

Power Analyser

# UMG 96-PQ-L UMG 96-PQ-L-LP

from Firmware version 3.57

Modbus address list and Formulary

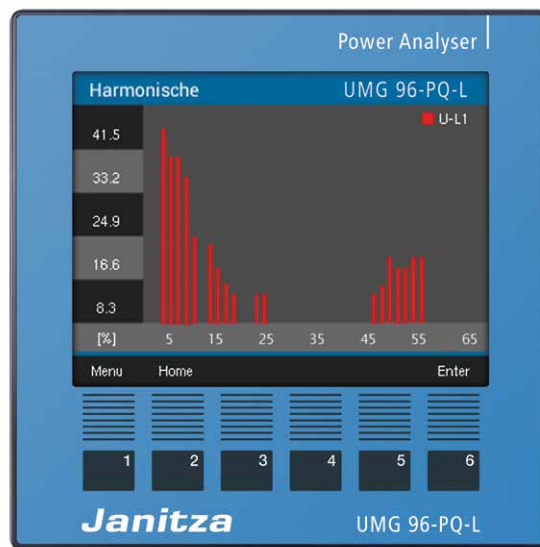


Image may differ from the original!

# Inhaltsverzeichnis

|  |           |
|--|-----------|
| <b>Definitions</b>   | <b>4</b>  |
| Update rate . . . . .  | 4         |
| Byte sequence . . . . .  | 4         |
| Fourier analysis . . . . .   | 4         |
| RS485 Transfer parameters . . . . .  | 4         |
| Drag indicator . . . . .   | 4         |
| Symbols and definitions . . . . .  | 4         |
| Number formats . . . . .   | 4         |
| <b>Explanations of the measured values</b>                                   | <b>5</b>  |
| Modbus functions . . . . .   | .11       |
| <b>Adress list UMG 96-PQ-L</b>   | <b>13</b> |
| Frequently required measured values . . . . .                                | .13       |
| Measured values . . . . .  | .14       |
| Maximum values . . . . .   | .18       |
| Maximum values, timestamp . . . . .  | .21       |
| Minimum values . . . . .   | .23       |
| Minimum values, timestamp . . . . .  | .25       |
| Moving mean values . . . . .   | .26       |
| Maximum values of moving mean values . . . . .                               | .29       |
| Gridded mean values . . . . .  | .30       |
| Drag indicator . . . . .   | .33       |
| Energy values . . . . .  | .36       |
| Digital inputs/outputs . . . . .   | .47       |
| Comparator groups . . . . .  | .50       |
| Events, read out last event via Modbus . . . . .                             | .52       |
| Fourier analysis, measured values . . . . .                                  | .52       |
| Maximum values, fourier analysis . . . . .                                   | .62       |
| Maximum values, timestamp, fourier analysis . . . . .                        | .71       |
| Minimum values, fourier analysis . . . . .                                   | .83       |
| Minimum values, timestamp, fourier analysis . . . . .                        | .87       |
| Moving mean values, fourier analysis . . . . .                               | .93       |
| Measured values, extended fourier analysis (41st - 65th harmonics) . . . . . | 103       |
| Maximum values, extended fourier analysis . . . . .                          | 106       |
| Maximum values, timestamp, extended fourier analysis . . . . .               | 109       |
| Minimum values, extended fourier analysis . . . . .                          | 114       |
| Minimum values, timestamp, extended fourier analysis . . . . .               | 116       |
| Moving mean values, extended fourier analysis . . . . .                      | 119       |
| Other parameters . . . . .   | 122       |
| Interharmonics - only with IEC 61000-4-30, class S . . . . .                 | 123       |
| Flicker meas. values - only with IEC 61000-4-30, class S . . . . .           | 131       |
| Other parameters - only with IEC 61000-4-30, class S . . . . .               | 131       |
| UMG 96-PQ-L-LP extended address list . . . . .                               | 131       |
| RCM module: Measured values, type Float . . . . .                            | 132       |
| RCM module: Moving mean values, type Float . . . . .                         | 133       |
| RCM module: Minimum values, type Float . . . . .                             | 133       |
| RCM module: Maximum values, type Float . . . . .                             | 133       |

|  |     |
|--|-----|
| RCM module: Minimum values, timestamp . . . . .                | 133 |
| RCM module: Maximum values, timestamp . . . . .                | 133 |
| RCM module: Energy values . . . . .                            | 134 |
| RCM module: Fourier analysis, measured values, float . . . . . | 134 |
| RCM module: Other parameters. . . . .                          | 136 |

## Copyright

This handbook is subject to the legal regulations of the copyright laws and may not be fully or partially photocopied, reprinted or reproduced mechanically or electronically and may not be copied or published in any other way without the legal, written permission of:

Janitza electronics GmbH  
Vor dem Polstück 6  
35633 Lahnau  
Germany

## Protected trademarks

All trademarks and the resulting rights belong to the respective owners of these rights.

## Disclaimer

Janitza electronics GmbH does not accept any responsibility for errors or faults within this handbook and does not accept any obligation to keep the contents of this handbook updated.

## Comments on the handbook

We welcome your comments. If anything appears to be unclear in this handbook, please let us know and send us an E-MAIL to:  
info@janitza.com

# Definitions

## Update rate

The modbus register addresses are updated every 200 ms.

## Byte sequence

The data in the modbus address list can be called up in the

- Big-Endian (high-Byte before low-Byte) and in the
- Little-Endian (low-byte before high-byte) format.

The addresses described in this address list supply the data in the „Big-Endian“ format.

If you require the data in the „Little-Endian“ format, you must add the value 32768 to the address.

## Fourier analysis

Fourier analysis is used to determine the proportion of harmonics in the overall signal.

- 1st harmonic = fundamental (50/60 Hz)
- 2nd harmonic = 1st harmonic (100/120 Hz)
- etc.

## RS485 Transfer parameters

The measurement device supports the following transfer parameters:

| Type      | Maximum   |
|-----------|---|
| Baudrate  | 9600, 19200, 38400, 57600, 115200 Baud  |
| Data bits | 8   |
| Framing   | 1 Stop bit & No parity<br>1 Stop bit & Parity even<br>1 Stop bit & Parity odd<br>2 Stop bit & No parity |

Tab. RS485 Transfer parameters

## Drag indicator

Drag indicator values are the 3 highest average values over a defined time base (interval) since the min/max values were last deleted.

## Symbols and definitions

| Symbol                           | Definition  |
|----------------------------------|---|
| N                                | Total number of sample points per period (for example, in a period of 20 ms)  |
| k                                | Sample value or number of samples per period ( $0 \leq k < N$ )   |
| p                                | Number or identification of the phase conductor (p = 1, 2 or 3)   |
| $i_{pk}$                         | Sample value k of the current of the phase conductor p  |
| $u_{pNk}$                        | Sample value k of the neutral voltage of the phase conductor p  |
| $P_p$                            | Real power of the phase conductor p<br>The index 0 indicates the fundamental oscillation, e.g. P01= active power of the fundamental oscillation in L1                           |
| Fund.                            | fundamental oscillation   |
| Psum3                            | = P1+P2+P3  |
| short (x10)<br>(x100)<br>(x1000) | The measured values have been multiplied by the specified factor in order to make better use of the short number format. Values in x100 must therefore still be divided by 100. |

Tab. Symbol explanation

## Number formats

- Measured values in the **short format** do **not** take into account the set transformer ratio, i.e. these measured values have to be multiplied by the corresponding transformer factor!
- Measured values in **float or integer format** take into account the corresponding transformer factors!

| Type   | Size   | Minimum   | Maximum      |
|--------|--------|-----------|--------------|
| char   | 8 bit  | 0         | 255          |
| byte   | 8 bit  | -128      | 127          |
| short  | 16 bit | $-2^{15}$ | $2^{15} - 1$ |
| ushort | 16 bit | 0         | $2^{16} - 1$ |
| int    | 32 bit | $-2^{31}$ | $2^{31} - 1$ |
| uint   | 32 bit | 0         | $2^{32} - 1$ |
| long   | 64 bit | $-2^{63}$ | $2^{63} - 1$ |
| ulong  | 64 bit | 0         | $2^{64} - 1$ |
| float  | 32 bit | IEEE 754  | IEEE 754     |
| double | 64 bit | IEEE 754  | IEEE 754     |

Tab. Number formats

# Explanations of the measured values

## Measured value

- A measured value is an effective value which is formed over a period (measuring window) of 200ms.
- A measuring window is 10 periods in the 50 Hz network and 12 periods in the 60 Hz network.
- A measuring window has a start time and an end time.
- The resolution between the start time and end time is approximately 2 ns.
- The accuracy of the start time and end time depends on the accuracy of the internal clock. (typically +/- 1 minute/month)
- In order to improve the accuracy of the internal clock, it is recommended that the clock in the device is compared with a time service and reset.

## Mean value of measured value

- For each measured value, a sliding mean value is calculated over the selected averaging time.
- The mean value is calculated every 200 ms.
- You can take the possible averaging times from the table.

| n | Mean time / seconds |
|---|---------------------|
| 0 | 5                   |
| 1 | 10                  |
| 2 | 15                  |
| 3 | 30                  |
| 4 | 60                  |
| 5 | 300                 |
| 6 | 480                 |
| 7 | 600                 |
| 8 | 900                 |

## Max. value of measured value

- The *max. value of the measured value* is the largest measured value which has occurred since the last deletion.

## Min. value of measured value

- The *min. value of the measured value* is the lowest measured value which has occurred since the last deletion.

## Max. value of mean value

- The *max. value of the mean value* is the largest mean value which has occurred since the last deletion.

## Nominal current, voltage, frequency

- The limit values for events and transients are set by the nominal value in percentage.

## Nominal current $I_{\text{rated}}$

- The  $I_{\text{rated}}$  is the nominal current of the transformers and is required for calculation of the K-factor.

## Peak value negative

- Highest negative sampling value from the last 200 ms measuring window..

## Peak value positive

- Highest positive sampling value from the last 200 ms measuring window.

## Crest factor

- The crest factor describes the relation between the peak value and effective value of a periodic quantity. It serves as a characteristic value for general description of the curve form of a periodic quantity. The distortion factor is another example of a quantity for characterization of the difference from the pure sinusoidal form.
- Example: A sinusoidal change voltage with an effective value of 230 V has a peak value of approx. 325 V. The crest factor is then  $325 \text{ V} / 230 \text{ V} = 1.414$ .

Effective value of the current for phase conductor p

$$I_p = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} i_{pk}^2}$$

Effective value of neutral conductor current

$$I_N = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} (i_{1k} + i_{2k} + i_{3k})^2}$$

Effective voltage L-N

$$U_{pN} = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} u_{pNk}^2}$$

Effective voltage L-L

$$U_{pg} = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} (u_{gNk} - u_{pNk})^2}$$

Star connection voltage (vectorial)

$$U_{\text{Star connection voltage}} = U_{1_{rms}} + U_{2_{rms}} + U_{3_{rms}}$$

Real power for phase conductor

$$P_p = \frac{1}{N} \cdot \sum_{k=0}^{N-1} (u_{pNk} \times i_{pk})$$

Apparent power for phase conductor

- Unsigned

$$S_p = U_{pN} \cdot I_p$$

Total apparent power (arithmetic) Sa

- Unsigned

$$S_A = S_1 + S_2 + S_3$$

Peak demand P<sub>max</sub>

- T = Periodic time
- t<sub>n</sub> = n-th interval time
- P<sub>n</sub> = n-th Power measurement value
- N = Number of measuring intervals in the period T

$$P_{\max} = \max \left( P_{\max}, \frac{1}{T} \sum_{n=1}^N (t_n \cdot P_n) \right)$$

## Order number of harmonics

xxx[0] = mains frequency (50 Hz/60 Hz)  
 xxx[1] = 2nd harmonic (100 Hz/120 Hz)  
 xxx[2] = 3rd harmonic (150 Hz/180 Hz)  
 etc.

## THD

- THD (Total Harmonic Distortion) is the distortion factor and provides the relation of the harmonic parts of an oscillation to the mains frequency.

### Distortion factor THD (U) for the voltage

- M = 40 (UMG 604, UMG 508, UMG 96RM)
- M = 50 (UMG 605, UMG 511)
- fund corresponds to n=1

$$THD_U = \frac{1}{|U_{fund}|} \sqrt{\sum_{n=2}^M |U_{n.Harm}|^2}$$

### Distortion factor THD (I) for the current

- M = 40 (UMG 604, UMG 508, UMG 96RM)
- M = 50 (UMG 605, UMG 511)
- fund corresponds to n=1

$$THD_I = \frac{1}{|I_{fund}|} \sqrt{\sum_{n=2}^M |I_{n.Harm}|^2}$$

## ZHD

- THD for the interharmonics.
- Is calculated in the product series UMG 511 and UMG 605.

## Interharmonics

- Sinusoidal oscillations, which frequencies are not a multiple integer of the mains frequency.
- Is calculated in the product series and UMG 511 UMG 605.
- Calculation and measurement methods in accordance with the DIN EN 61000-4-30.
- The order number of inter harmonics corresponds to the order number of the next smallest harmonic. For example, between the 3rd and 4th harmonic of the 3rd inter harmonics.

## TDD (I)

- TDD Total demand distortion, harmonic current distortion in % of maximum demand load current
- IL = Maximum demand load current
- M = 40 (UMG 604, UMG 508, UMG 96RM)
- M = 50 (UMG 605, UMG 511)

$$TDD = \frac{1}{I_L} \sqrt{\sum_{n=2}^M I_n^2} \times 100\%$$

## Ripple control signal U (EN61000-4-30)

The ripple control signal U is a voltage (200 ms measured value) which is measured at a carrier frequency specified by the user. Only frequencies beneath 3 kHz are observed.

## Ripple control signal I

The ripple control signal I is a current (200 ms measured value) which is measured at a carrier frequency specified by the user. Only frequencies beneath 3 kHz are observed.

## Positive sequence-negative sequence-zero sequence

- The extent of a voltage or current imbalance in a three-phase system is identified using the positive sequence, negative sequence and zero sequence components.
- The balance of the rotation current system strived for in normal operation is disturbed by the unsymmetrical loads, errors and equipment.
- A three-phase system is called symmetric, when the three phase conductor voltages and currents are the same size and are displaced against each other by  $120^\circ$ . If one or both conditions are not fulfilled, the system is described as unsymmetrical. By calculating the symmetrical components consisting of the positive sequence, negative sequence and zero sequence, the simplified analysis of an imbalanced error is possible in a rotary current system..
- Imbalance is a feature of the network quality for the limits specified in international norms (EN 50160 for example).

### Positive sequence

$$U_{Mit} = \frac{1}{3} \left| U_{L1,fund} + U_{L2,fund} \cdot e^{j\frac{2\pi}{3}} + U_{L3,fund} \cdot e^{j\frac{4\pi}{3}} \right|$$

### Negative sequence

$$U_{Geg} = \frac{1}{3} \left| U_{L1,fund} + U_{L2,fund} \cdot e^{-j\frac{2\pi}{3}} + U_{L3,fund} \cdot e^{-j\frac{4\pi}{3}} \right|$$

### Zero sequence

$$U_{zero} = \frac{1}{3} \left| U_{L1,fund} + U_{L2,fund} + U_{L3,fund} \right|$$

A zero component can only occur if a sum current can flow back through the main conductor.

### Voltage imbalance

$$\text{Voltage imbalance} = \frac{U_{Geg}}{U_{Mit}}$$

### Under difference U (IEC 61000-4-30)

$$U_{under} = \frac{U_{din} - \sqrt{\frac{\sum_{i=1}^n U_{rms-under,i}^2}{n}}}{U_{din}} [\%]$$

### Under difference I

$$I_{under} = \frac{I_{Nominal\ current} - \sqrt{\frac{\sum_{i=1}^n I_{rms-under,i}^2}{n}}}{I_{Nominal\ current}} [\%]$$

## K-factor

- The K-factor describes the increase of the eddy current losses when loaded with harmonics. For a sinusoidal load on the transformer, the K-factor =1. The larger the K-factor, the heavier a transformer can be loaded with harmonics without overheating.

## Power Factor (vectorial) - Lambda

- The power factor is unsigned.

$$PF_x = \frac{|P_x|}{S_x}$$

$x = L1, L2, L3, L4$

## Cos(φ) - Fundamental Power Factor

- Only the mains frequency part is used for calculation of the cos(φ).
- Cos(φ) sign:
  - = for the supply of real power
  - + = for obtaining real power

$$PF_1 = \cos(\varphi) = \frac{P_1}{S_1}$$

## Cos(φ) total

- Cos(φ) sign:
  - = for the supply of real power
  - + = for obtaining real power

$$\cos(\varphi)_{Sum_3} = \frac{P_{1\_fund} + P_{2\_fund} + P_{3\_fund}}{\sqrt{(P_{1\_fund} + P_{2\_fund} + P_{3\_fund})^2 + (Q_{1\_fund} + Q_{2\_fund} + Q_{3\_fund})^2}}$$

$$\cos(\varphi)_{Sum_4} = \frac{P_{1\_fund} + P_{2\_fund} + P_{3\_fund} + P_{4\_fund}}{\sqrt{(P_{1\_fund} + P_{2\_fund} + P_{3\_fund} + P_{4\_fund})^2 + (Q_{1\_fund} + Q_{2\_fund} + Q_{3\_fund} + Q_{4\_fund})^2}}$$

## Phase Angle φ

- The phase angle between current and voltage of the external conductor p is calculated according to DIN EN 61557-12 and displayed.
- The sign of the phase angle corresponding to the sign of the reactive power.

## Mains frequency reactive power

The mains frequency reactive power is the power factor of the mains frequency and is calculated using the fourier analysis (FFT). Voltage and current do not have to be sinusoidal. All in the device calculated reactive power are resulting of fundamental reactive power.

### Reactive power sign

- Sign  $Q = +1$  for  $\phi$  in the range  $0^\circ \dots 180^\circ$  (inductive)
- Sign  $Q = -1$  for  $\phi$  in the range  $180^\circ \dots 360^\circ$  (capacitive)

$$\text{Sign } Q(\varphi_p) = +1 \text{ if } \varphi_p \in [0^\circ - 180^\circ]$$

$$\text{Sign } Q(\varphi_p) = -1 \text{ if } \varphi_p \in [180^\circ - 360^\circ]$$

### Reactive power for phase conductor p

- Reactive power of the mains frequency.

$$Q_{fund p} = \text{Sign } Q(\varphi_p) \cdot \sqrt{S_{fund p}^2 - P_{fund p}^2}$$

### Total reactive power

- Reactive power of the mains frequency.

$$Q_V = Q_1 + Q_2 + Q_3$$

### Distortion power factor

- The distortion power factor is the power factor of all mains frequencies and is calculated using the fourier analysis (FFT).

$$D = \sqrt{S^2 - P^2 - Q_{fund}^2}$$

- The apparent power „S” contains all fundamental harmonics and all harmonic rates up to the M-th harmonic.
- The effective power „P” contains all fundamental harmonics and all harmonic rates up to the M-th harmonic.
- M = 40 (UMG 96-PA, UMG 96-PQ-L)
- M = 63 (UMG 605, UMG 605-PRO, UMG 511, UMG 512-PRO)

### Reactive energy per phase

$$E_{r_{L1}} = \int Q_{L1}(t) \cdot \Delta t$$

### Reactive energy per phase, inductive

$$E_{r(ind)_{L1}} = \int Q_{L1}(t) \cdot \Delta t \quad \text{for } Q_{L1}(t) > 0$$

### Reactive energy per phase, capacitive

$$E_{r(cap)_{L1}} = \int Q_{L1}(t) \cdot \Delta t \quad \text{for } Q_{L1}(t) < 0$$

### Reactive energy, sum L1-L3

$$E_{r_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t$$

### Reactive energy, sum L1-L3, inductive

$$E_{r(ind)_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t$$

for  $(Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) > 0$

### Reactive energy, sum L1-L3, capacitive

$$E_{r(cap)_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t$$

for  $(Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) < 0$

## Modbus functions

The measuring device supports the following Modbus functions as a slave:

### 02 Read Input Status

This function code is used to read from 1 to 2000 contiguous status of discrete inputs in a remote device. The Request PDU specifies the starting address, i.e. the address of the first input specified, and the number of inputs. In the PDU Discrete Inputs are addressed starting at zero. Therefore Discrete inputs numbered 1-16 are addressed as 0-15.

The discrete inputs in the response message are packed as one input per bit of the data field.

### 03 Read Holding Registers

Reads the binary contents of holding registers (4X references) in the slave.

### 04 Read Input Registers

Reads the binary contents of input registers (3X references) in the slave.

### 06 Preset Single Register

Presets a value into a single holding register (4X reference). When broadcast, the function presets the same register reference in all attached slaves.

### 08 Diagnostic function

MODBUS function code 08 provides a series of tests for checking the communication system between a client ( Master) device and a server ( Slave), or for checking various internal error conditions within a server.

The function uses a two-byte sub-function code field in the query to define the type of test to be performed.

The following diagnostic functions are dedicated to serial line devices. The normal response to the Return Query Data request is to loopback the same data. The function code and sub-function codes are also echoed.

| Sub-function code |     | Name                                   |
|-------------------|-----|--|
| Hex               | Dec |  |
| 00                | 00  | Return Query Data                      |
| 01                | 01  | Restart Communications Option          |
| 0A                | 10  | Clear Counters and Diagnostic Register |
| 0B                | 11  | Return Bus Message Count               |
| 0C                | 12  | Return Bus Communication Error Count   |
| 0D                | 13  | Return Bus Exception Error Count       |
| 0E                | 14  | Return Slave Message Count             |
| 0F                | 15  | Return Slave No Response Count         |
| 10                | 16  | Return Slave NAK Count                 |
| 11                | 17  | Return Slave Busy Count                |

### 16 (10Hex) Preset Multiple Registers

Presets values into a sequence of holding registers (4X references). When broadcast, the function presets the same register references in all attached slaves.

### 23 (17Hex) Read/Write 4X Registers

Performs a combination of one read and one write operation in a single Modbus transaction. The function can write new contents to a group of 4XXXX registers, and then return the contents of another group of 4XXXX registers. Broadcast is not supported.



## Adress list UMG 96-PQ-L

| Address                                    | Format | RD/WR | Note   | Unit | Min | Max |
|--|--------|-------|--|------|-----|-----|
| <b>Frequently required measured values</b> |        |       |  |      |     |     |
| 19000                                      | float  | RD    | Voltage L1-N   | V    |     |     |
| 19002                                      | float  | RD    | Voltage L2-N   | V    |     |     |
| 19004                                      | float  | RD    | Voltage L3-N   | V    |     |     |
| 19006                                      | float  | RD    | Voltage L1-L2  | V    |     |     |
| 19008                                      | float  | RD    | Voltage L2-L3  | V    |     |     |
| 19010                                      | float  | RD    | Voltage L3-L1  | V    |     |     |
| 19012                                      | float  | RD    | Current, L1  | A    |     |     |
| 19014                                      | float  | RD    | Current, L2  | A    |     |     |
| 19016                                      | float  | RD    | Current, L3  | A    |     |     |
| 19018                                      | float  | RD    | Vector sum, $I_N=I_1+I_2+I_3$                                  | A    |     |     |
| 19020                                      | float  | RD    | Real power L1  | W    |     |     |
| 19022                                      | float  | RD    | Real power L2  | W    |     |     |
| 19024                                      | float  | RD    | Real power L3  | W    |     |     |
| 19026                                      | float  | RD    | Sum, $P_{sum3}=P_1+P_2+P_3$                                    | W    |     |     |
| 19028                                      | float  | RD    | Apparent power L1  | VA   |     |     |
| 19030                                      | float  | RD    | Apparent power L2  | VA   |     |     |
| 19032                                      | float  | RD    | Apparent power L3  | VA   |     |     |
| 19034                                      | float  | RD    | Sum, $S_{sum3}=S_1+S_2+S_3$                                    | VA   |     |     |
| 19036                                      | float  | RD    | Reactive power (mains frequ.) L1                               | var  |     |     |
| 19038                                      | float  | RD    | Reactive power (mains frequ.) L2                               | var  |     |     |
| 19040                                      | float  | RD    | Reactive power (mains frequ.) L3                               | var  |     |     |
| 19042                                      | float  | RD    | Sum, $Q_{sum3}=Q_1+Q_2+Q_3$                                    | var  |     |     |
| 19044                                      | float  | RD    | Power factor fundamental oscill., $\cos(\varphi)$ , UL1<br>IL1 |      |     |     |
| 19046                                      | float  | RD    | Power factor fundamental oscill., $\cos(\varphi)$ , UL2<br>IL2 |      |     |     |
| 19048                                      | float  | RD    | Power factor fundamental oscill., $\cos(\varphi)$ , UL3<br>IL3 |      |     |     |
| 19050                                      | float  | RD    | Measured frequency   | Hz   |     |     |
| 19052                                      | float  | RD    | Rotation field, 1=right, 0=none, -1=left                       |      |     |     |
| 19054                                      | float  | RD    | Real energy L1, consumed                                       | Wh   |     |     |
| 19056                                      | float  | RD    | Real energy L2, consumed                                       | Wh   |     |     |
| 19058                                      | float  | RD    | Real energy L3, consumed                                       | Wh   |     |     |
| 19060                                      | float  | RD    | Real energy L1..L3   | Wh   |     |     |
| 19062                                      | float  | RD    | Real energy L1, consumed                                       | Wh   |     |     |
| 19064                                      | float  | RD    | Real energy L2, consumed                                       | Wh   |     |     |
| 19066                                      | float  | RD    | Real energy L3, consumed                                       | Wh   |     |     |
| 19068                                      | float  | RD    | Real energy L1..L3, consumed, rate 1                           | Wh   |     |     |
| 19070                                      | float  | RD    | Real energy L1, delivered                                      | Wh   |     |     |
| 19072                                      | float  | RD    | Real energy L2, delivered                                      | Wh   |     |     |
| 19074                                      | float  | RD    | Real energy L3, delivered                                      | Wh   |     |     |
| 19076                                      | float  | RD    | Real energy L1..L3, delivered                                  | Wh   |     |     |
| 19078                                      | float  | RD    | Apparent energy L1   | VAh  |     |     |
| 19080                                      | float  | RD    | Apparent energy L2   | VAh  |     |     |
| 19082                                      | float  | RD    | Apparent energy L3   | VAh  |     |     |

| Address | Format | RD/WR | Note                            | Unit | Min | Max |
|---------|--------|-------|---------------------------------|------|-----|-----|
| 19084   | float  | RD    | Apparent energy L1..L3          | VAh  |     |     |
| 19086   | float  | RD    | Reactive energy, inductive, L1  | varh |     |     |
| 19088   | float  | RD    | Reactive energy, inductive, L2  | varh |     |     |
| 19090   | float  | RD    | Reactive energy, inductive, L3  | varh |     |     |
| 19092   | float  | RD    | Reactive energy L1..L3          | varh |     |     |
| 19094   | float  | RD    | Reactive energy, inductive, L1  | varh |     |     |
| 19096   | float  | RD    | Reactive energy, inductive, L2  | varh |     |     |
| 19098   | float  | RD    | Reactive energy, inductive, L3  | varh |     |     |
| 19100   | float  | RD    | Reactive energy L1..L3, ind.    | varh |     |     |
| 19102   | float  | RD    | Reactive energy, capacitive, L1 | varh |     |     |
| 19104   | float  | RD    | Reactive energy, capacitive, L2 | varh |     |     |
| 19106   | float  | RD    | Reactive energy, capacitive, L3 | varh |     |     |
| 19108   | float  | RD    | Reactive energy L1..L3, cap.    | varh |     |     |
| 19110   | float  | RD    | Harmonic, THD,U L1-N            | %    |     |     |
| 19112   | float  | RD    | Harmonic, THD,U L2-N            | %    |     |     |
| 19114   | float  | RD    | Harmonic, THD,U L3-N            | %    |     |     |
| 19116   | float  | RD    | Harmonic, THD,I L1              | %    |     |     |
| 19118   | float  | RD    | Harmonic, THD,I L2              | %    |     |     |
| 19120   | float  | RD    | Harmonic, THD,I L3              | %    |     |     |

### Measured values

|      |        |    |   |     |  |  |
|------|--------|----|---|-----|--|--|
| 991  | float  | RD | Measured value (float): current max value for current RMS of all 3 phases | A   |  |  |
| 993  | ushort | RD | Measured value (float): the corresponding phase number (1...3)            |     |  |  |
| 1000 | float  | RD | Measured value (float): voltage L1-N                                      | V   |  |  |
| 1002 | float  | RD | Measured value (float): voltage L2-N                                      | V   |  |  |
| 1004 | float  | RD | Measured value (float): voltage L3-N                                      | V   |  |  |
| 1006 | float  | RD | Measured value (float): voltage L1-L2                                     | V   |  |  |
| 1008 | float  | RD | Measured value (float): voltage L2-L3                                     | V   |  |  |
| 1010 | float  | RD | Measured value (float): voltage L3-L1                                     | V   |  |  |
| 1012 | float  | RD | Measured value (float): current L1  | A   |  |  |
| 1014 | float  | RD | Measured value (float): current L2  | A   |  |  |
| 1016 | float  | RD | Measured value (float): current L3  | A   |  |  |
| 1018 | float  | RD | Measured value (float): current sum (calculated current in N)             | A   |  |  |
| 1020 | float  | RD | Measured value (float): active power L1                                   | W   |  |  |
| 1022 | float  | RD | Measured value (float): active power L2                                   | W   |  |  |
| 1024 | float  | RD | Measured value (float): active power L3                                   | W   |  |  |
| 1026 | float  | RD | Measured value (float): active power sum                                  | W   |  |  |
| 1028 | float  | RD | Measured value (float): reactive power L1                                 | var |  |  |
| 1030 | float  | RD | Measured value (float): reactive power L2                                 | var |  |  |
| 1032 | float  | RD | Measured value (float): reactive power L3                                 | var |  |  |
| 1034 | float  | RD | Measured value (float): reactive power sum                                | var |  |  |
| 1036 | float  | RD | Measured value (float): apparent power L1                                 | VA  |  |  |
| 1038 | float  | RD | Measured value (float): apparent power L2                                 | VA  |  |  |
| 1040 | float  | RD | Measured value (float): apparent power L3                                 | VA  |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 1042    | float  | RD    | Measured value (float): apparent power sum                                       | VA   |     |     |
| 1044    | float  | RD    | Measured value (float): $\cos(\varphi)$ L1                                       |      |     |     |
| 1046    | float  | RD    | Measured value (float): $\cos(\varphi)$ L2                                       |      |     |     |
| 1048    | float  | RD    | Measured value (float): $\cos(\varphi)$ L3                                       |      |     |     |
| 1050    | float  | RD    | Measured value (float): $\cos(\varphi)$ sum                                      |      |     |     |
| 1052    | float  | RD    | Measured value (float): active power of the fundamental oscillation L1           | W    |     |     |
| 1054    | float  | RD    | Measured value (float): active power of the fundamental oscillation L2           | W    |     |     |
| 1056    | float  | RD    | Measured value (float): active power of the fundamental oscillation L3           | W    |     |     |
| 1214    | float  | RD    | Measured value (float): THD voltage L1 [%]                                       | %    |     |     |
| 1216    | float  | RD    | Measured value (float): THD voltage L2 [%]                                       | %    |     |     |
| 1218    | float  | RD    | Measured value (float): THD voltage L3 [%]                                       | %    |     |     |
| 1220    | float  | RD    | Measured value (float): THD current L1 [%]                                       | %    |     |     |
| 1222    | float  | RD    | Measured value (float): THD current L1 [%]                                       | %    |     |     |
| 1224    | float  | RD    | Measured value (float): THD current L1 [%]                                       | %    |     |     |
| 1226    | float  | RD    | Measured value (float): frequency  | Hz   |     |     |
| 1228    | float  | RD    | Measured value (float): zero sequence voltage                                    |      |     |     |
| 1230    | float  | RD    | Measured value (float): positive sequence voltage                                |      |     |     |
| 1232    | float  | RD    | Measured value (float): negative sequence voltage                                |      |     |     |
| 1234    | float  | RD    | Measured value (float): zero sequence current                                    |      |     |     |
| 1236    | float  | RD    | Measured value (float): positive sequence current                                |      |     |     |
| 1238    | float  | RD    | Measured value (float): negative sequence current                                |      |     |     |
| 1240    | float  | RD    | Measured value (float): distortion power L1                                      | var  |     |     |
| 1242    | float  | RD    | Measured value (float): distortion power L2                                      | var  |     |     |
| 1244    | float  | RD    | Measured value (float): distortion power L3                                      | var  |     |     |
| 1246    | float  | RD    | Measured value (float): distortion power sum                                     | var  |     |     |
| 1248    | float  | RD    | Measured value (float): Rotation field, 1=right, 0=none, -1=left                 |      |     |     |
| 1250    | float  | RD    | Measured value (float): real part of the fundamental oscillation voltage L1      | V    |     |     |
| 1252    | float  | RD    | Measured value (float): imaginary part of the fundamental oscillation voltage L1 | V    |     |     |
| 1254    | float  | RD    | Measured value (float): real part of the fundamental oscillation voltage L2      | V    |     |     |
| 1256    | float  | RD    | Measured value (float): imaginary part of the fundamental oscillation voltage L2 | V    |     |     |
| 1258    | float  | RD    | Measured value (float): real part of the fundamental oscillation voltage L3      | V    |     |     |
| 1260    | float  | RD    | Measured value (float): imaginary part of the fundamental oscillation voltage L3 | V    |     |     |
| 1262    | float  | RD    | Measured value (float): real part of the fundamental oscillation current L1      | A    |     |     |
| 1264    | float  | RD    | Measured value (float): imaginary part of the fundamental oscillation current L1 | A    |     |     |
| 1266    | float  | RD    | Measured value (float): real part of the fundamental oscillation current L2      | A    |     |     |

| Address | Format        | RD/WR | Note   | Unit | Min | Max |
|---------|---------------|-------|--|------|-----|-----|
| 1268    | float         | RD    | Measured value (float): imaginary part of the fundamental oscillation current L2 | A    |     |     |
| 1270    | float         | RD    | Measured value (float): real part of the fundamental oscillation current L3      | A    |     |     |
| 1272    | float         | RD    | Measured value (float): imaginary part of the fundamental oscillation current L3 | A    |     |     |
| 1274    | float         | RD    | Measured value (float): frequency (200ms)  | Hz   |     |     |
| 1276    | float         | RD    | Measured value (float): TDD (total demand distortion) current L1                 | %    |     |     |
| 1278    | float         | RD    | Measured value (float): TDD (total demand distortion) current L2                 | %    |     |     |
| 1280    | float         | RD    | Measured value (float): TDD (total demand distortion) current L3                 | %    |     |     |
| 1282    | float         | RD    | Measured value (float): crest factor voltageL1                                   |      |     |     |
| 1284    | float         | RD    | Measured value (float): crest factor voltageL2                                   |      |     |     |
| 1286    | float         | RD    | Measured value (float): crest factor voltageL3                                   |      |     |     |
| 1288    | float         | RD    | Measured value (float): crest factor current L1                                  |      |     |     |
| 1290    | float         | RD    | Measured value (float): crest factor current L2                                  |      |     |     |
| 1292    | float         | RD    | Measured value (float): crest factor current L3                                  |      |     |     |
| 1294    | float         | RD    | Measured value (float): power factor L1  |      |     |     |
| 1296    | float         | RD    | Measured value (float): power factor L2  |      |     |     |
| 1298    | float         | RD    | Measured value (float): power factor L3  |      |     |     |
| 1300    | float         | RD    | Measured value (float): power factor sum3=P-sum3/Ssum3                           |      |     |     |
| 1329    | float         | RD    | Measured value (float): voltage asymmetry [%]                                    | %    |     |     |
| 1331    | float         | RD    | Measured value (float): current asymmetry [%]                                    | %    |     |     |
| 1400    | float         | RD    | Angular shift of the current I1 in the unit circle, relative to normal zero      | deg  |     |     |
| 1402    | float         | RD    | Angular shift of the current I2 in the unit circle, relative to normal zero      | deg  |     |     |
| 1404    | float         | RD    | Angular shift of the current I3 in the unit circle, relative to normal zero      | deg  |     |     |
| 11000   | short (x10)   | RD    | Measured value (short): voltage L1-N   | V    |     |     |
| 11001   | short (x10)   | RD    | Measured value (short): voltage L2-N   | V    |     |     |
| 11002   | short (x10)   | RD    | Measured value (short): voltage L3-N   | V    |     |     |
| 11003   | short (x10)   | RD    | Measured value (short): voltage L1-L2  | V    |     |     |
| 11004   | short (x10)   | RD    | Measured value (short): voltage L2-L3  | V    |     |     |
| 11005   | short (x10)   | RD    | Measured value (short): voltage L3-L1  | V    |     |     |
| 11006   | short (x1000) | RD    | Measured value (short): current L1   | A    |     |     |
| 11007   | short (x1000) | RD    | Measured value (short): current L2   | A    |     |     |
| 11008   | short (x1000) | RD    | Measured value (short): current L3   | A    |     |     |
| 11009   | short (x1000) | RD    | Measured value (short): current sum  | A    |     |     |
| 11010   | short (x10)   | RD    | Measured value (short): active power L1  | W    |     |     |

| Address | Format           | RD/WR | Note   | Unit | Min | Max |
|---------|------------------|-------|--|------|-----|-----|
| 11011   | short<br>(x10)   | RD    | Measured value (short): active power L2                              | W    |     |     |
| 11012   | short<br>(x10)   | RD    | Measured value (short): active power L3                              | W    |     |     |
| 11013   | short            | RD    | Measured value (short): active power sum                             | W    |     |     |
| 11014   | short<br>(x10)   | RD    | Measured value (short): reactive power L1                            | var  |     |     |
| 11015   | short<br>(x10)   | RD    | Measured value (short): reactive power L2                            | var  |     |     |
| 11016   | short<br>(x10)   | RD    | Measured value (short): reactive power L3                            | var  |     |     |
| 11017   | short            | RD    | Measured value (short): reactive power sum                           | var  |     |     |
| 11018   | short<br>(x10)   | RD    | Measured value (short): apparent power L1                            | VA   |     |     |
| 11019   | short<br>(x10)   | RD    | Measured value (short): apparent power L2                            | VA   |     |     |
| 11020   | short<br>(x10)   | RD    | Measured value (short): apparent power L3                            | VA   |     |     |
| 11021   | short            | RD    | Measured value (short): apparent power sum                           | VA   |     |     |
| 11022   | short<br>(x100)  | RD    | Measured value (short): cos( $\rho$ ) L1                             |      |     |     |
| 11023   | short<br>(x100)  | RD    | Measured value (short): cos( $\rho$ ) L2                             |      |     |     |
| 11024   | short<br>(x100)  | RD    | Measured value (short): cos( $\rho$ ) L3                             |      |     |     |
| 11025   | short<br>(x100)  | RD    | Measured value (short): cos( $\rho$ ) sum                            |      |     |     |
| 11026   | short<br>(x10)   | RD    | Measured value (short): active power fundamen-<br>tal oscillation L1 | W    |     |     |
| 11027   | short<br>(x10)   | RD    | Measured value (short): active power fundamen-<br>tal oscillation L2 | W    |     |     |
| 11028   | short<br>(x10)   | RD    | Measured value (short): active power fundamen-<br>tal oscillation L3 | W    |     |     |
| 11111   | short<br>(x100)  | RD    | Measured value (short): THD voltage L1-N [%]                         | %    |     |     |
| 11112   | short<br>(x100)  | RD    | Measured value (short): THD voltage L2-N [%]                         | %    |     |     |
| 11113   | short<br>(x100)  | RD    | Measured value (short): THD voltage L3-N [%]                         | %    |     |     |
| 11114   | short<br>(x100)  | RD    | Measured value (short): THD current L1 [%]                           | %    |     |     |
| 11115   | short<br>(x100)  | RD    | Measured value (short): THD current L2 [%]                           | %    |     |     |
| 11116   | short<br>(x100)  | RD    | Measured value (short): THD current L3 [%]                           | %    |     |     |
| 11117   | short<br>(x10)   | RD    | Measured value (short): frequency                                    | Hz   |     |     |
| 11118   | short<br>(x10)   | RD    | Measured value (short): zero sequence voltage                        |      |     |     |
| 11119   | short<br>(x10)   | RD    | Measured value (short): positive sequence<br>voltage                 |      |     |     |
| 11120   | short<br>(x10)   | RD    | Measured value (short): negative sequence<br>voltage                 |      |     |     |
| 11121   | short<br>(x1000) | RD    | Measured value (short): zero sequence current                        |      |     |     |

| Address | Format            | RD/WR | Note  | Unit | Min | Max |
|---------|-------------------|-------|---|------|-----|-----|
| 11122   | short<br>(x1000)  | RD    | Measured value (short): positive sequence current                         |      |     |     |
| 11123   | short<br>(x1000)  | RD    | Measured value (short): negative sequence current                         |      |     |     |
| 11124   | short<br>(x10)    | RD    | Measured value (short): distortion power L1                               | var  |     |     |
| 11125   | short<br>(x10)    | RD    | Measured value (short): distortion power L2                               | var  |     |     |
| 11126   | short<br>(x10)    | RD    | Measured value (short): distortion power L3                               | var  |     |     |
| 11127   | short             | RD    | Measured value (short): distortion power sum                              | var  |     |     |
| 11128   | short<br>(x10)    | RD    | Measured value (short): Rotation field: > 0 = right, 0 = none, < 0 = left |      |     |     |
| 11168   | ushort<br>(x1000) | RD    | Measured value (short): crest factor voltage L1-N                         |      |     |     |
| 11169   | ushort<br>(x1000) | RD    | Measured value (short): crest factor voltage L2-N                         |      |     |     |
| 11170   | ushort<br>(x1000) | RD    | Measured value (short): crest factor voltage L3-N                         |      |     |     |
| 11171   | ushort<br>(x1000) | RD    | Measured value (short): crest factor current L1                           |      |     |     |
| 11172   | ushort<br>(x1000) | RD    | Measured value (short): crest factor current L2                           |      |     |     |
| 11173   | ushort<br>(x1000) | RD    | Measured value (short): crest factor current L3                           |      |     |     |

### Maximum values

|      |       |    |   |     |  |  |
|------|-------|----|---|-----|--|--|
| 3000 | float | RD | Maximum value (float): voltage L1-N       | V   |  |  |
| 3002 | float | RD | Maximum value (float): voltage L2-N       | V   |  |  |
| 3004 | float | RD | Maximum value (float): voltage L3-N       | V   |  |  |
| 3006 | float | RD | Maximum value (float): voltage L1-L2      | V   |  |  |
| 3008 | float | RD | Maximum value (float): voltage L2-L3      | V   |  |  |
| 3010 | float | RD | Maximum value (float): voltage L3-L1      | V   |  |  |
| 3012 | float | RD | Maximum value (float): current L1         | A   |  |  |
| 3014 | float | RD | Maximum value (float): current L2         | A   |  |  |
| 3016 | float | RD | Maximum value (float): current L3         | A   |  |  |
| 3018 | float | RD | Maximum value (float): current sum        | A   |  |  |
| 3020 | float | RD | Maximum value (float): active power L1    | W   |  |  |
| 3022 | float | RD | Maximum value (float): active power L2    | W   |  |  |
| 3024 | float | RD | Maximum value (float): active power L3    | W   |  |  |
| 3026 | float | RD | Maximum value (float): active power sum   | W   |  |  |
| 3028 | float | RD | Maximum value (float): reactive power L1  | var |  |  |
| 3030 | float | RD | Maximum value (float): reactive power L2  | var |  |  |
| 3032 | float | RD | Maximum value (float): reactive power L3  | var |  |  |
| 3034 | float | RD | Maximum value (float): reactive power sum | var |  |  |
| 3036 | float | RD | Maximum value (float): apparent power L1  | VA  |  |  |
| 3038 | float | RD | Maximum value (float): apparent power L2  | VA  |  |  |
| 3040 | float | RD | Maximum value (float): apparent power L3  | VA  |  |  |
| 3042 | float | RD | Maximum value (float): apparent power sum | VA  |  |  |

| Address | Format      | RD/WR | Note   | Unit | Min | Max |
|---------|-------------|-------|--|------|-----|-----|
| 3044    | float       | RD    | Maximum value (float): $\cos(\varphi)$ L1                                |      |     |     |
| 3046    | float       | RD    | Maximum value (float): $\cos(\varphi)$ L2                                |      |     |     |
| 3048    | float       | RD    | Maximum value (float): $\cos(\varphi)$ L3                                |      |     |     |
| 3050    | float       | RD    | Maximum value (float): $\cos(\varphi)$ sum                               |      |     |     |
| 3052    | float       | RD    | Maximum value (float): active power, fundamental oscillation L1          | V    |     |     |
| 3054    | float       | RD    | Maximum value (float): active power, fundamental oscillation L2          | V    |     |     |
| 3056    | float       | RD    | Maximum value (float): active power, fundamental oscillation L3          | V    |     |     |
| 3214    | float       | RD    | Maximum value (float): THD voltage L1                                    | %    |     |     |
| 3216    | float       | RD    | Maximum value (float): THD voltage L2                                    | %    |     |     |
| 3218    | float       | RD    | Maximum value (float): THD voltage L3                                    | %    |     |     |
| 3220    | float       | RD    | Maximum value (float): THD current L1                                    | %    |     |     |
| 3222    | float       | RD    | Maximum value (float): THD current L2                                    | %    |     |     |
| 3224    | float       | RD    | Maximum value (float): THD current L3                                    | %    |     |     |
| 3226    | float       | RD    | Maximum value (float): frequency   | Hz   |     |     |
| 3228    | float       | RD    | Maximum value (float): voltage zero sequence                             |      |     |     |
| 3230    | float       | RD    | Maximum value (float): voltage positive sequence                         |      |     |     |
| 3232    | float       | RD    | Maximum value (float): voltage negative sequence                         |      |     |     |
| 3234    | float       | RD    | Maximum value (float): current zero sequence                             |      |     |     |
| 3236    | float       | RD    | Maximum value (float): current positive sequence                         |      |     |     |
| 3238    | float       | RD    | Maximum value (float): current negative sequence                         |      |     |     |
| 3240    | float       | RD    | Maximum value (float): distortion power L1                               | var  |     |     |
| 3242    | float       | RD    | Maximum value (float): distortion power L2                               | var  |     |     |
| 3244    | float       | RD    | Maximum value (float): distortion power L3                               | var  |     |     |
| 3246    | float       | RD    | Maximum value (float): distortion power sum                              | var  |     |     |
| 3264    | float       | RD    | Maximum value (float): TDD current L1 [%]                                | %    |     |     |
| 3266    | float       | RD    | Maximum value (float): TDD current L2 [%]                                | %    |     |     |
| 3268    | float       | RD    | Maximum value (float): TDD current L3 [%]                                | %    |     |     |
| 3270    | float       | RD    | Maximum value (float): max. value power factor L1                        |      |     |     |
| 3272    | float       | RD    | Maximum value (float): max. value power factor L2                        |      |     |     |
| 3274    | float       | RD    | Maximum value (float): max. value power factor L3                        |      |     |     |
| 3276    | float       | RD    | Maximum value (float): max. value power factor sum3= $P_{sum3}/S_{sum3}$ |      |     |     |
| 3278    | float       | RD    | Maximum value (float): voltage asymmetry [%] (max)                       | %    |     |     |
| 3280    | float       | RD    | Maximum value (float): current asymmetry [%] (max)                       | %    |     |     |
| 13000   | short (x10) | RD    | Maximum value (short): voltage L1-N                                      | V    |     |     |
| 13001   | short (x10) | RD    | Maximum value (short): voltage L2-N                                      | V    |     |     |
| 13002   | short (x10) | RD    | Maximum value (short): voltage L3-N                                      | V    |     |     |

| Address | Format        | RD/WR | Note  | Unit | Min | Max |
|---------|---------------|-------|---|------|-----|-----|
| 13003   | short (x10)   | RD    | Maximum value (short): voltage L1-L2                              | V    |     |     |
| 13004   | short (x10)   | RD    | Maximum value (short): voltage L2-L3                              | V    |     |     |
| 13005   | short (x10)   | RD    | Maximum value (short): voltage L3-L1                              | V    |     |     |
| 13006   | short (x1000) | RD    | Maximum value (short): current L1                                 | A    |     |     |
| 13007   | short (x1000) | RD    | Maximum value (short): current L2                                 | A    |     |     |
| 13008   | short (x1000) | RD    | Maximum value (short): current L3                                 | A    |     |     |
| 13009   | short (x1000) | RD    | Maximum value (short): current sum                                | A    |     |     |
| 13010   | short (x10)   | RD    | Maximum value (short): active power L1                            | W    |     |     |
| 13011   | short (x10)   | RD    | Maximum value (short): active power L2                            | W    |     |     |
| 13012   | short (x10)   | RD    | Maximum value (short): active power L3                            | W    |     |     |
| 13013   | short         | RD    | Maximum value (short): active power sum                           | W    |     |     |
| 13014   | short (x10)   | RD    | Maximum value (short): reactive power L1                          | var  |     |     |
| 13015   | short (x10)   | RD    | Maximum value (short): reactive power L2                          | var  |     |     |
| 13016   | short (x10)   | RD    | Maximum value (short): reactive power L3                          | var  |     |     |
| 13017   | short         | RD    | Maximum value (short): reactive power sum                         | var  |     |     |
| 13018   | short (x10)   | RD    | Maximum value (short): apparent power L1                          | VA   |     |     |
| 13019   | short (x10)   | RD    | Maximum value (short): apparent power L2                          | VA   |     |     |
| 13020   | short (x10)   | RD    | Maximum value (short): apparent power L3                          | VA   |     |     |
| 13021   | short         | RD    | Maximum value (short): apparent power sum                         | VA   |     |     |
| 13022   | short (x1000) | RD    | Maximum value (short): $\cos(\varphi)$ L1                         |      |     |     |
| 13023   | short (x1000) | RD    | Maximum value (short): $\cos(\varphi)$ L2                         |      |     |     |
| 13024   | short (x1000) | RD    | Maximum value (short): $\cos(\varphi)$ L3                         |      |     |     |
| 13025   | short (x1000) | RD    | Maximum value (short): $\cos(\varphi)$ sum                        |      |     |     |
| 13026   | short (x10)   | RD    | Maximum value (short): active power of fundamental oscillation L1 | W    |     |     |
| 13027   | short (x10)   | RD    | Maximum value (short): active power of fundamental oscillation L2 | W    |     |     |
| 13028   | short (x10)   | RD    | Maximum value (short): active power of fundamental oscillation L3 | W    |     |     |
| 13107   | short (x100)  | RD    | Maximum value (short): THD voltage L1                             | %    |     |     |
| 13108   | short (x100)  | RD    | Maximum value (short): THD voltage L2                             | %    |     |     |
| 13109   | short (x100)  | RD    | Maximum value (short): THD voltage L3                             | %    |     |     |

| Address | Format        | RD/WR | Note   | Unit | Min | Max |
|---------|---------------|-------|--|------|-----|-----|
| 13110   | short (x100)  | RD    | Maximum value (short): THD current L1            | %    |     |     |
| 13111   | short (x100)  | RD    | Maximum value (short): THD current L2            | %    |     |     |
| 13112   | short (x100)  | RD    | Maximum value (short): THD current L3            | %    |     |     |
| 13113   | short (x100)  | RD    | Maximum value (short): frequency                 |      |     |     |
| 13114   | short (x10)   | RD    | Maximum value (short): voltage zero sequence     |      |     |     |
| 13115   | short (x10)   | RD    | Maximum value (short): voltage positive sequence |      |     |     |
| 13116   | short (x10)   | RD    | Maximum value (short): voltage negative sequence |      |     |     |
| 13117   | short (x1000) | RD    | Maximum value (short): current zero sequence     |      |     |     |
| 13118   | short (x1000) | RD    | Maximum value (short): current positive sequence |      |     |     |
| 13119   | short (x1000) | RD    | Maximum value (short): current negative sequence |      |     |     |
| 13120   | short (x10)   | RD    | Maximum value (short): distortion power L1       | var  |     |     |
| 13121   | short (x10)   | RD    | Maximum value (short): distortion power L2       | var  |     |     |
| 13122   | short (x10)   | RD    | Maximum value (short): distortion power L3       | var  |     |     |
| 13123   | short (x10)   | RD    | Maximum value (short): distortion power sum      | var  |     |     |

### Maximum values, timestamp

|      |      |    |  |   |  |  |
|------|------|----|--|---|--|--|
| 3300 | uint | RD | UTC timestamp of max. value: voltage L1-N      | s |  |  |
| 3302 | uint | RD | UTC timestamp of max. value: voltage L2-N      | s |  |  |
| 3304 | uint | RD | UTC timestamp of max. value: voltage L3-N      | s |  |  |
| 3306 | uint | RD | UTC timestamp of max. value: voltage L1-L2     | s |  |  |
| 3308 | uint | RD | UTC timestamp of max. value: voltage L2-L3     | s |  |  |
| 3310 | uint | RD | UTC timestamp of max. value: voltage L3-L1     | s |  |  |
| 3312 | uint | RD | UTC timestamp of max. value: current L1        | s |  |  |
| 3314 | uint | RD | UTC timestamp of max. value: current L2        | s |  |  |
| 3316 | uint | RD | UTC timestamp of max. value: current L3        | s |  |  |
| 3318 | uint | RD | UTC timestamp of max. value: current sum       | s |  |  |
| 3320 | uint | RD | UTC timestamp of max. value: active power L1   | s |  |  |
| 3322 | uint | RD | UTC timestamp of max. value: active power L2   | s |  |  |
| 3324 | uint | RD | UTC timestamp of max. value: active power L3   | s |  |  |
| 3326 | uint | RD | UTC timestamp of max. value: active power sum  | s |  |  |
| 3328 | uint | RD | UTC timestamp of max. value: reactive power L1 | s |  |  |
| 3330 | uint | RD | UTC timestamp of max. value: reactive power L2 | s |  |  |
| 3332 | uint | RD | UTC timestamp of max. value: reactive power L3 | s |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 3334    | uint   | RD    | UTC timestamp of max. value: reactive power sum                        | s    |     |     |
| 3336    | uint   | RD    | UTC timestamp of max. value: apparent power L1                         | s    |     |     |
| 3338    | uint   | RD    | UTC timestamp of max. value: apparent power L2                         | s    |     |     |
| 3340    | uint   | RD    | UTC timestamp of max. value: apparent power L3                         | s    |     |     |
| 3342    | uint   | RD    | UTC timestamp of max. value: apparent power sum                        | s    |     |     |
| 3344    | uint   | RD    | UTC timestamp of max. value: $\cos(\varphi)$ L1                        | s    |     |     |
| 3346    | uint   | RD    | UTC timestamp of max. value: $\cos(\varphi)$ L2                        | s    |     |     |
| 3348    | uint   | RD    | UTC timestamp of max. value: $\cos(\varphi)$ L3                        | s    |     |     |
| 3350    | uint   | RD    | UTC timestamp of max. value: $\cos(\varphi)$ sum                       | s    |     |     |
| 3352    | uint   | RD    | UTC timestamp of max. value: active power (fundamental oscillation) L1 | s    |     |     |
| 3354    | uint   | RD    | UTC timestamp of max. value: active power (fundamental oscillation) L2 | s    |     |     |
| 3356    | uint   | RD    | UTC timestamp of max. value: active power (fundamental oscillation) L3 | s    |     |     |
| 3514    | uint   | RD    | UTC timestamp of max. value: THD voltage L1                            | s    |     |     |
| 3516    | uint   | RD    | UTC timestamp of max. value: THD voltage L2                            | s    |     |     |
| 3518    | uint   | RD    | UTC timestamp of max. value: THD voltage L3                            | s    |     |     |
| 3520    | uint   | RD    | UTC timestamp of max. value: THD current L1                            | s    |     |     |
| 3522    | uint   | RD    | UTC timestamp of max. value: THD current L2                            | s    |     |     |
| 3524    | uint   | RD    | UTC timestamp of max. value: THD current L3                            | s    |     |     |
| 3526    | uint   | RD    | UTC timestamp of max. value: frequency                                 | s    |     |     |
| 3528    | uint   | RD    | UTC timestamp of max. value: voltage zero sequence                     | s    |     |     |
| 3530    | uint   | RD    | UTC timestamp of max. value: voltage positive sequence                 | s    |     |     |
| 3532    | uint   | RD    | UTC timestamp of max. value: voltage negative sequence                 | s    |     |     |
| 3534    | uint   | RD    | UTC timestamp of max. value: current zero sequence                     | s    |     |     |
| 3536    | uint   | RD    | UTC timestamp of max. value: current positive sequence                 | s    |     |     |
| 3538    | uint   | RD    | UTC timestamp of max. value: current negative sequence                 | s    |     |     |
| 3540    | uint   | RD    | UTC timestamp of max. value: distortion power L1                       | s    |     |     |
| 3542    | uint   | RD    | UTC timestamp of max. value: distortion power L2                       | s    |     |     |
| 3544    | uint   | RD    | UTC timestamp of max. value: distortion power L3                       | s    |     |     |
| 3546    | uint   | RD    | UTC timestamp of max. value: distortion power sum                      | s    |     |     |
| 3548    | uint   | RD    | UTC timestamp of max. value: mean value current L1                     | s    |     |     |
| 3550    | uint   | RD    | UTC timestamp of max. value: mean value current L2                     | s    |     |     |
| 3552    | uint   | RD    | UTC timestamp of max. value: mean value current L3                     | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 3554    | uint   | RD    | UTC timestamp of max. value: mean value current sum        | s    |     |     |
| 3556    | uint   | RD    | UTC timestamp of max. value: mean value active power L1    | s    |     |     |
| 3558    | uint   | RD    | UTC timestamp of max. value: mean value active power L2    | s    |     |     |
| 3560    | uint   | RD    | UTC timestamp of max. value: mean value active power L3    | s    |     |     |
| 3562    | uint   | RD    | UTC timestamp of max. value: mean value active power sum   | s    |     |     |
| 3564    | uint   | RD    | UTC timestamp of max. value: TDD current L1                | s    |     |     |
| 3566    | uint   | RD    | UTC timestamp of max. value: TDD current L2                | s    |     |     |
| 3568    | uint   | RD    | UTC timestamp of max. value: TDD current L3                | s    |     |     |
| 3570    | uint   | RD    | UTC timestamp of max. value: power factor L1               | s    |     |     |
| 3572    | uint   | RD    | UTC timestamp of max. value: power factor L2               | s    |     |     |
| 3574    | uint   | RD    | UTC timestamp of max. value: power factor L3               | s    |     |     |
| 3576    | uint   | RD    | UTC timestamp of max. value: power factor sum3=Psum3/Ssum3 | s    |     |     |
| 3578    | uint   | RD    | UTC timestamp of max. value: Voltage asymmetry             | s    |     |     |
| 3580    | uint   | RD    | UTC timestamp of max. value: Current asymmetry             | s    |     |     |

### Minimum values

|      |       |    |  |    |  |  |
|------|-------|----|--|----|--|--|
| 4000 | float | RD | Minimum value (float): voltage L1-N              | V  |  |  |
| 4002 | float | RD | Minimum value (float): voltage L2-N              | V  |  |  |
| 4004 | float | RD | Minimum value (float): voltage L3-N              | V  |  |  |
| 4006 | float | RD | Minimum value (float): voltage L1-L2             | V  |  |  |
| 4008 | float | RD | Minimum value (float): voltage L1-L3             | V  |  |  |
| 4010 | float | RD | Minimum value (float): voltage L3-L1             | V  |  |  |
| 4012 | float | RD | Minimum value (float): cos( $\varphi$ ) L1       |    |  |  |
| 4014 | float | RD | Minimum value (float): cos( $\varphi$ ) L2       |    |  |  |
| 4016 | float | RD | Minimum value (float): cos( $\varphi$ ) L3       |    |  |  |
| 4018 | float | RD | Minimum value (float): cos( $\varphi$ ) sum      |    |  |  |
| 4098 | float | RD | Minimum value (float): THD voltage L1 [%]        | %  |  |  |
| 4100 | float | RD | Minimum value (float): THD voltage L2 [%]        | %  |  |  |
| 4102 | float | RD | Minimum value (float): THD voltage L3 [%]        | %  |  |  |
| 4104 | float | RD | Minimum value (float): frequency                 | Hz |  |  |
| 4106 | float | RD | Minimum value (float): voltage zero sequence     |    |  |  |
| 4108 | float | RD | Minimum value (float): voltage positive sequence |    |  |  |
| 4110 | float | RD | Minimum value (float): voltage negative sequence |    |  |  |
| 4112 | float | RD | Minimum value (float): active power L1           | W  |  |  |
| 4114 | float | RD | Minimum value (float): active power L2           | W  |  |  |
| 4116 | float | RD | Minimum value (float): active power L3           | W  |  |  |
| 4118 | float | RD | Minimum value (float): active power sum          | W  |  |  |
| 4120 | float | RD | Minimum value (float): power factor L1           |    |  |  |
| 4122 | float | RD | Minimum value (float): power factor L2           |    |  |  |

| Address | Format        | RD/WR | Note  | Unit | Min | Max |
|---------|---------------|-------|---|------|-----|-----|
| 4124    | float         | RD    | Minimum value (float): power factor L3                |      |     |     |
| 4126    | float         | RD    | Minimum value (float): power factor sum3=P-sum3/Ssum3 |      |     |     |
| 4128    | float         | RD    | Minimum value (float): THD current L1 [%]             | %    |     |     |
| 4130    | float         | RD    | Minimum value (float): THD current L2 [%]             | %    |     |     |
| 4132    | float         | RD    | Minimum value (float): THD current L3 [%]             | %    |     |     |
| 4134    | float         | RD    | Minimum value (float): current L1                     | A    |     |     |
| 4136    | float         | RD    | Minimum value (float): current L2                     | A    |     |     |
| 4138    | float         | RD    | Minimum value (float): current L3                     | A    |     |     |
| 4140    | float         | RD    | Minimum value (float): current sum                    | A    |     |     |
| 4142    | float         | RD    | Minimum value (float): reactive power L1              | var  |     |     |
| 4144    | float         | RD    | Minimum value (float): reactive power L2              | var  |     |     |
| 4146    | float         | RD    | Minimum value (float): reactive power L3              | var  |     |     |
| 4148    | float         | RD    | Minimum value (float): reactive power sum             | var  |     |     |
| 4150    | float         | RD    | Minimum value (float): apparent power L1              | VA   |     |     |
| 4152    | float         | RD    | Minimum value (float): apparent power L2              | VA   |     |     |
| 4154    | float         | RD    | Minimum value (float): apparent power L3              | VA   |     |     |
| 4156    | float         | RD    | Minimum value (float): apparent power sum             | VA   |     |     |
| 4158    | float         | RD    | Minimum value (float): voltage asymmetry [%] (min)    | %    |     |     |
| 4160    | float         | RD    | Minimum value (float): current asymmetry [%] (min)    | %    |     |     |
| 14000   | short (x10)   | RD    | Minimum value (short): voltage L1-N                   | V    |     |     |
| 14001   | short (x10)   | RD    | Minimum value (short): voltage L2-N                   | V    |     |     |
| 14002   | short (x10)   | RD    | Minimum value (short): voltage L3-N                   | V    |     |     |
| 14003   | short (x10)   | RD    | Minimum value (short): voltage L1-L2                  | V    |     |     |
| 14004   | short (x10)   | RD    | Minimum value (short): voltage L1-L3                  | V    |     |     |
| 14005   | short (x10)   | RD    | Minimum value (short): voltage L3-L1                  | V    |     |     |
| 14006   | short (x1000) | RD    | Minimum value (short): cos( $\varphi$ ) L1            |      |     |     |
| 14007   | short (x1000) | RD    | Minimum value (short): cos( $\varphi$ ) L1            |      |     |     |
| 14008   | short (x1000) | RD    | Minimum value (short): cos( $\varphi$ ) L1            |      |     |     |
| 14009   | short (x1000) | RD    | Minimum value (short): cos( $\varphi$ ) L1            |      |     |     |
| 14049   | short (x100)  | RD    | Minimum value (short): THD voltage L1 [%]             | %    |     |     |
| 14050   | short (x100)  | RD    | Minimum value (short): THD voltage L2 [%]             | %    |     |     |
| 14051   | short (x100)  | RD    | Minimum value (short): THD voltage L3 [%]             | %    |     |     |
| 14052   | short (x100)  | RD    | Minimum value (short): frequency                      | Hz   |     |     |
| 14053   | short (x10)   | RD    | Minimum value (short): voltage zero sequence          |      |     |     |

| Address | Format      | RD/WR | Note   | Unit | Min | Max |
|---------|-------------|-------|--|------|-----|-----|
| 14054   | short (x10) | RD    | Minimum value (short): voltage positive sequence |      |     |     |
| 14055   | short (x10) | RD    | Minimum value (short): voltage negative sequence |      |     |     |
| 14056   | short (x10) | RD    | Minimum value (short): active power L1           | W    |     |     |
| 14057   | short (x10) | RD    | Minimum value (short): active power L2           | W    |     |     |
| 14058   | short (x10) | RD    | Minimum value (short): active power L3           | W    |     |     |
| 14059   | short (x10) | RD    | Minimum value (short): active power sum          | W    |     |     |

### Minimum values, timestamp

|      |      |    |  |   |  |  |
|------|------|----|--|---|--|--|
| 4200 | uint | RD | UTC timestamp of min. value: voltage L1-N              | s |  |  |
| 4202 | uint | RD | UTC timestamp of min. value: voltage L2-N              | s |  |  |
| 4204 | uint | RD | UTC timestamp of min. value: voltage L3-N              | s |  |  |
| 4206 | uint | RD | UTC timestamp of min. value: voltage L1-L2             | s |  |  |
| 4208 | uint | RD | UTC timestamp of min. value: voltage L2-L3             | s |  |  |
| 4210 | uint | RD | UTC timestamp of min. value: voltage L3-L1             | s |  |  |
| 4212 | uint | RD | UTC timestamp of min. value: cos( $\varphi$ ) L1       | s |  |  |
| 4214 | uint | RD | UTC timestamp of min. value: cos( $\varphi$ ) L2       | s |  |  |
| 4216 | uint | RD | UTC timestamp of min. value: cos( $\varphi$ ) L3       | s |  |  |
| 4218 | uint | RD | UTC timestamp of min. value: cos( $\varphi$ ) sum      | s |  |  |
| 4298 | uint | RD | UTC timestamp of min. value: THD voltage L1            | s |  |  |
| 4300 | uint | RD | UTC timestamp of min. value: THD voltage L2            | s |  |  |
| 4302 | uint | RD | UTC timestamp of min. value: THD voltage L3            | s |  |  |
| 4304 | uint | RD | UTC timestamp of min. value: frequency                 | s |  |  |
| 4306 | uint | RD | UTC timestamp of min. value: voltage zero sequence     | s |  |  |
| 4308 | uint | RD | UTC timestamp of min. value: voltage positive sequence | s |  |  |
| 4310 | uint | RD | UTC timestamp of min. value: voltage negative sequence | s |  |  |
| 4312 | uint | RD | UTC timestamp of min. value: active power L1           | s |  |  |
| 4314 | uint | RD | UTC timestamp of min. value: active power L2           | s |  |  |
| 4316 | uint | RD | UTC timestamp of min. value: active power L3           | s |  |  |
| 4318 | uint | RD | UTC timestamp of min. value: active power sum          | s |  |  |
| 4320 | uint | RD | UTC timestamp of min. value: power factor L1           | s |  |  |
| 4322 | uint | RD | UTC timestamp of min. value: power factor L2           | s |  |  |
| 4324 | uint | RD | UTC timestamp of min. value: power factor L3           | s |  |  |
| 4326 | uint | RD | UTC timestamp of min. value: power factor sum          | s |  |  |
| 4328 | uint | RD | UTC timestamp of min. value: THD current L1            | s |  |  |
| 4330 | uint | RD | UTC timestamp of min. value: THD current L2            | s |  |  |
| 4332 | uint | RD | UTC timestamp of min. value: THD current L3            | s |  |  |
| 4334 | uint | RD | UTC timestamp of min. value: current L1                | s |  |  |
| 4336 | uint | RD | UTC timestamp of min. value: current L2                | s |  |  |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 4338    | uint   | RD    | UTC timestamp of min. value: current L3         | s    |     |     |
| 4340    | uint   | RD    | UTC timestamp of min. value: current sum        | s    |     |     |
| 4342    | uint   | RD    | UTC timestamp of min. value: reactive power L1  | s    |     |     |
| 4344    | uint   | RD    | UTC timestamp of min. value: reactive power L2  | s    |     |     |
| 4346    | uint   | RD    | UTC timestamp of min. value: reactive power L3  | s    |     |     |
| 4348    | uint   | RD    | UTC timestamp of min. value: reactive power sum | s    |     |     |
| 4350    | uint   | RD    | UTC timestamp of min. value: apparent power L1  | s    |     |     |
| 4352    | uint   | RD    | UTC timestamp of min. value: apparent power L2  | s    |     |     |
| 4354    | uint   | RD    | UTC timestamp of min. value: apparent power L3  | s    |     |     |
| 4356    | uint   | RD    | UTC timestamp of min. value: apparent power sum | s    |     |     |
| 4358    | uint   | RD    | UTC timestamp of min. value: voltage asymmetry  | s    |     |     |
| 4360    | uint   | RD    | UTC timestamp of min. value: current asymmetry  | s    |     |     |

### Moving mean values

|      |       |       |  |     |   |   |
|------|-------|-------|--|-----|---|---|
| 57   | char  | RD/WR | Time base moving mean values - Current<br>0=5s, 1=10s, 2=30s, 3=60s, 4=5min, 5=8min, 6=15min |     | 0 | 6 |
| 58   | char  | RD/WR | Time base moving mean values - Power<br>0=5s, 1=10s, 2=30s, 3=60s, 4=5min, 5=8min, 6=15min   |     | 0 | 6 |
| 2000 | float | RD    | Mean value (float): voltage L1   | V   |   |   |
| 2002 | float | RD    | Mean value (float): voltage L2   | V   |   |   |
| 2004 | float | RD    | Mean value (float): voltage L3   | V   |   |   |
| 2006 | float | RD    | Mean value (float): mean value voltage L1-L2   | V   |   |   |
| 2008 | float | RD    | Mean value (float): mean value voltage L2-L3   | V   |   |   |
| 2010 | float | RD    | Mean value (float): mean value voltage L3-L1   | V   |   |   |
| 2012 | float | RD    | Mean value (float): mean value current L1  | A   |   |   |
| 2014 | float | RD    | Mean value (float): mean value current L2  | A   |   |   |
| 2016 | float | RD    | Mean value (float): mean value current L3  | A   |   |   |
| 2018 | float | RD    | Mean value (float): mean value current sum   | A   |   |   |
| 2020 | float | RD    | Mean value (float): mean value active power L1   | W   |   |   |
| 2022 | float | RD    | Mean value (float): mean value active power L2   | W   |   |   |
| 2024 | float | RD    | Mean value (float): mean value active power L3   | W   |   |   |
| 2026 | float | RD    | Mean value (float): mean value active power sum  | W   |   |   |
| 2028 | float | RD    | Mean value (float): mean value reactive power L1   | var |   |   |
| 2030 | float | RD    | Mean value (float): reactive power L2  | var |   |   |
| 2032 | float | RD    | Mean value (float): reactive power L3  | var |   |   |
| 2034 | float | RD    | Mean value (float): mean value reactive power sum  | var |   |   |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 2036    | float  | RD    | Mean value (float): apparent power L1  | VA   |     |     |
| 2038    | float  | RD    | Mean value (float): mean value apparent power L2                                   | VA   |     |     |
| 2040    | float  | RD    | Mean value (float): mean value apparent power L3                                   | VA   |     |     |
| 2042    | float  | RD    | Mean value (float): mean value apparent power sum                                  | VA   |     |     |
| 2044    | float  | RD    | Mean value (float): mean value $\cos(\varphi)$ L1                                  |      |     |     |
| 2046    | float  | RD    | Mean value (float): mean value $\cos(\varphi)$ L2                                  |      |     |     |
| 2048    | float  | RD    | Mean value (float): mean value $\cos(\varphi)$ L3                                  |      |     |     |
| 2050    | float  | RD    | Mean value (float): $\cos(\varphi)$ sum  |      |     |     |
| 2052    | float  | RD    | Mean value (float): active power, fundamental oscillation L1                       | W    |     |     |
| 2054    | float  | RD    | Mean value (float): active power, fundamental oscillation L2                       | W    |     |     |
| 2056    | float  | RD    | Mean value (float): active power, fundamental oscillation L3                       | W    |     |     |
| 2214    | float  | RD    | Mean value (float): THD voltage L1 [%]   | %    |     |     |
| 2216    | float  | RD    | Mean value (float): THD voltage L2 [%]   | %    |     |     |
| 2218    | float  | RD    | Mean value (float): THD voltage L3 [%]   | %    |     |     |
| 2220    | float  | RD    | Mean value (float): THD current L1 [%]   | %    |     |     |
| 2222    | float  | RD    | Mean value (float): THD current L2 [%]   | %    |     |     |
| 2224    | float  | RD    | Mean value (float): THD current L3 [%]   | %    |     |     |
| 2226    | float  | RD    | Mean value (float): frequency  | Hz   |     |     |
| 2228    | float  | RD    | Mean value (float): zero sequence voltage  |      |     |     |
| 2230    | float  | RD    | Mean value (float): positive sequence voltage                                      |      |     |     |
| 2232    | float  | RD    | Mean value (float): negative sequence voltage                                      |      |     |     |
| 2234    | float  | RD    | Mean value (float): zero sequence current  |      |     |     |
| 2236    | float  | RD    | Mean value (float): mean value positive sequence current                           |      |     |     |
| 2238    | float  | RD    | Mean value (float): mean value negative sequence current                           |      |     |     |
| 2240    | float  | RD    | Mean value (float): mean value distortion power L1                                 | var  |     |     |
| 2242    | float  | RD    | Mean value (float): mean value distortion power L2                                 | var  |     |     |
| 2244    | float  | RD    | Mean value (float): distortion power L3  | var  |     |     |
| 2246    | float  | RD    | Mean value (float): distortion power sum   | var  |     |     |
| 2248    | float  | RD    | Mean value (float): TDD (total demand distortion) current L1 [%]                   | %    |     |     |
| 2250    | float  | RD    | Mean value (float): TDD (total demand distortion) current L2 [%]                   | %    |     |     |
| 2252    | float  | RD    | Mean value (float): TDD (total demand distortion) current L3 [%]                   | %    |     |     |
| 2254    | float  | RD    | Mean value (float): power factor L1  |      |     |     |
| 2256    | float  | RD    | Mean value (float): power factor L2  |      |     |     |
| 2258    | float  | RD    | Mean value (float): power factor L3  |      |     |     |
| 2260    | float  | RD    | Mean value (float): power factor $\text{sum3} = P_{\text{sum3}} / S_{\text{sum3}}$ |      |     |     |
| 2294    | float  | RD    | Mean value (float): voltage asymmetry [%] (avg)                                    | %    |     |     |
| 2296    | float  | RD    | Mean value (float): current asymmetry [%] (avg)                                    | %    |     |     |

| Address | Format           | RD/WR | Note   | Unit | Min | Max |
|---------|------------------|-------|--|------|-----|-----|
| 12000   | short<br>(x10)   | RD    | Mean value (short): voltage L1-N                               | V    |     |     |
| 12001   | short<br>(x10)   | RD    | Mean value (short): voltage L2-N                               | V    |     |     |
| 12002   | short<br>(x10)   | RD    | Mean value (short): voltage L3-N                               | V    |     |     |
| 12003   | short<br>(x10)   | RD    | Mean value (short): voltage L1-L2                              | V    |     |     |
| 12004   | short<br>(x10)   | RD    | Mean value (short): voltage L2-L3                              | V    |     |     |
| 12005   | short<br>(x10)   | RD    | Mean value (short): voltage L3-L1                              | V    |     |     |
| 12006   | short<br>(x1000) | RD    | Mean value (short): current L1                                 | A    |     |     |
| 12007   | short<br>(x1000) | RD    | Mean value (short): current L2                                 | A    |     |     |
| 12008   | short<br>(x1000) | RD    | Mean value (short): current L3                                 | A    |     |     |
| 12009   | short<br>(x1000) | RD    | Mean value (short): current sum                                | A    |     |     |
| 12010   | short<br>(x10)   | RD    | Mean value (short): active power L1                            | W    |     |     |
| 12011   | short<br>(x10)   | RD    | Mean value (short): active power L2                            | W    |     |     |
| 12012   | short<br>(x10)   | RD    | Mean value (short): active power L3                            | W    |     |     |
| 12013   | short            | RD    | Mean value (short): active power sum                           | W    |     |     |
| 12014   | short<br>(x10)   | RD    | Mean value (short): reactive power L1                          | var  |     |     |
| 12015   | short<br>(x10)   | RD    | Mean value (short): reactive power L2                          | var  |     |     |
| 12016   | short<br>(x10)   | RD    | Mean value (short): reactive power L3                          | var  |     |     |
| 12017   | short            | RD    | Mean value (short): reactive power sum                         | var  |     |     |
| 12018   | short<br>(x10)   | RD    | Mean value (short): apparent power L1                          | VA   |     |     |
| 12019   | short<br>(x10)   | RD    | Mean value (short): apparent power L2                          | VA   |     |     |
| 12020   | short<br>(x10)   | RD    | Mean value (short): apparent power L3                          | VA   |     |     |
| 12021   | short            | RD    | Mean value (short): apparent power sum                         | VA   |     |     |
| 12022   | short<br>(x1000) | RD    | Mean value (short): $\cos(\varphi)$ L1                         |      |     |     |
| 12023   | short<br>(x1000) | RD    | Mean value (short): $\cos(\varphi)$ L2                         |      |     |     |
| 12024   | short<br>(x1000) | RD    | Mean value (short): $\cos(\varphi)$ L3                         |      |     |     |
| 12025   | short<br>(x1000) | RD    | Mean value (short): $\cos(\varphi)$ sum                        |      |     |     |
| 12026   | short<br>(x10)   | RD    | Mean value (short): active power of fundamental oscillation L1 | W    |     |     |
| 12027   | short<br>(x10)   | RD    | Mean value (short): active power of fundamental oscillation L2 | W    |     |     |
| 12028   | short<br>(x10)   | RD    | Mean value (short): active power of fundamental oscillation L3 | W    |     |     |

| Address | Format           | RD/WR | Note  | Unit | Min | Max |
|---------|------------------|-------|---|------|-----|-----|
| 12107   | short<br>(x100)  | RD    | Mean value (short): THD voltage L1            | %    |     |     |
| 12108   | short<br>(x100)  | RD    | Mean value (short): THD voltage L2            | %    |     |     |
| 12109   | short<br>(x100)  | RD    | Mean value (short): THD voltage L3            | %    |     |     |
| 12110   | short<br>(x100)  | RD    | Mean value (short): THD current L1            | %    |     |     |
| 12111   | short<br>(x100)  | RD    | Mean value (short): THD current L2            | %    |     |     |
| 12112   | short<br>(x100)  | RD    | Mean value (short): THD current L3            | %    |     |     |
| 12113   | short<br>(x100)  | RD    | Mean value (short): frequency                 | Hz   |     |     |
| 12114   | short<br>(x10)   | RD    | Mean value (short): zero sequence voltage     |      |     |     |
| 12115   | short<br>(x10)   | RD    | Mean value (short): positive sequence voltage |      |     |     |
| 12116   | short<br>(x10)   | RD    | Mean value (short): negative sequence voltage |      |     |     |
| 12117   | short<br>(x1000) | RD    | Mean value (short): zero sequence current     |      |     |     |
| 12118   | short<br>(x1000) | RD    | Mean value (short): positive sequence current |      |     |     |
| 12119   | short<br>(x1000) | RD    | Mean value (short): negative sequence current |      |     |     |
| 12120   | short<br>(x10)   | RD    | Mean value (short): distortion power L1       | var  |     |     |
| 12121   | short<br>(x10)   | RD    | Mean value (short): distortion power L2       | var  |     |     |
| 12122   | short<br>(x10)   | RD    | Mean value (short): distortion power L3       | var  |     |     |
| 12123   | short            | RD    | Mean value (short): distortion power sum      | var  |     |     |

### Maximum values of moving mean values

|       |                  |    |   |   |  |  |
|-------|------------------|----|---|---|--|--|
| 3248  | float            | RD | Maximum values of mean values (float): current L1       | A |  |  |
| 3250  | float            | RD | Maximum values of mean values (float): current L2       | A |  |  |
| 3252  | float            | RD | Maximum values of mean values (float): current L3       | A |  |  |
| 3254  | float            | RD | Maximum values of mean values (float): current sum      | A |  |  |
| 3256  | float            | RD | Maximum values of mean values (float): active power L1  | W |  |  |
| 3258  | float            | RD | Maximum values of mean values (float): active power L2  | W |  |  |
| 3260  | float            | RD | Maximum values of mean values (float): active power L3  | W |  |  |
| 3262  | float            | RD | Maximum values of mean values (float): active power sum | W |  |  |
| 13124 | short<br>(x1000) | RD | Maximum values of mean values (short): current L1       | A |  |  |

| Address | Format           | RD/WR | Note   | Unit | Min | Max |
|---------|------------------|-------|--|------|-----|-----|
| 13125   | short<br>(x1000) | RD    | Maximum values of mean values (short): current L2      | A    |     |     |
| 13126   | short<br>(x1000) | RD    | Maximum values of mean values (short): current L3      | A    |     |     |
| 13128   | short<br>(x10)   | RD    | Maximum values of mean values (short): active power L1 | A    |     |     |
| 13129   | short<br>(x10)   | RD    | Maximum values of mean values (short): active power L2 | A    |     |     |
| 13130   | short<br>(x10)   | RD    | Maximum values of mean values (short): active power L3 | A    |     |     |

### Gridded mean values

|       |        |       |   |    |    |      |
|-------|--------|-------|---|----|----|------|
| 31504 | ushort | RD/WR | averaging interval for Gridded Mean Values in Seconds   | s  | 60 | 3600 |
| 32000 | float  | RD    | Gridded mean values (float): maximum voltage L1         | V  |    |      |
| 32002 | float  | RD    | Gridded mean values (float): maximum voltage L2         | V  |    |      |
| 32004 | float  | RD    | Gridded mean values (float): maximum voltage L3         | V  |    |      |
| 32008 | float  | RD    | Gridded mean values (float): maximum voltage L1-L2      | V  |    |      |
| 32010 | float  | RD    | Gridded mean values (float): maximum voltage L2-L3      | V  |    |      |
| 32012 | float  | RD    | Gridded mean values (float): maximum voltage L3-L1      | V  |    |      |
| 32016 | float  | RD    | Gridded mean values (float): maximum current L1         | A  |    |      |
| 32018 | float  | RD    | Gridded mean values (float): maximum current L2         | A  |    |      |
| 32020 | float  | RD    | Gridded mean values (float): maximum current L3         | A  |    |      |
| 32022 | float  | RD    | Gridded mean values (float): maximum current L4         | A  |    |      |
| 32024 | float  | RD    | Gridded mean values (float): sum maximum current L1-L3  | A  |    |      |
| 32026 | float  | RD    | Gridded mean values (float): sum maximum current L1-L4  | A  |    |      |
| 32028 | float  | RD    | Gridded mean values (float): maximum active power L1    | W  |    |      |
| 32030 | float  | RD    | Gridded mean values (float): maximum active power L2    | W  |    |      |
| 32032 | float  | RD    | Gridded mean values (float): maximum active power L3    | W  |    |      |
| 32036 | float  | RD    | Gridded mean values (float): maximum total active power | W  |    |      |
| 32040 | float  | RD    | Gridded mean values (float): maximum reactive power L1  | VA |    |      |
| 32042 | float  | RD    | Gridded mean values (float): maximum reactive power L2  | VA |    |      |
| 32044 | float  | RD    | Gridded mean values (float): maximum reactive power L3  | VA |    |      |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 32048   | float  | RD    | Gridded mean values (float): maximum total reactive power | VA   |     |     |
| 32052   | float  | RD    | Gridded mean values (float): maximum apparent power L1    | var  |     |     |
| 32054   | float  | RD    | Gridded mean values (float): maximum apparent power L2    | var  |     |     |
| 32056   | float  | RD    | Gridded mean values (float): maximum apparent power L3    | var  |     |     |
| 32060   | float  | RD    | Gridded mean values (float): maximum total apparent power | var  |     |     |
| 32064   | float  | RD    | Gridded mean values (float): maximum cos(phi) L1          |      |     |     |
| 32066   | float  | RD    | Gridded mean values (float): maximum cos(phi) L2          |      |     |     |
| 32068   | float  | RD    | Gridded mean values (float): maximum cos(phi) L3          |      |     |     |
| 32072   | float  | RD    | Gridded mean values (float): maximum cos(phi)             |      |     |     |
| 32076   | float  | RD    | Gridded mean values (float): minimum voltage L1           | V    |     |     |
| 32078   | float  | RD    | Gridded mean values (float): minimum voltage L2           | V    |     |     |
| 32080   | float  | RD    | Gridded mean values (float): minimum voltage L3           | V    |     |     |
| 32084   | float  | RD    | Gridded mean values (float): minimum voltage L1-L2        | V    |     |     |
| 32086   | float  | RD    | Gridded mean values (float): minimum voltage L2-L3        | V    |     |     |
| 32088   | float  | RD    | Gridded mean values (float): minimum voltage L3-L1        | V    |     |     |
| 32092   | float  | RD    | Gridded mean values (float): minimum current L1           | A    |     |     |
| 32094   | float  | RD    | Gridded mean values (float): minimum current L2           | A    |     |     |
| 32096   | float  | RD    | Gridded mean values (float): minimum current L3           | A    |     |     |
| 32098   | float  | RD    | Gridded mean values (float): minimum current L4           | A    |     |     |
| 32100   | float  | RD    | Gridded mean values (float): sum minimum current L1-L3    | A    |     |     |
| 32102   | float  | RD    | Gridded mean values (float): sum minimum current L1-L4    | A    |     |     |
| 32104   | float  | RD    | Gridded mean values (float): minimum active power L1      | W    |     |     |
| 32106   | float  | RD    | Gridded mean values (float): minimum active power L2      | W    |     |     |
| 32108   | float  | RD    | Gridded mean values (float): minimum active power L3      | W    |     |     |
| 32112   | float  | RD    | Gridded mean values (float): minimum total active power   | W    |     |     |
| 32116   | float  | RD    | Gridded mean values (float): minimum reactive power L1    | VA   |     |     |
| 32118   | float  | RD    | Gridded mean values (float): minimum reactive power L2    | VA   |     |     |
| 32120   | float  | RD    | Gridded mean values (float): minimum reactive power L3    | VA   |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 32124   | float  | RD    | Gridded mean values (float): minimum total reactive power | VA   |     |     |
| 32128   | float  | RD    | Gridded mean values (float): minimum apparent power L1    | var  |     |     |
| 32130   | float  | RD    | Gridded mean values (float): minimum apparent power L2    | var  |     |     |
| 32132   | float  | RD    | Gridded mean values (float): minimum apparent power L3    | var  |     |     |
| 32136   | float  | RD    | Gridded mean values (float): minimum total apparent power | var  |     |     |
| 32140   | float  | RD    | Gridded mean values (float): minimum cos(phi) L1          |      |     |     |
| 32142   | float  | RD    | Gridded mean values (float): minimum cos(phi) L2          |      |     |     |
| 32144   | float  | RD    | Gridded mean values (float): minimum cos(phi) L3          |      |     |     |
| 32148   | float  | RD    | Gridded mean values (float): minimum cos(phi)             |      |     |     |
| 32152   | float  | RD    | Gridded mean values (float): average voltage L1           | V    |     |     |
| 32154   | float  | RD    | Gridded mean values (float): average voltage L2           | V    |     |     |
| 32156   | float  | RD    | Gridded mean values (float): average voltage L3           | V    |     |     |
| 32160   | float  | RD    | Gridded mean values (float): average voltage L1-L2        | V    |     |     |
| 32162   | float  | RD    | Gridded mean values (float): average voltage L2-L3        | V    |     |     |
| 32164   | float  | RD    | Gridded mean values (float): average voltage L3-L1        | V    |     |     |
| 32168   | float  | RD    | Gridded mean values (float): average current L1           | A    |     |     |
| 32170   | float  | RD    | Gridded mean values (float): average current L2           | A    |     |     |
| 32172   | float  | RD    | Gridded mean values (float): average current L3           | A    |     |     |
| 32174   | float  | RD    | Gridded mean values (float): average current L4           | A    |     |     |
| 32176   | float  | RD    | Gridded mean values (float): sum average current L1-L3    | A    |     |     |
| 32178   | float  | RD    | Gridded mean values (float): sum average current L1-L4    | A    |     |     |
| 32180   | float  | RD    | Gridded mean values (float): average active power L1      | W    |     |     |
| 32182   | float  | RD    | Gridded mean values (float): average active power L2      | W    |     |     |
| 32184   | float  | RD    | Gridded mean values (float): average active power L3      | W    |     |     |
| 32188   | float  | RD    | Gridded mean values (float): average total active power   | W    |     |     |
| 32192   | float  | RD    | Gridded mean values (float): average apparent power L1    | VA   |     |     |
| 32194   | float  | RD    | Gridded mean values (float): average apparent power L2    | VA   |     |     |
| 32196   | float  | RD    | Gridded mean values (float): average apparent power L3    | VA   |     |     |
| 32200   | float  | RD    | Gridded mean values (float): average total apparent power | VA   |     |     |
| 32204   | float  | RD    | Gridded mean values (float): average reactive power L1    | var  |     |     |
| 32206   | float  | RD    | Gridded mean values (float): average reactive power L2    | var  |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 32208   | float  | RD    | Gridded mean values (float): average reactive power L3    | var  |     |     |
| 32212   | float  | RD    | Gridded mean values (float): average total reactive power | var  |     |     |
| 32216   | float  | RD    | Gridded mean values (float): average cos(phi) L1          |      |     |     |
| 32218   | float  | RD    | Gridded mean values (float): average cos(phi) L2          |      |     |     |
| 32220   | float  | RD    | Gridded mean values (float): average cos(phi) L3          |      |     |     |
| 32224   | float  | RD    | Gridded mean values (float): average cos(phi)             |      |     |     |
| 32609   | uint   | RD    | Gridded mean values (float): UTC timestamp                |      |     |     |

### Drag indicator

|      |       |    |  |    |  |  |
|------|-------|----|--|----|--|--|
| 7000 | float | RD | Drag indicator: highest value current L1                                     | A  |  |  |
| 7002 | float | RD | Drag indicator: highest value current L2                                     | A  |  |  |
| 7004 | float | RD | Drag indicator: highest value current L3                                     | A  |  |  |
| 7006 | uint  | RD | Drag indicator: point in time [UTC], highest value current L1                | s  |  |  |
| 7008 | uint  | RD | Drag indicator: point in time [UTC], highest value current L2                | s  |  |  |
| 7010 | uint  | RD | Drag indicator: point in time [UTC], highest value current L3                | s  |  |  |
| 7012 | float | RD | Drag indicator: highest value apparent power L1                              | VA |  |  |
| 7014 | float | RD | Drag indicator: highest value apparent power L2                              | VA |  |  |
| 7016 | float | RD | Drag indicator: highest value apparent power L3                              | VA |  |  |
| 7018 | float | RD | Drag indicator: highest value apparent power sum                             | VA |  |  |
| 7020 | uint  | RD | Drag indicator: point in time [UTC], highest value apparent power L1         | s  |  |  |
| 7022 | uint  | RD | Drag indicator: point in time [UTC], highest value apparent power L2         | s  |  |  |
| 7024 | uint  | RD | Drag indicator: point in time [UTC], highest value apparent power L3         | s  |  |  |
| 7026 | uint  | RD | Drag indicator: point in time [UTC], highest value apparent power sum        | s  |  |  |
| 7028 | float | RD | Drag indicator: highest value active power L1, consumed                      | W  |  |  |
| 7030 | float | RD | Drag indicator: highest value active power L2, consumed                      | W  |  |  |
| 7032 | float | RD | Drag indicator: highest value active power L3, consumed                      | W  |  |  |
| 7034 | float | RD | Drag indicator: highest value active power sum, consumed                     | W  |  |  |
| 7036 | uint  | RD | Drag indicator: point in time [UTC], highest value active power L1, consumed | s  |  |  |
| 7038 | uint  | RD | Drag indicator: point in time [UTC], highest value active power L2, consumed | s  |  |  |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 7040    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power L3, consumed    | s    |     |     |
| 7042    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power sum, consumed   | s    |     |     |
| 7044    | float  | RD    | Drag indicator: highest value active power L1, delivered                        | W    |     |     |
| 7046    | float  | RD    | Drag indicator: highest value active power L2, delivered                        | W    |     |     |
| 7048    | float  | RD    | Drag indicator: highest value active power L3, delivered                        | W    |     |     |
| 7050    | float  | RD    | Drag indicator: highest value active power sum, delivered                       | W    |     |     |
| 7052    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power L1, delivered   | s    |     |     |
| 7054    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power L2, delivered   | s    |     |     |
| 7056    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power L3, delivered   | s    |     |     |
| 7058    | uint   | RD    | Drag indicator: point in time [UTC], highest value active power sum, delivered  | s    |     |     |
| 7060    | float  | RD    | Drag indicator: 2. highest value current L1                                     | A    |     |     |
| 7062    | float  | RD    | Drag indicator: 2. highest value current L2                                     | A    |     |     |
| 7064    | float  | RD    | Drag indicator: 2. highest value current L3                                     | A    |     |     |
| 7066    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value current L1                | s    |     |     |
| 7068    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value current L2                | s    |     |     |
| 7070    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value current L3                | s    |     |     |
| 7072    | float  | RD    | Drag indicator: 2. highest value apparent power L1                              | VA   |     |     |
| 7074    | float  | RD    | Drag indicator: 2. highest value apparent power L2                              | VA   |     |     |
| 7076    | float  | RD    | Drag indicator: 2. highest value apparent power L3                              | VA   |     |     |
| 7078    | float  | RD    | Drag indicator: 2. highest value apparent power sum                             | VA   |     |     |
| 7080    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value apparent power L1         | s    |     |     |
| 7082    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value apparent power L2         | s    |     |     |
| 7084    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value apparent power L3         | s    |     |     |
| 7086    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value apparent power sum        | s    |     |     |
| 7088    | float  | RD    | Drag indicator: 2. highest value active power L1, consumed                      | W    |     |     |
| 7090    | float  | RD    | Drag indicator: 2. highest value active power L2, consumed                      | W    |     |     |
| 7092    | float  | RD    | Drag indicator: 2. highest value active power L3, consumed                      | W    |     |     |
| 7094    | float  | RD    | Drag indicator: 2. highest value active power sum, consumed                     | W    |     |     |
| 7096    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L1, consumed | s    |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 7098    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L2, consumed   | s    |     |     |
| 7100    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L3, consumed   | s    |     |     |
| 7102    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power sum, consumed  | s    |     |     |
| 7104    | float  | RD    | Drag indicator: 2. highest value active power L1, delivered                       | W    |     |     |
| 7106    | float  | RD    | Drag indicator: 2. highest value active power L2, delivered                       | W    |     |     |
| 7108    | float  | RD    | Drag indicator: 2. highest value active power L3, delivered                       | W    |     |     |
| 7110    | float  | RD    | Drag indicator: 2. highest value active power sum, delivered                      | W    |     |     |
| 7112    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L1, delivered  | s    |     |     |
| 7114    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L2, delivered  | s    |     |     |
| 7116    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power L3, delivered  | s    |     |     |
| 7118    | uint   | RD    | Drag indicator: point in time [UTC], 2. highest value active power sum, delivered | s    |     |     |
| 7120    | float  | RD    | Drag indicator: 3. highest value current L1                                       | A    |     |     |
| 7122    | float  | RD    | Drag indicator: 3. highest value current L2                                       | A    |     |     |
| 7124    | float  | RD    | Drag indicator: 3. highest value current L3                                       | A    |     |     |
| 7126    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value current L1                  | s    |     |     |
| 7128    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value current L2                  | s    |     |     |
| 7130    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value current L3                  | s    |     |     |
| 7132    | float  | RD    | Drag indicator: 3. highest value apparent power L1                                | VA   |     |     |
| 7134    | float  | RD    | Drag indicator: 3. highest value apparent power L2                                | VA   |     |     |
| 7136    | float  | RD    | Drag indicator: 3. highest value apparent power L3                                | VA   |     |     |
| 7138    | float  | RD    | Drag indicator: 3. highest value apparent power sum                               | VA   |     |     |
| 7140    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value apparent power L1           | s    |     |     |
| 7142    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value apparent power L2           | s    |     |     |
| 7144    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value apparent power L3           | s    |     |     |
| 7146    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value apparent power sum          | s    |     |     |
| 7148    | float  | RD    | Drag indicator: 3. highest value active power L1, consumed                        | W    |     |     |
| 7150    | float  | RD    | Drag indicator: 3. highest value active power L2, consumed                        | W    |     |     |
| 7152    | float  | RD    | Drag indicator: 3. highest value active power L3, consumed                        | W    |     |     |
| 7154    | float  | RD    | Drag indicator: 3. highest value active power sum, consumed                       | W    |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 7156    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L1, consumed   | s    |     |     |
| 7158    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L2, consumed   | s    |     |     |
| 7160    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L3, consumed   | s    |     |     |
| 7162    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power sum, consumed  | s    |     |     |
| 7164    | float  | RD    | Drag indicator: 3. highest value active power L1, delivered                       | W    |     |     |
| 7166    | float  | RD    | Drag indicator: 3. highest value active power L2, delivered                       | W    |     |     |
| 7168    | float  | RD    | Drag indicator: 3. highest value active power L3, delivered                       | W    |     |     |
| 7170    | float  | RD    | Drag indicator: 3. highest value active power sum, delivered                      | W    |     |     |
| 7172    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L1, delivered  | s    |     |     |
| 7174    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L2, delivered  | s    |     |     |
| 7176    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power L3, delivered  | s    |     |     |
| 7178    | uint   | RD    | Drag indicator: point in time [UTC], 3. highest value active power sum, delivered | s    |     |     |

## Energy values

|      |       |    |                                 |     |  |  |
|------|-------|----|---------------------------------|-----|--|--|
| 5000 | float | RD | Active Energy L1, consumed      | Wh  |  |  |
| 5002 | float | RD | Active Energy L2, consumed      | Wh  |  |  |
| 5004 | float | RD | Active Energy L3, consumed      | Wh  |  |  |
| 5006 | float | RD | Active Energy sum, consumed     | Wh  |  |  |
| 5008 | float | RD | Active Energy L1, consumed, HT  | Wh  |  |  |
| 5010 | float | RD | Active Energy L2, consumed, HT  | Wh  |  |  |
| 5012 | float | RD | Active Energy L3, consumed, HT  | Wh  |  |  |
| 5014 | float | RD | Active Energy sum, consumed, HT | Wh  |  |  |
| 5016 | float | RD | Active Energy L1, consumed, NT  | Wh  |  |  |
| 5018 | float | RD | Active Energy L2, consumed, NT  | Wh  |  |  |
| 5020 | float | RD | Active Energy L3, consumed, NT  | Wh  |  |  |
| 5022 | float | RD | Active Energy sum, consumed, NT | Wh  |  |  |
| 5024 | float | RD | Apparent Energy L1              | VAh |  |  |
| 5026 | float | RD | Apparent Energy L2              | VAh |  |  |
| 5028 | float | RD | Apparent Energy L3              | VAh |  |  |
| 5030 | float | RD | Apparent Energy, total          | VAh |  |  |
| 5032 | float | RD | Apparent Energy L1, HT          | VAh |  |  |
| 5034 | float | RD | Apparent Energy L1, HT          | VAh |  |  |
| 5036 | float | RD | Apparent Energy L3, HT          | VAh |  |  |
| 5038 | float | RD | Apparent Energy, total, HT      | VAh |  |  |
| 5040 | float | RD | Apparent Energy L1, NT          | VAh |  |  |
| 5042 | float | RD | Apparent Energy L2, NT          | VAh |  |  |
| 5044 | float | RD | Apparent Energy L3, NT          | VAh |  |  |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 5046    | float  | RD    | Apparent Energy, total, NT                                    | VAh  |     |     |
| 5048    | float  | RD    | Reactive Energy L1, inductive                                 | varh |     |     |
| 5050    | float  | RD    | Reactive Energy L2, inductive                                 | varh |     |     |
| 5052    | float  | RD    | Reactive Energy L3, inductive                                 | varh |     |     |
| 5054    | float  | RD    | Reactive Energy sum, inductive                                | varh |     |     |
| 5056    | float  | RD    | Reactive Energy L1, inductive, HT                             | varh |     |     |
| 5058    | float  | RD    | Reactive Energy L2, inductive, HT                             | varh |     |     |
| 5060    | float  | RD    | Reactive Energy L3, inductive, HT                             | varh |     |     |
| 5062    | float  | RD    | Reactive Energy, total, inductive, HT                         | varh |     |     |
| 5064    | float  | RD    | Reactive Energy L1, inductive, NT                             | varh |     |     |
| 5066    | float  | RD    | Reactive Energy L2, inductive, NT                             | varh |     |     |
| 5068    | float  | RD    | Reactive Energy L3, inductive, NT                             | varh |     |     |
| 5070    | float  | RD    | Reactive Energy, total, inductive, NT                         | varh |     |     |
| 5072    | float  | RD    | Active Energy L1, delivered                                   | Wh   |     |     |
| 5074    | float  | RD    | Active Energy L2, delivered                                   | Wh   |     |     |
| 5076    | float  | RD    | Active Energy L3, delivered                                   | Wh   |     |     |
| 5078    | float  | RD    | Active Energy sum, delivered                                  | Wh   |     |     |
| 5080    | float  | RD    | Reactive Energy L1, capacitive                                | varh |     |     |
| 5082    | float  | RD    | Reactive Energy L2, capacitive                                | varh |     |     |
| 5084    | float  | RD    | Reactive Energy L3, capacitive                                | varh |     |     |
| 5086    | float  | RD    | Reactive Energy sum, capacitive                               | varh |     |     |
| 5088    | float  | RD    | Active Energy sum, without return travel block                | Wh   |     |     |
| 5090    | float  | RD    | Reactive Energy sum, without return travel block              | varh |     |     |
| 5092    | float  | RD    | Reactive Energy L1, inductive, consumed                       | varh |     |     |
| 5094    | float  | RD    | Reactive Energy L2, inductive, consumed                       | varh |     |     |
| 5096    | float  | RD    | Reactive Energy L3, inductive, consumed                       | varh |     |     |
| 5098    | float  | RD    | Reactive Energy sum, inductive, consumed                      | varh |     |     |
| 5100    | float  | RD    | Reactive Energy L1, capacitive, consumed                      | varh |     |     |
| 5102    | float  | RD    | Reactive Energy L2, capacitive, consumed                      | varh |     |     |
| 5104    | float  | RD    | Reactive Energy L3, capacitive, consumed                      | varh |     |     |
| 5106    | float  | RD    | Reactive Energy sum, capacitive, consumed                     | varh |     |     |
| 5108    | float  | RD    | Reactive Energy L1, inductive, delivered                      | varh |     |     |
| 5110    | float  | RD    | Reactive Energy L2, inductive, delivered                      | varh |     |     |
| 5112    | float  | RD    | Reactive Energy L3, inductive, delivered                      | varh |     |     |
| 5114    | float  | RD    | Reactive Energy sum, inductive, delivered                     | varh |     |     |
| 5116    | float  | RD    | Reactive Energy L1, capacitive, delivered                     | varh |     |     |
| 5118    | float  | RD    | Reactive Energy L2, capacitive, delivered                     | varh |     |     |
| 5120    | float  | RD    | Reactive Energy L3, capacitive, delivered                     | varh |     |     |
| 5122    | float  | RD    | Reactive Energy sum, capacitive, delivered                    | varh |     |     |
| 5124    | float  | RD    | Active Energy (consumed), max. monthly value, jan., even year | Wh   |     |     |
| 5126    | float  | RD    | Active Energy (consumed), max. monthly value, feb., even year | Wh   |     |     |
| 5128    | float  | RD    | Active Energy (consumed), max. monthly value, mar., even year | Wh   |     |     |
| 5130    | float  | RD    | Active Energy (consumed), max. monthly value, apr., even year | Wh   |     |     |
| 5132    | float  | RD    | Active Energy (consumed), max. monthly value, may., even year | Wh   |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 5134    | float  | RD    | Active Energy (consumed), max. monthly value, jun., even year   | Wh   |     |     |
| 5136    | float  | RD    | Active Energy (consumed), max. monthly value, jul., even year   | Wh   |     |     |
| 5138    | float  | RD    | Active Energy (consumed), max. monthly value, aug., even year   | Wh   |     |     |
| 5140    | float  | RD    | Active Energy (consumed), max. monthly value, sep., even year   | Wh   |     |     |
| 5142    | float  | RD    | Active Energy (consumed), max. monthly value, oct., even year   | Wh   |     |     |
| 5144    | float  | RD    | Active Energy (consumed), max. monthly value, nov., even year   | Wh   |     |     |
| 5146    | float  | RD    | Active Energy (consumed), max. monthly value, dec., even year   | Wh   |     |     |
| 5148    | float  | RD    | Active Energy (consumed), max. monthly value, jan., uneven year | Wh   |     |     |
| 5150    | float  | RD    | Active Energy (consumed), max. monthly value, feb., uneven year | Wh   |     |     |
| 5152    | float  | RD    | Active Energy (consumed), max. monthly value, mar., uneven year | Wh   |     |     |
| 5154    | float  | RD    | Active Energy (consumed), max. monthly value, apr., uneven year | Wh   |     |     |
| 5156    | float  | RD    | Active Energy (consumed), max. monthly value, may., uneven year | Wh   |     |     |
| 5158    | float  | RD    | Active Energy (consumed), max. monthly value, jun., uneven year | Wh   |     |     |
| 5160    | float  | RD    | Active Energy (consumed), max. monthly value, jul., uneven year | Wh   |     |     |
| 5162    | float  | RD    | Active Energy (consumed), max. monthly value, aug., uneven year | Wh   |     |     |
| 5164    | float  | RD    | Active Energy (consumed), max. monthly value, sep., uneven year | Wh   |     |     |
| 5166    | float  | RD    | Active Energy (consumed), max. monthly value, oct., uneven year | Wh   |     |     |
| 5168    | float  | RD    | Active Energy (consumed), max. monthly value, nov., uneven year | Wh   |     |     |
| 5170    | float  | RD    | Active Energy (consumed), max. monthly value, dec., uneven year | Wh   |     |     |
| 5172    | float  | RD    | Apparent Energy, max. monthly value, jan., even year            | VAh  |     |     |
| 5174    | float  | RD    | Apparent Energy, max. monthly value, feb., even year            | VAh  |     |     |
| 5176    | float  | RD    | Apparent Energy, max. monthly value, mar., even year            | VAh  |     |     |
| 5178    | float  | RD    | Apparent Energy, max. monthly value, apr., even year            | VAh  |     |     |
| 5180    | float  | RD    | Apparent Energy, max. monthly value, may., even year            | VAh  |     |     |
| 5182    | float  | RD    | Apparent Energy, max. monthly value, jun., even year            | VAh  |     |     |
| 5184    | float  | RD    | Apparent Energy, max. monthly value, jul., even year            | VAh  |     |     |
| 5186    | float  | RD    | Apparent Energy, max. monthly value, aug., even year            | VAh  |     |     |
| 5188    | float  | RD    | Apparent Energy, max. monthly value, sep., even year            | VAh  |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 5190    | float  | RD    | Apparent Energy, max. monthly value, oct., even year          | VAh  |     |     |
| 5192    | float  | RD    | Apparent Energy, max. monthly value, nov., even year          | VAh  |     |     |
| 5194    | float  | RD    | Apparent Energy, max. monthly value, dec., even year          | VAh  |     |     |
| 5196    | float  | RD    | Apparent Energy, max. monthly value, jan., uneven year        | VAh  |     |     |
| 5198    | float  | RD    | Apparent Energy, max. monthly value, feb., uneven year        | VAh  |     |     |
| 5200    | float  | RD    | Apparent Energy, max. monthly value, mar., uneven year        | VAh  |     |     |
| 5202    | float  | RD    | Apparent Energy, max. monthly value, apr., uneven year        | VAh  |     |     |
| 5204    | float  | RD    | Apparent Energy, max. monthly value, may., uneven year        | VAh  |     |     |
| 5206    | float  | RD    | Apparent Energy, max. monthly value, jun., uneven year        | VAh  |     |     |
| 5208    | float  | RD    | Apparent Energy, max. monthly value, jul., uneven year        | VAh  |     |     |
| 5210    | float  | RD    | Apparent Energy, max. monthly value, aug., uneven year        | VAh  |     |     |
| 5212    | float  | RD    | Apparent Energy, max. monthly value, sep., uneven year        | VAh  |     |     |
| 5214    | float  | RD    | Apparent Energy, max. monthly value, oct., uneven year        | VAh  |     |     |
| 5216    | float  | RD    | Apparent Energy, max. monthly value, nov., uneven year        | VAh  |     |     |
| 5218    | float  | RD    | Apparent Energy, max. monthly value, dec., uneven year        | VAh  |     |     |
| 5220    | float  | RD    | Reactive Energy (ind.), max. monthly value, jan., even year   | varh |     |     |
| 5222    | float  | RD    | Reactive Energy (ind.), max. monthly value, feb., even year   | varh |     |     |
| 5224    | float  | RD    | Reactive Energy (ind.), max. monthly value, mar., even year   | varh |     |     |
| 5226    | float  | RD    | Reactive Energy (ind.), max. monthly value, apr., even year   | varh |     |     |
| 5228    | float  | RD    | Reactive Energy (ind.), max. monthly value, may., even year   | varh |     |     |
| 5230    | float  | RD    | Reactive Energy (ind.), max. monthly value, jun., even year   | varh |     |     |
| 5232    | float  | RD    | Reactive Energy (ind.), max. monthly value, jul., even year   | varh |     |     |
| 5234    | float  | RD    | Reactive Energy (ind.), max. monthly value, aug., even year   | varh |     |     |
| 5236    | float  | RD    | Reactive Energy (ind.), max. monthly value, sep., even year   | varh |     |     |
| 5238    | float  | RD    | Reactive Energy (ind.), max. monthly value, oct., even year   | varh |     |     |
| 5240    | float  | RD    | Reactive Energy (ind.), max. monthly value, nov., even year   | varh |     |     |
| 5242    | float  | RD    | Reactive Energy (ind.), max. monthly value, dec., even year   | varh |     |     |
| 5244    | float  | RD    | Reactive Energy (ind.), max. monthly value, jan., uneven year | varh |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max        |
|---------|--------|-------|--|------|-----|------------|
| 5246    | float  | RD    | Reactive Energy (ind.), max. monthly value, feb.,<br>uneven year | varh |     |            |
| 5248    | float  | RD    | Reactive Energy (ind.), max. monthly value, mar.,<br>uneven year | varh |     |            |
| 5250    | float  | RD    | Reactive Energy (ind.), max. monthly value, apr.,<br>uneven year | varh |     |            |
| 5252    | float  | RD    | Reactive Energy (ind.), max. monthly value,<br>may., uneven year | varh |     |            |
| 5254    | float  | RD    | Reactive Energy (ind.), max. monthly value, jun.,<br>uneven year | varh |     |            |
| 5256    | float  | RD    | Reactive Energy (ind.), max. monthly value, jul.,<br>uneven year | varh |     |            |
| 5258    | float  | RD    | Reactive Energy (ind.), max. monthly value,<br>aug., uneven year | varh |     |            |
| 5260    | float  | RD    | Reactive Energy (ind.), max. monthly value, sep.,<br>uneven year | varh |     |            |
| 5262    | float  | RD    | Reactive Energy (ind.), max. monthly value, oct.,<br>uneven year | varh |     |            |
| 5264    | float  | RD    | Reactive Energy (ind.), max. monthly value, nov.,<br>uneven year | varh |     |            |
| 5266    | float  | RD    | Reactive Energy (ind.), max. monthly value,<br>dec., uneven year | varh |     |            |
| 6000    | double | RD/WR | Active Energy L1, consumed                                       | Wh   | 0   | 3.403 e+38 |
| 6004    | double | RD/WR | Active Energy L2, consumed                                       | Wh   | 0   | 3.403 e+38 |
| 6008    | double | RD/WR | Active Energy L3, consumed                                       | Wh   | 0   | 3.403 e+38 |
| 6012    | double | RD/WR | Active Energy sum, consumed                                      | Wh   | 0   | 3.403 e+38 |
| 6016    | double | RD/WR | Active Energy L1, consumed, HT                                   | Wh   | 0   | 3.403 e+38 |
| 6020    | double | RD/WR | Active Energy L2, consumed, HT                                   | Wh   | 0   | 3.403 e+38 |
| 6024    | double | RD/WR | Active Energy L3, consumed, HT                                   | Wh   | 0   | 3.403 e+38 |
| 6028    | double | RD/WR | Active Energy sum, consumed, HT                                  | Wh   | 0   | 3.403 e+38 |
| 6032    | double | RD/WR | Active Energy L1, consumed, NT                                   | Wh   | 0   | 3.403 e+38 |
| 6036    | double | RD/WR | Active Energy L2, consumed, NT                                   | Wh   | 0   | 3.403 e+38 |
| 6040    | double | RD/WR | Active Energy L3, consumed, NT                                   | Wh   | 0   | 3.403 e+38 |
| 6044    | double | RD/WR | Active Energy sum, consumed, NT                                  | Wh   | 0   | 3.403 e+38 |
| 6048    | double | RD/WR | Apparent Energy L1   | VAh  | 0   | 3.403 e+38 |
| 6052    | double | RD/WR | Apparent Energy L2   | VAh  | 0   | 3.403 e+38 |
| 6056    | double | RD/WR | Apparent Energy L3   | VAh  | 0   | 3.403 e+38 |
| 6060    | double | RD/WR | Apparent Energy, total   | VAh  | 0   | 3.403 e+38 |
| 6064    | double | RD/WR | Apparent Energy L1, HT   | VAh  | 0   | 3.403 e+38 |
| 6068    | double | RD/WR | Apparent Energy L2, HT   | VAh  | 0   | 3.403 e+38 |
| 6072    | double | RD/WR | Apparent Energy L3, HT   | VAh  | 0   | 3.403 e+38 |
| 6076    | double | RD/WR | Apparent Energy, total, HT                                       | VAh  | 0   | 3.403 e+38 |
| 6080    | double | RD/WR | Apparent Energy L1, NT   | VAh  | 0   | 3.403 e+38 |
| 6084    | double | RD/WR | Apparent Energy L2, NT   | VAh  | 0   | 3.403 e+38 |
| 6088    | double | RD/WR | Apparent Energy L3, NT   | VAh  | 0   | 3.403 e+38 |
| 6092    | double | RD/WR | Apparent Energy, total, NT                                       | VAh  | 0   | 3.403 e+38 |
| 6096    | double | RD/WR | Reactive Energy L1, inductive                                    | varh | 0   | 3.403 e+38 |
| 6100    | double | RD/WR | Reactive Energy L2, inductive                                    | varh | 0   | 3.403 e+38 |
| 6104    | double | RD/WR | Reactive Energy L3, inductive                                    | varh | 0   | 3.403 e+38 |
| 6108    | double | RD/WR | Reactive Energy sum, inductive                                   | varh | 0   | 3.403 e+38 |
| 6112    | double | RD/WR | Reactive Energy L1, inductive, HT                                | varh | 0   | 3.403 e+38 |

| Address | Format | RD/WR | Note  | Unit | Min | Max        |
|---------|--------|-------|---|------|-----|------------|
| 6116    | double | RD/WR | Reactive Energy L2, inductive, HT                             | varh | 0   | 3.403 e+38 |
| 6120    | double | RD/WR | Reactive Energy L3, inductive, HT                             | varh | 0   | 3.403 e+38 |
| 6124    | double | RD/WR | Reactive Energy, total, inductive, HT                         | varh | 0   | 3.403 e+38 |
| 6128    | double | RD/WR | Reactive Energy L1, inductive, NT                             | varh | 0   | 3.403 e+38 |
| 6132    | double | RD/WR | Reactive Energy L2, inductive, NT                             | varh | 0   | 3.403 e+38 |
| 6136    | double | RD/WR | Reactive Energy L3, inductive, NT                             | varh | 0   | 3.403 e+38 |
| 6140    | double | RD/WR | Reactive Energy, total, inductive, NT                         | varh | 0   | 3.403 e+38 |
| 6144    | double | RD/WR | Active Energy, delivered                                      | Wh   | 0   | 3.403 e+38 |
| 6148    | double | RD/WR | Active Energy L2, delivered                                   | Wh   | 0   | 3.403 e+38 |
| 6152    | double | RD/WR | Active Energy L3, delivered                                   | Wh   | 0   | 3.403 e+38 |
| 6156    | double | RD/WR | Active Energy sum, delivered                                  | Wh   | 0   | 3.403 e+38 |
| 6160    | double | RD/WR | Reactive Energy L1, capacitive                                | varh | 0   | 3.403 e+38 |
| 6164    | double | RD/WR | Reactive Energy L2, capacitive                                | varh | 0   | 3.403 e+38 |
| 6168    | double | RD/WR | Reactive Energy L3, capacitive                                | varh | 0   | 3.403 e+38 |
| 6172    | double | RD/WR | Reactive Energy sum, capacitive                               | varh | 0   | 3.403 e+38 |
| 6176    | double | RD/WR | Active Energy sum, without return travel block                | Wh   | 0   | 3.403 e+38 |
| 6180    | double | RD/WR | Reactive Energy sum, without return travel block              | varh | 0   | 3.403 e+38 |
| 6184    | double | RD/WR | Reactive Energy L1, inductive, consumed                       | varh | 0   | 3.403 e+38 |
| 6188    | double | RD/WR | Reactive Energy L2, inductive, consumed                       | varh | 0   | 3.403 e+38 |
| 6192    | double | RD/WR | Reactive Energy L3, inductive, consumed                       | varh | 0   | 3.403 e+38 |
| 6196    | double | RD/WR | Reactive Energy sum, inductive, consumed                      | varh | 0   | 3.403 e+38 |
| 6200    | double | RD/WR | Reactive Energy L1, capacitive, consumed                      | varh | 0   | 3.403 e+38 |
| 6204    | double | RD/WR | Reactive Energy L2, capacitive, consumed                      | varh | 0   | 3.403 e+38 |
| 6208    | double | RD/WR | Reactive Energy L3, capacitive, consumed                      | varh | 0   | 3.403 e+38 |
| 6212    | double | RD/WR | Reactive Energy sum, capacitive, consumed                     | varh | 0   | 3.403 e+38 |
| 6216    | double | RD/WR | Reactive Energy L1, inductive, delivered                      | varh | 0   | 3.403 e+38 |
| 6220    | double | RD/WR | Reactive Energy L2, inductive, delivered                      | varh | 0   | 3.403 e+38 |
| 6224    | double | RD/WR | Reactive Energy L3, inductive, delivered                      | varh | 0   | 3.403 e+38 |
| 6228    | double | RD/WR | Reactive Energy sum, inductive, delivered                     | varh | 0   | 3.403 e+38 |
| 6232    | double | RD/WR | Reactive Energy L1, capacitive, delivered                     | varh | 0   | 3.403 e+38 |
| 6236    | double | RD/WR | Reactive Energy L2, capacitive, delivered                     | varh | 0   | 3.403 e+38 |
| 6240    | double | RD/WR | Reactive Energy L3, capacitive, delivered                     | varh | 0   | 3.403 e+38 |
| 6244    | double | RD/WR | Reactive Energy sum, capacitive, delivered                    | varh | 0   | 3.403 e+38 |
| 6248    | double | RD    | Active Energy (consumed), max. monthly value, jan., even year | Wh   |     |            |
| 6252    | double | RD    | Active Energy (consumed), max. monthly value, feb., even year | Wh   |     |            |
| 6256    | double | RD    | Active Energy (consumed), max. monthly value, mar., even year | Wh   |     |            |
| 6260    | double | RD    | Active Energy (consumed), max. monthly value, apr., even year | Wh   |     |            |
| 6264    | double | RD    | Active Energy (consumed), max. monthly value, may., even year | Wh   |     |            |
| 6268    | double | RD    | Active Energy (consumed), max. monthly value, jun., even year | Wh   |     |            |
| 6272    | double | RD    | Active Energy (consumed), max. monthly value, jul., even year | Wh   |     |            |
| 6276    | double | RD    | Active Energy (consumed), max. monthly value, aug., even year | Wh   |     |            |
| 6280    | double | RD    | Active Energy (consumed), max. monthly value, sep., even year | Wh   |     |            |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 6284    | double | RD    | Active Energy (consumed), max. monthly value, oct., even year   | Wh   |     |     |
| 6288    | double | RD    | Active Energy (consumed), max. monthly value, nov., even year   | Wh   |     |     |
| 6292    | double | RD    | Active Energy (consumed), max. monthly value, dec., even year   | Wh   |     |     |
| 6296    | double | RD    | Active Energy (consumed), max. monthly value, jan., uneven year | Wh   |     |     |
| 6300    | double | RD    | Active Energy (consumed), max. monthly value, feb., uneven year | Wh   |     |     |
| 6304    | double | RD    | Active Energy (consumed), max. monthly value, mar., uneven year | Wh   |     |     |
| 6308    | double | RD    | Active Energy (consumed), max. monthly value, apr., uneven year | Wh   |     |     |
| 6312    | double | RD    | Active Energy (consumed), max. monthly value, may., uneven year | Wh   |     |     |
| 6316    | double | RD    | Active Energy (consumed), max. monthly value, jun., uneven year | Wh   |     |     |
| 6320    | double | RD    | Active Energy (consumed), max. monthly value, jul., uneven year | Wh   |     |     |
| 6324    | double | RD    | Active Energy (consumed), max. monthly value, aug., uneven year | Wh   |     |     |
| 6328    | double | RD    | Active Energy (consumed), max. monthly value, sep., uneven year | Wh   |     |     |
| 6332    | double | RD    | Active Energy (consumed), max. monthly value, oct., uneven year | Wh   |     |     |
| 6336    | double | RD    | Active Energy (consumed), max. monthly value, oct., uneven year | Wh   |     |     |
| 6340    | double | RD    | Active Energy (consumed), max. monthly value, dec., uneven year | Wh   |     |     |
| 6344    | double | RD    | Apparent Energy, max. monthly value, jan., even year            | VAh  |     |     |
| 6348    | double | RD    | Apparent Energy, max. monthly value, feb., even year            | VAh  |     |     |
| 6352    | double | RD    | Apparent Energy, max. monthly value, mar., even year            | VAh  |     |     |
| 6356    | double | RD    | Apparent Energy, max. monthly value, apr., even year            | VAh  |     |     |
| 6360    | double | RD    | Apparent Energy, max. monthly value, may., even year            | VAh  |     |     |
| 6364    | double | RD    | Apparent Energy, max. monthly value, jun., even year            | VAh  |     |     |
| 6368    | double | RD    | Apparent Energy, max. monthly value, jul., even year            | VAh  |     |     |
| 6372    | double | RD    | Apparent Energy, max. monthly value, aug., even year            | VAh  |     |     |
| 6376    | double | RD    | Apparent Energy, max. monthly value, sep., even year            | VAh  |     |     |
| 6380    | double | RD    | Apparent Energy, max. monthly value, oct., even year            | VAh  |     |     |
| 6384    | double | RD    | Apparent Energy, max. monthly value, nov., even year            | VAh  |     |     |
| 6388    | double | RD    | Apparent Energy, max. monthly value, dec., even year            | VAh  |     |     |
| 6392    | double | RD    | Apparent Energy, max. monthly value, jan., uneven year          | VAh  |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 6396    | double | RD    | Apparent Energy, max. monthly value, feb., uneven year | VAh  |     |     |
| 6400    | double | RD    | Apparent Energy, max. monthly value, mar., uneven year | VAh  |     |     |
| 6404    | double | RD    | Apparent Energy, max. monthly value, apr., uneven year | VAh  |     |     |
| 6408    | double | RD    | Apparent Energy, max. monthly value, may., uneven year | VAh  |     |     |
| 6412    | double | RD    | Apparent Energy, max. monthly value, jun., uneven year | VAh  |     |     |
| 6416    | double | RD    | Apparent Energy, max. monthly value, jul., uneven year | VAh  |     |     |
| 6420    | double | RD    | Apparent Energy, max. monthly value, aug., uneven year | VAh  |     |     |
| 6424    | double | RD    | Apparent Energy, max. monthly value, sep., uneven year | VAh  |     |     |
| 6428    | double | RD    | Apparent Energy, max. monthly value, oct., uneven year | VAh  |     |     |
| 6432    | double | RD    | Apparent Energy, max. monthly value, nov., uneven year | VAh  |     |     |
| 6436    | double | RD    | Apparent Energy, max. monthly value, dec., uneven year | VAh  |     |     |
| 15000   | int    | RD    | Active Energy L1, consumed                             | Wh   |     |     |
| 15002   | int    | RD    | Active Energy L2, consumed                             | Wh   |     |     |
| 15004   | int    | RD    | Active Energy L3, consumed                             | Wh   |     |     |
| 15006   | int    | RD    | Active Energy sum, consumed                            | Wh   |     |     |
| 15008   | int    | RD    | Active Energy L1, consumed, HT                         | Wh   |     |     |
| 15010   | int    | RD    | Active Energy L2, consumed, HT                         | Wh   |     |     |
| 15012   | int    | RD    | Active Energy L3, consumed, HT                         | Wh   |     |     |
| 15014   | int    | RD    | Active Energy sum, consumed, HT                        | Wh   |     |     |
| 15016   | int    | RD    | Active Energy L1, consumed, NT                         | Wh   |     |     |
| 15018   | int    | RD    | Active Energy L2, consumed, NT                         | Wh   |     |     |
| 15020   | int    | RD    | Active Energy L3, consumed, NT                         | Wh   |     |     |
| 15022   | int    | RD    | Active Energy sum, consumed, NT                        | Wh   |     |     |
| 15024   | int    | RD    | Apparent Energy L1                                     | VAh  |     |     |
| 15026   | int    | RD    | Apparent Energy L2                                     | VAh  |     |     |
| 15028   | int    | RD    | Apparent Energy L3                                     | VAh  |     |     |
| 15030   | int    | RD    | Apparent Energy, total                                 | VAh  |     |     |
| 15032   | int    | RD    | Apparent Energy L1, HT                                 | VAh  |     |     |
| 15034   | int    | RD    | Apparent Energy L2, HT                                 | VAh  |     |     |
| 15036   | int    | RD    | Apparent Energy L3, HT                                 | VAh  |     |     |
| 15038   | int    | RD    | Apparent Energy, total, HT                             | VAh  |     |     |
| 15040   | int    | RD    | Apparent Energy L1, NT                                 | VAh  |     |     |
| 15042   | int    | RD    | Apparent Energy L2, NT                                 | VAh  |     |     |
| 15044   | int    | RD    | Apparent Energy L3, NT                                 | VAh  |     |     |
| 15046   | int    | RD    | Apparent Energy, total, NT                             | VAh  |     |     |
| 15048   | int    | RD    | Reactive Energy L1, inductive                          | varh |     |     |
| 15050   | int    | RD    | Reactive Energy L2, inductive                          | varh |     |     |
| 15052   | int    | RD    | Reactive Energy L3, inductive                          | varh |     |     |
| 15054   | int    | RD    | Reactive Energy sum, inductive                         | varh |     |     |
| 15056   | int    | RD    | Reactive Energy L1, inductive, HT                      | varh |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 15058   | int    | RD    | Reactive Energy L2, inductive, HT                             | varh |     |     |
| 15060   | int    | RD    | Reactive Energy L3, inductive, HT                             | varh |     |     |
| 15062   | int    | RD    | Reactive Energy, total, inductive, HT                         | varh |     |     |
| 15064   | int    | RD    | Reactive Energy L1, inductive, NT                             | varh |     |     |
| 15066   | int    | RD    | Reactive Energy L2, inductive, NT                             | varh |     |     |
| 15068   | int    | RD    | Reactive Energy L3, inductive, NT                             | varh |     |     |
| 15070   | int    | RD    | Reactive Energy, total, inductive, NT                         | varh |     |     |
| 15072   | int    | RD    | Active Energy L1, delivered                                   | Wh   |     |     |
| 15074   | int    | RD    | Active Energy L2, delivered                                   | Wh   |     |     |
| 15076   | int    | RD    | Active Energy L3, delivered                                   | Wh   |     |     |
| 15078   | int    | RD    | Active Energy sum, delivered                                  | Wh   |     |     |
| 15080   | int    | RD    | Reactive Energy L1, capacitive                                | varh |     |     |
| 15082   | int    | RD    | Reactive Energy L2, capacitive                                | varh |     |     |
| 15084   | int    | RD    | Reactive Energy L3, capacitive                                | varh |     |     |
| 15086   | int    | RD    | Reactive Energy sum, capacitive                               | varh |     |     |
| 15088   | int    | RD    | Active Energy sum, without return travel block                | Wh   |     |     |
| 15090   | int    | RD    | Reactive Energy sum, without return travel block              | varh |     |     |
| 15092   | int    | RD    | Reactive Energy L1, inductive, consumed                       | varh |     |     |
| 15094   | int    | RD    | Reactive Energy L2, inductive, consumed                       | varh |     |     |
| 15096   | int    | RD    | Reactive Energy L3, inductive, consumed                       | varh |     |     |
| 15098   | int    | RD    | Reactive Energy sum, inductive, consumed                      | varh |     |     |
| 15100   | int    | RD    | Reactive Energy L1, capacitive, consumed                      | varh |     |     |
| 15102   | int    | RD    | Reactive Energy L2, capacitive, consumed                      | varh |     |     |
| 15104   | int    | RD    | Reactive Energy L3, capacitive, consumed                      | varh |     |     |
| 15106   | int    | RD    | Reactive Energy sum, capacitive, consumed                     | varh |     |     |
| 15108   | int    | RD    | Reactive Energy L1, inductive, delivered                      | varh |     |     |
| 15110   | int    | RD    | Reactive Energy L2, inductive, delivered                      | varh |     |     |
| 15112   | int    | RD    | Reactive Energy L3, inductive, delivered                      | varh |     |     |
| 15114   | int    | RD    | Reactive Energy sum, inductive, delivered                     | varh |     |     |
| 15116   | int    | RD    | Reactive Energy L1, capacitive, delivered                     | varh |     |     |
| 15118   | int    | RD    | Reactive Energy L2, capacitive, delivered                     | varh |     |     |
| 15120   | int    | RD    | Reactive Energy L3, capacitive, delivered                     | varh |     |     |
| 15122   | int    | RD    | Reactive Energy sum, capacitive, delivered                    | varh |     |     |
| 15124   | int    | RD    | Active Energy (consumed), max. monthly value, jan., even year | Wh   |     |     |
| 15126   | int    | RD    | Active Energy (consumed), max. monthly value, feb., even year | Wh   |     |     |
| 15128   | int    | RD    | Active Energy (consumed), max. monthly value, mar., even year | Wh   |     |     |
| 15130   | int    | RD    | Active Energy (consumed), max. monthly value, apr., even year | Wh   |     |     |
| 15132   | int    | RD    | Active Energy (consumed), max. monthly value, may., even year | Wh   |     |     |
| 15134   | int    | RD    | Active Energy (consumed), max. monthly value, jun., even year | Wh   |     |     |
| 15136   | int    | RD    | Active Energy (consumed), max. monthly value, jul., even year | Wh   |     |     |
| 15138   | int    | RD    | Active Energy (consumed), max. monthly value, aug., even year | Wh   |     |     |
| 15140   | int    | RD    | Active Energy (consumed), max. monthly value, sep., even year | Wh   |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 15142   | int    | RD    | Active Energy (consumed), max. monthly value, oct., even year   | Wh   |     |     |
| 15144   | int    | RD    | Active Energy (consumed), max. monthly value, nov., even year   | Wh   |     |     |
| 15146   | int    | RD    | Active Energy (consumed), max. monthly value, dec., even year   | Wh   |     |     |
| 15148   | int    | RD    | Active Energy (consumed), max. monthly value, jan., uneven year | Wh   |     |     |
| 15150   | int    | RD    | Active Energy (consumed), max. monthly value, feb., uneven year | Wh   |     |     |
| 15152   | int    | RD    | Active Energy (consumed), max. monthly value, mar., uneven year | Wh   |     |     |
| 15154   | int    | RD    | Active Energy (consumed), max. monthly value, apr., uneven year | Wh   |     |     |
| 15156   | int    | RD    | Active Energy (consumed), max. monthly value, may., uneven year | Wh   |     |     |
| 15158   | int    | RD    | Active Energy (consumed), max. monthly value, jun., uneven year | Wh   |     |     |
| 15160   | int    | RD    | Active Energy (consumed), max. monthly value, jul., uneven year | Wh   |     |     |
| 15162   | int    | RD    | Active Energy (consumed), max. monthly value, aug., uneven year | Wh   |     |     |
| 15164   | int    | RD    | Active Energy (consumed), max. monthly value, sep., uneven year | Wh   |     |     |
| 15166   | int    | RD    | Active Energy (consumed), max. monthly value, oct., uneven year | Wh   |     |     |
| 15168   | int    | RD    | Active Energy (consumed), max. monthly value, nov., uneven year | Wh   |     |     |
| 15170   | int    | RD    | Active Energy (consumed), max. monthly value, dec., uneven year | Wh   |     |     |
| 15192   | int    | RD    | Apparent Energy, max. monthly value, jan., even year            | VAh  |     |     |
| 15194   | int    | RD    | Apparent Energy, max. monthly value, feb., even year            | VAh  |     |     |
| 15196   | int    | RD    | Apparent Energy, max. monthly value, mar., even year            | VAh  |     |     |
| 15198   | int    | RD    | Apparent Energy, max. monthly value, apr., even year            | VAh  |     |     |
| 15200   | int    | RD    | Apparent Energy, max. monthly value, may., even year            | VAh  |     |     |
| 15202   | int    | RD    | Apparent Energy, max. monthly value, jun., even year            | VAh  |     |     |
| 15204   | int    | RD    | Apparent Energy, max. monthly value, jul., even year            | VAh  |     |     |
| 15206   | int    | RD    | Apparent Energy, max. monthly value, aug., even year            | VAh  |     |     |
| 15208   | int    | RD    | Apparent Energy, max. monthly value, sep., even year            | VAh  |     |     |
| 15210   | int    | RD    | Apparent Energy, max. monthly value, oct., even year            | VAh  |     |     |
| 15212   | int    | RD    | Apparent Energy, max. monthly value, nov., even year            | VAh  |     |     |
| 15214   | int    | RD    | Apparent Energy, max. monthly value, dec., even year            | VAh  |     |     |
| 15216   | int    | RD    | Apparent Energy, max. monthly value, jan., uneven year          | VAh  |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 15218   | int    | RD    | Apparent Energy, max. monthly value, feb.,<br>uneven year        | VAh  |     |     |
| 15220   | int    | RD    | Apparent Energy, max. monthly value, mar.,<br>uneven year        | VAh  |     |     |
| 15222   | int    | RD    | Apparent Energy, max. monthly value, apr.,<br>uneven year        | VAh  |     |     |
| 15224   | int    | RD    | Apparent Energy, max. monthly value, may.,<br>uneven year        | VAh  |     |     |
| 15226   | int    | RD    | Apparent Energy, max. monthly value, jun.,<br>uneven year        | VAh  |     |     |
| 15228   | int    | RD    | Apparent Energy, max. monthly value, jul.,<br>uneven year        | VAh  |     |     |
| 15230   | int    | RD    | Apparent Energy, max. monthly value, aug.,<br>uneven year        | VAh  |     |     |
| 15232   | int    | RD    | Apparent Energy, max. monthly value, sep.,<br>uneven year        | VAh  |     |     |
| 15234   | int    | RD    | Apparent Energy, max. monthly value, oct.,<br>uneven year        | VAh  |     |     |
| 15236   | int    | RD    | Apparent Energy, max. monthly value, nov.,<br>uneven year        | VAh  |     |     |
| 15238   | int    | RD    | Apparent Energy, max. monthly value, dec.,<br>uneven year        | VAh  |     |     |
| 15240   | int    | RD    | Reactive Energy (ind.), max. monthly value, jan.,<br>even year   | varh |     |     |
| 15242   | int    | RD    | Reactive Energy (ind.), max. monthly value, feb.,<br>even year   | varh |     |     |
| 15244   | int    | RD    | Reactive Energy (ind.), max. monthly value, mar.,<br>even year   | varh |     |     |
| 15246   | int    | RD    | Reactive Energy (ind.), max. monthly value, apr.,<br>even year   | varh |     |     |
| 15248   | int    | RD    | Reactive Energy (ind.), max. monthly value,<br>may., even year   | varh |     |     |
| 15250   | int    | RD    | Reactive Energy (ind.), max. monthly value, jun.,<br>even year   | varh |     |     |
| 15252   | int    | RD    | Reactive Energy (ind.), max. monthly value, jul.,<br>even year   | varh |     |     |
| 15254   | int    | RD    | Reactive Energy (ind.), max. monthly value,<br>aug., even year   | varh |     |     |
| 15256   | int    | RD    | Reactive Energy (ind.), max. monthly value, sep.,<br>even year   | varh |     |     |
| 15258   | int    | RD    | Reactive Energy (ind.), max. monthly value, oct.,<br>even year   | varh |     |     |
| 15260   | int    | RD    | Reactive Energy (ind.), max. monthly value, nov.,<br>even year   | varh |     |     |
| 15262   | int    | RD    | Reactive Energy (ind.), max. monthly value,<br>dec., even year   | varh |     |     |
| 15264   | int    | RD    | Reactive Energy (ind.), max. monthly value, jan.,<br>uneven year | varh |     |     |
| 15266   | int    | RD    | Reactive Energy (ind.), max. monthly value, feb.,<br>uneven year | varh |     |     |
| 15268   | int    | RD    | Reactive Energy (ind.), max. monthly value, mar.,<br>uneven year | varh |     |     |
| 15270   | int    | RD    | Reactive Energy (ind.), max. monthly value, apr.,<br>uneven year | varh |     |     |
| 15272   | int    | RD    | Reactive Energy (ind.), max. monthly value,<br>may., uneven year | varh |     |     |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 15274   | int    | RD    | Reactive Energy (ind.), max. monthly value, jun., uneven year | varh |     |     |
| 15276   | int    | RD    | Reactive Energy (ind.), max. monthly value, jul., uneven year | varh |     |     |
| 15278   | int    | RD    | Reactive Energy (ind.), max. monthly value, aug., uneven year | varh |     |     |
| 15280   | int    | RD    | Reactive Energy (ind.), max. monthly value, sep., uneven year | varh |     |     |
| 15282   | int    | RD    | Reactive Energy (ind.), max. monthly value, oct., uneven year | varh |     |     |
| 15284   | int    | RD    | Reactive Energy (ind.), max. monthly value, nov., uneven year | varh |     |     |
| 15286   | int    | RD    | Reactive Energy (ind.), max. monthly value, dec., uneven year | varh |     |     |

### Digital inputs/outputs

|       |        |       |  |  |   |            |
|-------|--------|-------|--|--|---|------------|
| 806   | short  | RD/WR | Trigger a power quality event by 806=1   |  | 0 | 1          |
| 30046 | short  | RD/WR | Function of digital input 1:<br>0 = S0 input (pulse counter)<br>1 = Tariff switch HT/NT<br>5 = Event trigger (PQ series only) - Rising edge<br>6 = Event trigger (PQ series only) - Falling Flank<br>7 = Event trigger (PQ series only) - Alternating flank                            |  | 0 | 7          |
| 30047 | short  | RD/WR | Function of digital input 2:<br>0 = S0 input (pulse counter)<br>1 = Clock sync - minutes<br>3 = Clock sync - hours<br>5 = Event trigger (PQ series only) - Rising edge<br>6 = Event trigger (PQ series only) - Falling flank<br>7 = Event trigger (PQ series only) - Alternating flank |  |   |            |
| 30048 | short  | RD/WR | Function of digital input 3:<br>0 = S0 input (pulse counter)<br>4 = Drag indicator synchronisation<br>5 = Event trigger (PQ series only) - Rising edge<br>6 = Event trigger (PQ series only) - Falling flank<br>7 = Event trigger - Alternating flank                                  |  | 0 | 7          |
| 30400 | short  | RD    | Digital I/O: status digital Input 1  |  |   |            |
| 30401 | short  | RD    | Digital I/O: status digital Input 2  |  |   |            |
| 30402 | short  | RD    | Digital I/O: status digital Input 3  |  |   |            |
| 30406 | short  | RD    | Digital I/O: status digital Output 1   |  |   |            |
| 30407 | short  | RD    | Digital I/O: status digital Output 2   |  |   |            |
| 30408 | short  | RD    | Digital I/O: status digital Output 3   |  |   |            |
| 30409 | short  | RD/WR | Digital I/O: setting output 1  |  | 0 | 1          |
| 30410 | short  | RD/WR | Digital I/O: setting output 2  |  | 0 | 1          |
| 30411 | short  | RD/WR | Digital I/O: setting output 3  |  | 0 | 1          |
| 30412 | float  | RD    | Digital I/O: power values S0 input 1   |  |   |            |
| 30414 | float  | RD    | Digital I/O: power values S0 input 2   |  |   |            |
| 30416 | float  | RD    | Digital I/O: power values S0 input 3   |  |   |            |
| 30418 | long64 | RD/WR | Digital I/O: pulse counter, input 1  |  | 0 | 3.403 e+38 |
| 30422 | long64 | RD/WR | Digital I/O: pulse counter, input 2  |  | 0 | 3.403 e+38 |
| 30426 | long64 | RD/WR | Digital I/O: pulse counter, input 3  |  | 0 | 3.403 e+38 |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 30430   | int    | RD    | Digital I/O: pulse counter, input 1                 |      |     |     |
| 30432   | int    | RD    | Digital I/O: pulse counter, input 2                 |      |     |     |
| 30434   | int    | RD    | Digital I/O: pulse counter, input 3                 |      |     |     |
| 30436   | double | RD    | Digital I/O: pulse count x scaling, input 1         |      |     |     |
| 30440   | double | RD    | Digital I/O: pulse count x scaling, input 2         |      |     |     |
| 30444   | double | RD    | Digital I/O: pulse count x scaling, input 3         |      |     |     |
| 30448   | float  | RD    | Digital I/O: pulse count x scaling, input 1         |      |     |     |
| 30450   | float  | RD    | Digital I/O: pulse count x scaling, input 2         |      |     |     |
| 30452   | float  | RD    | Digital I/O: pulse count x scaling, input 3         |      |     |     |
| 30565   | long64 | RD    | Digital I/O: UTC timestamp, event 1, input 1        | s    |     |     |
| 30569   | long64 | RD    | Digital I/O: UTC timestamp, event 1, input 2        | s    |     |     |
| 30573   | long64 | RD    | Digital I/O: UTC timestamp, event 1, input 3        | s    |     |     |
| 30577   | short  | RD    | Digital I/O: status, event 1, input 1 (0=off, 1=on) |      |     |     |
| 30578   | short  | RD    | Digital I/O: status, event 1, input 2 (0=off, 1=on) |      |     |     |
| 30579   | short  | RD    | Digital I/O: status, event 1, input 3 (0=off, 1=on) |      |     |     |
| 30580   | long64 | RD    | Digital I/O: UTC timestamp, event 2, input 1        | s    |     |     |
| 30584   | long64 | RD    | Digital I/O: UTC timestamp, event 2, input 2        | s    |     |     |
| 30588   | long64 | RD    | Digital I/O: UTC timestamp, event 2, input 3        | s    |     |     |
| 30592   | short  | RD    | Digital I/O: status, event 2, input 1 (0=off, 1=on) |      |     |     |
| 30593   | short  | RD    | Digital I/O: status, event 2, input 2 (0=off, 1=on) |      |     |     |
| 30594   | short  | RD    | Digital I/O: status, event 2, input 3 (0=off, 1=on) |      |     |     |
| 30595   | long64 | RD    | Digital I/O: UTC timestamp, event 3, input 1        | s    |     |     |
| 30599   | long64 | RD    | Digital I/O: UTC timestamp, event 3, input 2        | s    |     |     |
| 30603   | long64 | RD    | Digital I/O: UTC timestamp, event 3, input 3        | s    |     |     |
| 30607   | short  | RD    | Digital I/O: status, event 3, input 1 (0=off, 1=on) |      |     |     |
| 30608   | short  | RD    | Digital I/O: status, event 3, input 2 (0=off, 1=on) |      |     |     |
| 30609   | short  | RD    | Digital I/O: status, event 3, input 3 (0=off, 1=on) |      |     |     |
| 30610   | long64 | RD    | Digital I/O: UTC timestamp, event 4, input 1        | s    |     |     |
| 30614   | long64 | RD    | Digital I/O: UTC timestamp, event 4, input 2        | s    |     |     |
| 30618   | long64 | RD    | Digital I/O: UTC timestamp, event 4, input 3        | s    |     |     |
| 30622   | short  | RD    | Digital I/O: status, event 4, input 1 (0=off, 1=on) |      |     |     |
| 30623   | short  | RD    | Digital I/O: status, event 4, input 2 (0=off, 1=on) |      |     |     |
| 30624   | short  | RD    | Digital I/O: status, event 4, input 3 (0=off, 1=on) |      |     |     |
| 30625   | long64 | RD    | Digital I/O: UTC timestamp, event 5, input 1        | s    |     |     |
| 30629   | long64 | RD    | Digital I/O: UTC timestamp, event 5, input 2        | s    |     |     |
| 30633   | long64 | RD    | Digital I/O: UTC timestamp, event 5, input 3        | s    |     |     |
| 30637   | short  | RD    | Digital I/O: status, event 5, input 1 (0=off, 1=on) |      |     |     |
| 30638   | short  | RD    | Digital I/O: status, event 5, input 2 (0=off, 1=on) |      |     |     |
| 30639   | short  | RD    | Digital I/O: status, event 5, input 3 (0=off, 1=on) |      |     |     |
| 30640   | long64 | RD    | Digital I/O: UTC timestamp, event 6, input 1        | s    |     |     |
| 30644   | long64 | RD    | Digital I/O: UTC timestamp, event 6, input 2        | s    |     |     |
| 30648   | long64 | RD    | Digital I/O: UTC timestamp, event 6, input 3        | s    |     |     |
| 30652   | short  | RD    | Digital I/O: status, event 6, input 1 (0=off, 1=on) |      |     |     |
| 30653   | short  | RD    | Digital I/O: status, event 6, input 2 (0=off, 1=on) |      |     |     |
| 30654   | short  | RD    | Digital I/O: status, event 6, input 3 (0=off, 1=on) |      |     |     |
| 30655   | long64 | RD    | Digital I/O: UTC timestamp, event 7, input 1        | s    |     |     |
| 30659   | long64 | RD    | Digital I/O: UTC timestamp, event 7, input 2        | s    |     |     |
| 30663   | long64 | RD    | Digital I/O: UTC timestamp, event 7, input 3        | s    |     |     |
| 30667   | short  | RD    | Digital I/O: status, event 7, input 1 (0=off, 1=on) |      |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 30668   | short  | RD    | Digital I/O: status, event 7, input 2 (0=off, 1=on)  |      |     |     |
| 30669   | short  | RD    | Digital I/O: status, event 7, input 3 (0=off, 1=on)  |      |     |     |
| 30670   | long64 | RD    | Digital I/O: UTC timestamp, event 8, input 1         | s    |     |     |
| 30674   | long64 | RD    | Digital I/O: UTC timestamp, event 8, input 2         | s    |     |     |
| 30678   | long64 | RD    | Digital I/O: UTC timestamp, event 8, input 3         | s    |     |     |
| 30682   | short  | RD    | Digital I/O: status, event 8, input 1 (0=off, 1=on)  |      |     |     |
| 30683   | short  | RD    | Digital I/O: status, event 8, input 2 (0=off, 1=on)  |      |     |     |
| 30684   | short  | RD    | Digital I/O: status, event 8, input 3 (0=off, 1=on)  |      |     |     |
| 30685   | long64 | RD    | Digital I/O: UTC timestamp, event 9, input 1         | s    |     |     |
| 30689   | long64 | RD    | Digital I/O: UTC timestamp, event 9, input 2         | s    |     |     |
| 30693   | long64 | RD    | Digital I/O: UTC timestamp, event 9, input 3         | s    |     |     |
| 30697   | short  | RD    | Digital I/O: status, event 9, input 1 (0=off, 1=on)  |      |     |     |
| 30698   | short  | RD    | Digital I/O: status, event 9, input 2 (0=off, 1=on)  |      |     |     |
| 30699   | short  | RD    | Digital I/O: status, event 9, input 3 (0=off, 1=on)  |      |     |     |
| 30700   | long64 | RD    | Digital I/O: UTC timestamp, event 10, input 1        | s    |     |     |
| 30704   | long64 | RD    | Digital I/O: UTC timestamp, event 10, input 2        | s    |     |     |
| 30708   | long64 | RD    | Digital I/O: UTC timestamp, event 10, input 3        | s    |     |     |
| 30712   | short  | RD    | Digital I/O: status, event 10, input 1 (0=off, 1=on) |      |     |     |
| 30713   | short  | RD    | Digital I/O: status, event 10, input 2 (0=off, 1=on) |      |     |     |
| 30714   | short  | RD    | Digital I/O: status, event 10, input 3 (0=off, 1=on) |      |     |     |
| 30715   | long64 | RD    | Digital I/O: UTC timestamp, event 11, input 1        | s    |     |     |
| 30719   | long64 | RD    | Digital I/O: UTC timestamp, event 11, input 2        | s    |     |     |
| 30723   | long64 | RD    | Digital I/O: UTC timestamp, event 11, input 3        | s    |     |     |
| 30727   | short  | RD    | Digital I/O: status, event 11, input 1 (0=off, 1=on) |      |     |     |
| 30728   | short  | RD    | Digital I/O: status, event 11, input 2 (0=off, 1=on) |      |     |     |
| 30729   | short  | RD    | Digital I/O: status, event 11, input 3 (0=off, 1=on) |      |     |     |
| 30730   | long64 | RD    | Digital I/O: UTC timestamp, event 12, input 1        | s    |     |     |
| 30734   | long64 | RD    | Digital I/O: UTC timestamp, event 12, input 2        | s    |     |     |
| 30738   | long64 | RD    | Digital I/O: UTC timestamp, event 12, input 3        | s    |     |     |
| 30742   | short  | RD    | Digital I/O: status, event 12, input 1 (0=off, 1=on) |      |     |     |
| 30743   | short  | RD    | Digital I/O: status, event 12, input 2 (0=off, 1=on) |      |     |     |
| 30744   | short  | RD    | Digital I/O: status, event 12, input 3 (0=off, 1=on) |      |     |     |
| 30745   | long64 | RD    | Digital I/O: UTC timestamp, event 13, input 1        | s    |     |     |
| 30749   | long64 | RD    | Digital I/O: UTC timestamp, event 13, input 2        | s    |     |     |
| 30753   | long64 | RD    | Digital I/O: UTC timestamp, event 13, input 3        | s    |     |     |
| 30757   | short  | RD    | Digital I/O: status, event 13, input 1 (0=off, 1=on) |      |     |     |
| 30758   | short  | RD    | Digital I/O: status, event 13, input 2 (0=off, 1=on) |      |     |     |
| 30759   | short  | RD    | Digital I/O: status, event 13, input 3 (0=off, 1=on) |      |     |     |
| 30760   | long64 | RD    | Digital I/O: UTC timestamp, event 14, input 1        | s    |     |     |
| 30764   | long64 | RD    | Digital I/O: UTC timestamp, event 14, input 2        | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 30768   | long64 | RD    | Digital I/O: UTC timestamp, event 14, input 3        | s    |     |     |
| 30772   | short  | RD    | Digital I/O: status, event 14, input 1 (0=off, 1=on) |      |     |     |
| 30773   | short  | RD    | Digital I/O: status, event 14, input 2 (0=off, 1=on) |      |     |     |
| 30774   | short  | RD    | Digital I/O: status, event 14, input 3 (0=off, 1=on) |      |     |     |
| 30775   | long64 | RD    | Digital I/O: UTC timestamp, event 15, input 1        | s    |     |     |
| 30779   | long64 | RD    | Digital I/O: UTC timestamp, event 15, input 2        | s    |     |     |
| 30783   | long64 | RD    | Digital I/O: UTC timestamp, event 15, input 3        | s    |     |     |
| 30787   | short  | RD    | Digital I/O: status, event 15, input 1 (0=off, 1=on) |      |     |     |
| 30788   | short  | RD    | Digital I/O: status, event 15, input 2 (0=off, 1=on) |      |     |     |
| 30789   | short  | RD    | Digital I/O: status, event 15, input 3 (0=off, 1=on) |      |     |     |
| 30790   | long64 | RD    | Digital I/O: UTC timestamp, event 16, input 1        | s    |     |     |
| 30794   | long64 | RD    | Digital I/O: UTC timestamp, event 16, input 2        | s    |     |     |
| 30798   | long64 | RD    | Digital I/O: UTC timestamp, event 16, input 3        | s    |     |     |
| 30802   | short  | RD    | Digital I/O: status, event 16, input 1 (0=off, 1=on) |      |     |     |
| 30803   | short  | RD    | Digital I/O: status, event 16, input 2 (0=off, 1=on) |      |     |     |
| 30804   | short  | RD    | Digital I/O: status, event 16, input 3 (0=off, 1=on) |      |     |     |

## Comparator groups

|       |      |    |  |
|-------|------|----|--|
| 32500 | char | RD | PQ-L series: comparator group 1 comparator A       |
| 32501 | char | RD | PQ-L series: comparator group 1 comparator B       |
| 32502 | char | RD | PQ-L series: comparator group 1 comparator C       |
| 32503 | char | RD | PQ-L series: comparator group 1 comparator D       |
| 32504 | char | RD | PQ-L series: comparator group 1 comparator E       |
| 32505 | char | RD | PQ-L series: comparator group 1 comparator F       |
| 32506 | char | RD | PQ-L series: comparator group 1 comparator G       |
| 32507 | char | RD | PQ-L series: comparator group 1 comparator H       |
| 32508 | char | RD | PQ-L series: comparator group 1 comparator I       |
| 32509 | char | RD | PQ-L series: comparator group 1 comparator J       |
| 32510 | char | RD | PQ-L series: comparator group 1 group comparator 1 |
| 32511 | char | RD | PQ-L series: comparator group 2 comparator A       |
| 32512 | char | RD | PQ-L series: comparator group 2 comparator B       |
| 32513 | char | RD | PQ-L series: comparator group 2 comparator C       |
| 32514 | char | RD | PQ-L series: comparator group 2 comparator D       |
| 32515 | char | RD | PQ-L series: comparator group 2 comparator E       |
| 32516 | char | RD | PQ-L series: comparator group 2 comparator F       |
| 32517 | char | RD | PQ-L series: comparator group 2 comparator G       |
| 32518 | char | RD | PQ-L series: comparator group 2 comparator H       |
| 32519 | char | RD | PQ-L series: comparator group 2 comparator I       |
| 32520 | char | RD | PQ-L series: comparator group 2 comparator J       |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 32521   | char   | RD    | PQ-L series: comparator group 2 group comparator 2 |      |     |     |
| 32522   | char   | RD    | PQ-L series: comparator group 3 comparator A       |      |     |     |
| 32523   | char   | RD    | PQ-L series: comparator group 3 comparator B       |      |     |     |
| 32524   | char   | RD    | PQ-L series: comparator group 3 comparator C       |      |     |     |
| 32525   | char   | RD    | PQ-L series: comparator group 3 comparator D       |      |     |     |
| 32526   | char   | RD    | PQ-L series: comparator group 3 comparator E       |      |     |     |
| 32527   | char   | RD    | PQ-L series: comparator group 3 comparator F       |      |     |     |
| 32528   | char   | RD    | PQ-L series: comparator group 3 comparator G       |      |     |     |
| 32529   | char   | RD    | PQ-L series: comparator group 3 comparator H       |      |     |     |
| 32530   | char   | RD    | PQ-L series: comparator group 3 comparator I       |      |     |     |
| 32531   | char   | RD    | PQ-L series: comparator group 3 comparator J       |      |     |     |
| 32532   | char   | RD    | PQ-L series: comparator group 3 group comparator 3 |      |     |     |
| 32533   | char   | RD    | PQ-L series: comparator group 4 comparator A       |      |     |     |
| 32534   | char   | RD    | PQ-L series: comparator group 4 comparator B       |      |     |     |
| 32535   | char   | RD    | PQ-L series: comparator group 4 comparator C       |      |     |     |
| 32536   | char   | RD    | PQ-L series: comparator group 4 comparator D       |      |     |     |
| 32537   | char   | RD    | PQ-L series: comparator group 4 comparator E       |      |     |     |
| 32538   | char   | RD    | PQ-L series: comparator group 4 comparator F       |      |     |     |
| 32539   | char   | RD    | PQ-L series: comparator group 4 comparator G       |      |     |     |
| 32540   | char   | RD    | PQ-L series: comparator group 4 comparator H       |      |     |     |
| 32541   | char   | RD    | PQ-L series: comparator group 4 comparator I       |      |     |     |
| 32542   | char   | RD    | PQ-L series: comparator group 4 comparator J       |      |     |     |
| 32543   | char   | RD    | PQ-L series: comparator group 4 group comparator 4 |      |     |     |
| 32544   | char   | RD    | PQ-L series: comparator group 5 comparator A       |      |     |     |
| 32545   | char   | RD    | PQ-L series: comparator group 5 comparator B       |      |     |     |
| 32546   | char   | RD    | PQ-L series: comparator group 5 comparator C       |      |     |     |
| 32547   | char   | RD    | PQ-L series: comparator group 5 comparator D       |      |     |     |
| 32548   | char   | RD    | PQ-L series: comparator group 5 comparator E       |      |     |     |
| 32549   | char   | RD    | PQ-L series: comparator group 5 comparator F       |      |     |     |
| 32550   | char   | RD    | PQ-L series: comparator group 5 comparator G       |      |     |     |
| 32551   | char   | RD    | PQ-L series: comparator group 5 comparator H       |      |     |     |
| 32552   | char   | RD    | PQ-L series: comparator group 5 comparator I       |      |     |     |
| 32553   | char   | RD    | PQ-L series: comparator group 5 comparator J       |      |     |     |
| 32554   | char   | RD    | PQ-L series: comparator group 5 group comparator 5 |      |     |     |

| Address | Format | RD/WR | Note | Unit | Min | Max |
|---------|--------|-------|------|------|-----|-----|
|---------|--------|-------|------|------|-----|-----|

### Events, read out last event via Modbus

|       |         |    |  |  |  |  |
|-------|---------|----|--|--|--|--|
| 16643 | ushort  | RD | Last event phase (consider together with 16644):<br>0= Phase 1 (U or I), DigIn 1, Modbus event,<br>1= Phase 2 (U or I), DigIn 2<br>2= Phase 3 (U or I), DigIn 3<br>3= Multievent: At least in 2 phases for U and I events. With a frequency event, all 3 phases are always affected.<br>4= Event I4<br>5= Event I5<br>6= Event I6<br>If the device does not have an event, a 0 is displayed here.  |  |  |  |
| 16644 | short   | RD | Event type: -1= No event<br>0= IMAX_EVENT - Overcurrent<br>1= UMAX_EVENT - Overvoltage<br>2= UMIN_EVENT - Undervoltage<br>3= UOFF_EVENT - Voltage interruption<br>4= EXT_DIGIN - External event (dig. input)<br>5= EXT_MODBUS - External event (Modbus)<br>6= RVC_EVENT - Fast voltage change<br>7= FREQ_OVER_EVENT - Overfrequency<br>8= FREQ_UNDER_EVENT - Underfrequency<br>9= IMAX_RCM_EVENT - Overcurrent event in the analog RCM inputs (only in meters with module) |  |  |  |
| 16645 | ulong64 | RD | Event start time, UTC timestamp (resolution in ns) 0= no event   |  |  |  |
| 16649 | uint    | RD | Event duration (end time - start time in ns),<br>0= Event type EXT_DIGIN or EXT_MODBUS (external events do not have an end time)<br>0= No events (with simultaneous „Value -1 = No event“ for the event type)  |  |  |  |
| 16651 | float   | RD | Measured value of the event<br>0= Event type EXT_DIGIN and EXT_MODBUS (external events do not have any measured values)<br>-1= No event  |  |  |  |

### Fourier analysis, measured values

|      |       |    |   |   |  |  |
|------|-------|----|---|---|--|--|
| 1058 | float | RD | Fourier analysis: 1. harmonic voltage L1  | V |  |  |
| 1060 | float | RD | Fourier analysis: 3. harmonic voltage L1  | V |  |  |
| 1062 | float | RD | Fourier analysis: 5. harmonic voltage L1  | V |  |  |
| 1064 | float | RD | Fourier analysis: 7. harmonic voltage L1  | V |  |  |
| 1066 | float | RD | Fourier analysis: 9. harmonic voltage L1  | V |  |  |
| 1068 | float | RD | Fourier analysis: 11. harmonic voltage L1 | V |  |  |
| 1070 | float | RD | Fourier analysis: 13. harmonic voltage L1 | V |  |  |
| 1072 | float | RD | Fourier analysis: 15. harmonic voltage L1 | V |  |  |
| 1074 | float | RD | Fourier analysis: 17. harmonic voltage L1 | V |  |  |
| 1076 | float | RD | Fourier analysis: 19. harmonic voltage L1 | V |  |  |
| 1078 | float | RD | Fourier analysis: 21. harmonic voltage L1 | V |  |  |
| 1080 | float | RD | Fourier analysis: 23. harmonic voltage L1 | V |  |  |
| 1082 | float | RD | Fourier analysis: 25. harmonic voltage L1 | V |  |  |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 1084    | float  | RD    | Fourier analysis: 1. harmonic voltage L2  | V    |     |     |
| 1086    | float  | RD    | Fourier analysis: 3. harmonic voltage L2  | V    |     |     |
| 1088    | float  | RD    | Fourier analysis: 5. harmonic voltage L2  | V    |     |     |
| 1090    | float  | RD    | Fourier analysis: 7. harmonic voltage L2  | V    |     |     |
| 1092    | float  | RD    | Fourier analysis: 9. harmonic voltage L2  | V    |     |     |
| 1094    | float  | RD    | Fourier analysis: 11. harmonic voltage L2 | V    |     |     |
| 1096    | float  | RD    | Fourier analysis: 13. harmonic voltage L2 | V    |     |     |
| 1098    | float  | RD    | Fourier analysis: 15. harmonic voltage L2 | V    |     |     |
| 1100    | float  | RD    | Fourier analysis: 17. harmonic voltage L2 | V    |     |     |
| 1102    | float  | RD    | Fourier analysis: 19. harmonic voltage L2 | V    |     |     |
| 1104    | float  | RD    | Fourier analysis: 21. harmonic voltage L2 | V    |     |     |
| 1106    | float  | RD    | Fourier analysis: 23. harmonic voltage L2 | V    |     |     |
| 1108    | float  | RD    | Fourier analysis: 25. harmonic voltage L2 | V    |     |     |
| 1110    | float  | RD    | Fourier analysis: 1. harmonic voltage L3  | V    |     |     |
| 1112    | float  | RD    | Fourier analysis: 3. harmonic voltage L3  | V    |     |     |
| 1114    | float  | RD    | Fourier analysis: 5. harmonic voltage L3  | V    |     |     |
| 1116    | float  | RD    | Fourier analysis: 7. harmonic voltage L3  | V    |     |     |
| 1118    | float  | RD    | Fourier analysis: 9. harmonic voltage L3  | V    |     |     |
| 1120    | float  | RD    | Fourier analysis: 11. harmonic voltage L3 | V    |     |     |
| 1122    | float  | RD    | Fourier analysis: 13. harmonic voltage L3 | V    |     |     |
| 1124    | float  | RD    | Fourier analysis: 15. harmonic voltage L3 | V    |     |     |
| 1126    | float  | RD    | Fourier analysis: 17. harmonic voltage L3 | V    |     |     |
| 1128    | float  | RD    | Fourier analysis: 19. harmonic voltage L3 | V    |     |     |
| 1130    | float  | RD    | Fourier analysis: 21. harmonic voltage L3 | V    |     |     |
| 1132    | float  | RD    | Fourier analysis: 23. harmonic voltage L3 | V    |     |     |
| 1134    | float  | RD    | Fourier analysis: 25. harmonic voltage L3 | V    |     |     |
| 1136    | float  | RD    | Fourier analysis: 1. harmonic current L1  | A    |     |     |
| 1138    | float  | RD    | Fourier analysis: 3. harmonic current L1  | A    |     |     |
| 1140    | float  | RD    | Fourier analysis: 5. harmonic current L1  | A    |     |     |
| 1142    | float  | RD    | Fourier analysis: 7. harmonic current L1  | A    |     |     |
| 1144    | float  | RD    | Fourier analysis: 9. harmonic current L1  | A    |     |     |
| 1146    | float  | RD    | Fourier analysis: 11. harmonic current L1 | A    |     |     |
| 1148    | float  | RD    | Fourier analysis: 13. harmonic current L1 | A    |     |     |
| 1150    | float  | RD    | Fourier analysis: 15. harmonic current L1 | A    |     |     |
| 1152    | float  | RD    | Fourier analysis: 17. harmonic current L1 | A    |     |     |
| 1154    | float  | RD    | Fourier analysis: 19. harmonic current L1 | A    |     |     |
| 1156    | float  | RD    | Fourier analysis: 21. harmonic current L1 | A    |     |     |
| 1158    | float  | RD    | Fourier analysis: 23. harmonic current L1 | A    |     |     |
| 1160    | float  | RD    | Fourier analysis: 25. harmonic current L1 | A    |     |     |
| 1162    | float  | RD    | Fourier analysis: 1. harmonic current L2  | A    |     |     |
| 1164    | float  | RD    | Fourier analysis: 3. harmonic current L2  | A    |     |     |
| 1166    | float  | RD    | Fourier analysis: 5. harmonic current L2  | A    |     |     |
| 1168    | float  | RD    | Fourier analysis: 7. harmonic current L2  | A    |     |     |
| 1170    | float  | RD    | Fourier analysis: 9. harmonic current L2  | A    |     |     |
| 1172    | float  | RD    | Fourier analysis: 11. harmonic current L2 | A    |     |     |
| 1174    | float  | RD    | Fourier analysis: 13. harmonic current L2 | A    |     |     |
| 1176    | float  | RD    | Fourier analysis: 15. harmonic current L2 | A    |     |     |
| 1178    | float  | RD    | Fourier analysis: 17. harmonic current L2 | A    |     |     |
| 1180    | float  | RD    | Fourier analysis: 19. harmonic current L2 | A    |     |     |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 1182    | float  | RD    | Fourier analysis: 21. harmonic current L2 | A    |     |     |
| 1184    | float  | RD    | Fourier analysis: 23. harmonic current L2 | A    |     |     |
| 1186    | float  | RD    | Fourier analysis: 25. harmonic current L2 | A    |     |     |
| 1188    | float  | RD    | Fourier analysis: 1. harmonic current L3  | A    |     |     |
| 1190    | float  | RD    | Fourier analysis: 3. harmonic current L3  | A    |     |     |
| 1192    | float  | RD    | Fourier analysis: 5. harmonic current L3  | A    |     |     |
| 1194    | float  | RD    | Fourier analysis: 7. harmonic current L3  | A    |     |     |
| 1196    | float  | RD    | Fourier analysis: 9. harmonic current L3  | A    |     |     |
| 1198    | float  | RD    | Fourier analysis: 11. harmonic current L3 | A    |     |     |
| 1200    | float  | RD    | Fourier analysis: 13. harmonic current L3 | A    |     |     |
| 1202    | float  | RD    | Fourier analysis: 15. harmonic current L3 | A    |     |     |
| 1204    | float  | RD    | Fourier analysis: 17. harmonic current L3 | A    |     |     |
| 1206    | float  | RD    | Fourier analysis: 19. harmonic current L3 | A    |     |     |
| 1208    | float  | RD    | Fourier analysis: 21. harmonic current L3 | A    |     |     |
| 1210    | float  | RD    | Fourier analysis: 23. harmonic current L3 | A    |     |     |
| 1212    | float  | RD    | Fourier analysis: 25. harmonic current L3 | A    |     |     |
| 8000    | float  | RD    | Fourier analysis: 1. harmonic voltage L1  | V    |     |     |
| 8002    | float  | RD    | Fourier analysis: 2. harmonic voltage L1  | V    |     |     |
| 8004    | float  | RD    | Fourier analysis: 3. harmonic voltage L1  | V    |     |     |
| 8006    | float  | RD    | Fourier analysis: 4. harmonic voltage L1  | V    |     |     |
| 8008    | float  | RD    | Fourier analysis: 5. harmonic voltage L1  | V    |     |     |
| 8010    | float  | RD    | Fourier analysis: 6. harmonic voltage L1  | V    |     |     |
| 8012    | float  | RD    | Fourier analysis: 7. harmonic voltage L1  | V    |     |     |
| 8014    | float  | RD    | Fourier analysis: 8. harmonic voltage L1  | V    |     |     |
| 8016    | float  | RD    | Fourier analysis: 9. harmonic voltage L1  | V    |     |     |
| 8018    | float  | RD    | Fourier analysis: 10. harmonic voltage L1 | V    |     |     |
| 8020    | float  | RD    | Fourier analysis: 11. harmonic voltage L1 | V    |     |     |
| 8022    | float  | RD    | Fourier analysis: 12. harmonic voltage L1 | V    |     |     |
| 8024    | float  | RD    | Fourier analysis: 13. harmonic voltage L1 | V    |     |     |
| 8026    | float  | RD    | Fourier analysis: 14. harmonic voltage L1 | V    |     |     |
| 8028    | float  | RD    | Fourier analysis: 15. harmonic voltage L1 | V    |     |     |
| 8030    | float  | RD    | Fourier analysis: 16. harmonic voltage L1 | V    |     |     |
| 8032    | float  | RD    | Fourier analysis: 17. harmonic voltage L1 | V    |     |     |
| 8034    | float  | RD    | Fourier analysis: 18. harmonic voltage L1 | V    |     |     |
| 8036    | float  | RD    | Fourier analysis: 19. harmonic voltage L1 | V    |     |     |
| 8038    | float  | RD    | Fourier analysis: 20. harmonic voltage L1 | V    |     |     |
| 8040    | float  | RD    | Fourier analysis: 21. harmonic voltage L1 | V    |     |     |
| 8042    | float  | RD    | Fourier analysis: 22. harmonic voltage L1 | V    |     |     |
| 8044    | float  | RD    | Fourier analysis: 23. harmonic voltage L1 | V    |     |     |
| 8046    | float  | RD    | Fourier analysis: 24. harmonic voltage L1 | V    |     |     |
| 8048    | float  | RD    | Fourier analysis: 25. harmonic voltage L1 | V    |     |     |
| 8050    | float  | RD    | Fourier analysis: 26. harmonic voltage L1 | V    |     |     |
| 8052    | float  | RD    | Fourier analysis: 27. harmonic voltage L1 | V    |     |     |
| 8054    | float  | RD    | Fourier analysis: 28. harmonic voltage L1 | V    |     |     |
| 8056    | float  | RD    | Fourier analysis: 29. harmonic voltage L1 | V    |     |     |
| 8058    | float  | RD    | Fourier analysis: 30. harmonic voltage L1 | V    |     |     |
| 8060    | float  | RD    | Fourier analysis: 31. harmonic voltage L1 | V    |     |     |
| 8062    | float  | RD    | Fourier analysis: 32. harmonic voltage L1 | V    |     |     |
| 8064    | float  | RD    | Fourier analysis: 33. harmonic voltage L1 | V    |     |     |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 8066    | float  | RD    | Fourier analysis: 34. harmonic voltage L1 | V    |     |     |
| 8068    | float  | RD    | Fourier analysis: 35. harmonic voltage L1 | V    |     |     |
| 8070    | float  | RD    | Fourier analysis: 36. harmonic voltage L1 | V    |     |     |
| 8072    | float  | RD    | Fourier analysis: 37. harmonic voltage L1 | V    |     |     |
| 8074    | float  | RD    | Fourier analysis: 38. harmonic voltage L1 | V    |     |     |
| 8076    | float  | RD    | Fourier analysis: 39. harmonic voltage L1 | V    |     |     |
| 8078    | float  | RD    | Fourier analysis: 40. harmonic voltage L1 | V    |     |     |
| 8080    | float  | RD    | Fourier analysis: 1. harmonic voltage L2  | V    |     |     |
| 8082    | float  | RD    | Fourier analysis: 2. harmonic voltage L2  | V    |     |     |
| 8084    | float  | RD    | Fourier analysis: 3. harmonic voltage L2  | V    |     |     |
| 8086    | float  | RD    | Fourier analysis: 4. harmonic voltage L2  | V    |     |     |
| 8088    | float  | RD    | Fourier analysis: 5. harmonic voltage L2  | V    |     |     |
| 8090    | float  | RD    | Fourier analysis: 6. harmonic voltage L2  | V    |     |     |
| 8092    | float  | RD    | Fourier analysis: 7. harmonic voltage L2  | V    |     |     |
| 8094    | float  | RD    | Fourier analysis: 8. harmonic voltage L2  | V    |     |     |
| 8096    | float  | RD    | Fourier analysis: 9. harmonic voltage L2  | V    |     |     |
| 8098    | float  | RD    | Fourier analysis: 10. harmonic voltage L2 | V    |     |     |
| 8100    | float  | RD    | Fourier analysis: 11. harmonic voltage L2 | V    |     |     |
| 8102    | float  | RD    | Fourier analysis: 12. harmonic voltage L2 | V    |     |     |
| 8104    | float  | RD    | Fourier analysis: 13. harmonic voltage L2 | V    |     |     |
| 8106    | float  | RD    | Fourier analysis: 14. harmonic voltage L2 | V    |     |     |
| 8108    | float  | RD    | Fourier analysis: 15. harmonic voltage L2 | V    |     |     |
| 8110    | float  | RD    | Fourier analysis: 16. harmonic voltage L2 | V    |     |     |
| 8112    | float  | RD    | Fourier analysis: 17. harmonic voltage L2 | V    |     |     |
| 8114    | float  | RD    | Fourier analysis: 18. harmonic voltage L2 | V    |     |     |
| 8116    | float  | RD    | Fourier analysis: 19. harmonic voltage L2 | V    |     |     |
| 8118    | float  | RD    | Fourier analysis: 20. harmonic voltage L2 | V    |     |     |
| 8120    | float  | RD    | Fourier analysis: 21. harmonic voltage L2 | V    |     |     |
| 8122    | float  | RD    | Fourier analysis: 22. harmonic voltage L2 | V    |     |     |
| 8124    | float  | RD    | Fourier analysis: 23. harmonic voltage L2 | V    |     |     |
| 8126    | float  | RD    | Fourier analysis: 24. harmonic voltage L2 | V    |     |     |
| 8128    | float  | RD    | Fourier analysis: 25. harmonic voltage L2 | V    |     |     |
| 8130    | float  | RD    | Fourier analysis: 26. harmonic voltage L2 | V    |     |     |
| 8132    | float  | RD    | Fourier analysis: 27. harmonic voltage L2 | V    |     |     |
| 8134    | float  | RD    | Fourier analysis: 28. harmonic voltage L2 | V    |     |     |
| 8136    | float  | RD    | Fourier analysis: 29. harmonic voltage L2 | V    |     |     |
| 8138    | float  | RD    | Fourier analysis: 30. harmonic voltage L2 | V    |     |     |
| 8140    | float  | RD    | Fourier analysis: 31. harmonic voltage L2 | V    |     |     |
| 8142    | float  | RD    | Fourier analysis: 32. harmonic voltage L2 | V    |     |     |
| 8144    | float  | RD    | Fourier analysis: 33. harmonic voltage L2 | V    |     |     |
| 8146    | float  | RD    | Fourier analysis: 34. harmonic voltage L2 | V    |     |     |
| 8148    | float  | RD    | Fourier analysis: 35. harmonic voltage L2 | V    |     |     |
| 8150    | float  | RD    | Fourier analysis: 36. harmonic voltage L2 | V    |     |     |
| 8152    | float  | RD    | Fourier analysis: 37. harmonic voltage L2 | V    |     |     |
| 8154    | float  | RD    | Fourier analysis: 38. harmonic voltage L2 | V    |     |     |
| 8156    | float  | RD    | Fourier analysis: 39. harmonic voltage L2 | V    |     |     |
| 8158    | float  | RD    | Fourier analysis: 40. harmonic voltage L2 | V    |     |     |
| 8160    | float  | RD    | Fourier analysis: 1. harmonic voltage L3  | V    |     |     |
| 8162    | float  | RD    | Fourier analysis: 2. harmonic voltage L3  | V    |     |     |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 8164    | float  | RD    | Fourier analysis: 3. harmonic voltage L3  | V    |     |     |
| 8166    | float  | RD    | Fourier analysis: 4. harmonic voltage L3  | V    |     |     |
| 8168    | float  | RD    | Fourier analysis: 5. harmonic voltage L3  | V    |     |     |
| 8170    | float  | RD    | Fourier analysis: 6. harmonic voltage L3  | V    |     |     |
| 8172    | float  | RD    | Fourier analysis: 7. harmonic voltage L3  | V    |     |     |
| 8174    | float  | RD    | Fourier analysis: 8. harmonic voltage L3  | V    |     |     |
| 8176    | float  | RD    | Fourier analysis: 9. harmonic voltage L3  | V    |     |     |
| 8178    | float  | RD    | Fourier analysis: 10. harmonic voltage L3 | V    |     |     |
| 8180    | float  | RD    | Fourier analysis: 11. harmonic voltage L3 | V    |     |     |
| 8182    | float  | RD    | Fourier analysis: 12. harmonic voltage L3 | V    |     |     |
| 8184    | float  | RD    | Fourier analysis: 13. harmonic voltage L3 | V    |     |     |
| 8186    | float  | RD    | Fourier analysis: 14. harmonic voltage L3 | V    |     |     |
| 8188    | float  | RD    | Fourier analysis: 15. harmonic voltage L3 | V    |     |     |
| 8190    | float  | RD    | Fourier analysis: 16. harmonic voltage L3 | V    |     |     |
| 8192    | float  | RD    | Fourier analysis: 17. harmonic voltage L3 | V    |     |     |
| 8194    | float  | RD    | Fourier analysis: 18. harmonic voltage L3 | V    |     |     |
| 8196    | float  | RD    | Fourier analysis: 19. harmonic voltage L3 | V    |     |     |
| 8198    | float  | RD    | Fourier analysis: 20. harmonic voltage L3 | V    |     |     |
| 8200    | float  | RD    | Fourier analysis: 21. harmonic voltage L3 | V    |     |     |
| 8202    | float  | RD    | Fourier analysis: 22. harmonic voltage L3 | V    |     |     |
| 8204    | float  | RD    | Fourier analysis: 23. harmonic voltage L3 | V    |     |     |
| 8206    | float  | RD    | Fourier analysis: 24. harmonic voltage L3 | V    |     |     |
| 8208    | float  | RD    | Fourier analysis: 25. harmonic voltage L3 | V    |     |     |
| 8210    | float  | RD    | Fourier analysis: 26. harmonic voltage L3 | V    |     |     |
| 8212    | float  | RD    | Fourier analysis: 27. harmonic voltage L3 | V    |     |     |
| 8214    | float  | RD    | Fourier analysis: 28. harmonic voltage L3 | V    |     |     |
| 8216    | float  | RD    | Fourier analysis: 29. harmonic voltage L3 | V    |     |     |
| 8218    | float  | RD    | Fourier analysis: 30. harmonic voltage L3 | V    |     |     |
| 8220    | float  | RD    | Fourier analysis: 31. harmonic voltage L3 | V    |     |     |
| 8222    | float  | RD    | Fourier analysis: 32. harmonic voltage L3 | V    |     |     |
| 8224    | float  | RD    | Fourier analysis: 33. harmonic voltage L3 | V    |     |     |
| 8226    | float  | RD    | Fourier analysis: 34. harmonic voltage L3 | V    |     |     |
| 8228    | float  | RD    | Fourier analysis: 35. harmonic voltage L3 | V    |     |     |
| 8230    | float  | RD    | Fourier analysis: 36. harmonic voltage L3 | V    |     |     |
| 8232    | float  | RD    | Fourier analysis: 37. harmonic voltage L3 | V    |     |     |
| 8234    | float  | RD    | Fourier analysis: 38. harmonic voltage L3 | V    |     |     |
| 8236    | float  | RD    | Fourier analysis: 39. harmonic voltage L3 | V    |     |     |
| 8238    | float  | RD    | Fourier analysis: 40. harmonic voltage L3 | V    |     |     |
| 8240    | float  | RD    | Fourier analysis: 1. harmonic current L1  | A    |     |     |
| 8242    | float  | RD    | Fourier analysis: 2. harmonic current L1  | A    |     |     |
| 8244    | float  | RD    | Fourier analysis: 3. harmonic current L1  | A    |     |     |
| 8246    | float  | RD    | Fourier analysis: 4. harmonic current L1  | A    |     |     |
| 8248    | float  | RD    | Fourier analysis: 5. harmonic current L1  | A    |     |     |
| 8250    | float  | RD    | Fourier analysis: 6. harmonic current L1  | A    |     |     |
| 8252    | float  | RD    | Fourier analysis: 7. harmonic current L1  | A    |     |     |
| 8254    | float  | RD    | Fourier analysis: 8. harmonic current L1  | A    |     |     |
| 8256    | float  | RD    | Fourier analysis: 9. harmonic current L1  | A    |     |     |
| 8258    | float  | RD    | Fourier analysis: 10. harmonic current L1 | A    |     |     |
| 8260    | float  | RD    | Fourier analysis: 11. harmonic current L1 | A    |     |     |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 8262    | float  | RD    | Fourier analysis: 12. harmonic current L1 | A    |     |     |
| 8264    | float  | RD    | Fourier analysis: 13. harmonic current L1 | A    |     |     |
| 8266    | float  | RD    | Fourier analysis: 14. harmonic current L1 | A    |     |     |
| 8268    | float  | RD    | Fourier analysis: 15. harmonic current L1 | A    |     |     |
| 8270    | float  | RD    | Fourier analysis: 16. harmonic current L1 | A    |     |     |
| 8272    | float  | RD    | Fourier analysis: 17. harmonic current L1 | A    |     |     |
| 8274    | float  | RD    | Fourier analysis: 18. harmonic current L1 | A    |     |     |
| 8276    | float  | RD    | Fourier analysis: 19. harmonic current L1 | A    |     |     |
| 8278    | float  | RD    | Fourier analysis: 20. harmonic current L1 | A    |     |     |
| 8280    | float  | RD    | Fourier analysis: 21. harmonic current L1 | A    |     |     |
| 8282    | float  | RD    | Fourier analysis: 22. harmonic current L1 | A    |     |     |
| 8284    | float  | RD    | Fourier analysis: 23. harmonic current L1 | A    |     |     |
| 8286    | float  | RD    | Fourier analysis: 24. harmonic current L1 | A    |     |     |
| 8288    | float  | RD    | Fourier analysis: 25. harmonic current L1 | A    |     |     |
| 8290    | float  | RD    | Fourier analysis: 26. harmonic current L1 | A    |     |     |
| 8292    | float  | RD    | Fourier analysis: 27. harmonic current L1 | A    |     |     |
| 8294    | float  | RD    | Fourier analysis: 28. harmonic current L1 | A    |     |     |
| 8296    | float  | RD    | Fourier analysis: 29. harmonic current L1 | A    |     |     |
| 8298    | float  | RD    | Fourier analysis: 30. harmonic current L1 | A    |     |     |
| 8300    | float  | RD    | Fourier analysis: 31. harmonic current L1 | A    |     |     |
| 8302    | float  | RD    | Fourier analysis: 32. harmonic current L1 | A    |     |     |
| 8304    | float  | RD    | Fourier analysis: 33. harmonic current L1 | A    |     |     |
| 8306    | float  | RD    | Fourier analysis: 34. harmonic current L1 | A    |     |     |
| 8308    | float  | RD    | Fourier analysis: 35. harmonic current L1 | A    |     |     |
| 8310    | float  | RD    | Fourier analysis: 36. harmonic current L1 | A    |     |     |
| 8312    | float  | RD    | Fourier analysis: 37. harmonic current L1 | A    |     |     |
| 8314    | float  | RD    | Fourier analysis: 38. harmonic current L1 | A    |     |     |
| 8316    | float  | RD    | Fourier analysis: 39. harmonic current L1 | A    |     |     |
| 8318    | float  | RD    | Fourier analysis: 40. harmonic current L1 | A    |     |     |
| 8320    | float  | RD    | Fourier analysis: 1. harmonic current L2  | A    |     |     |
| 8322    | float  | RD    | Fourier analysis: 2. harmonic current L2  | A    |     |     |
| 8324    | float  | RD    | Fourier analysis: 3. harmonic current L2  | A    |     |     |
| 8326    | float  | RD    | Fourier analysis: 4. harmonic current L2  | A    |     |     |
| 8328    | float  | RD    | Fourier analysis: 5. harmonic current L2  | A    |     |     |
| 8330    | float  | RD    | Fourier analysis: 6. harmonic current L2  | A    |     |     |
| 8332    | float  | RD    | Fourier analysis: 7. harmonic current L2  | A    |     |     |
| 8334    | float  | RD    | Fourier analysis: 8. harmonic current L2  | A    |     |     |
| 8336    | float  | RD    | Fourier analysis: 9. harmonic current L2  | A    |     |     |
| 8338    | float  | RD    | Fourier analysis: 10. harmonic current L2 | A    |     |     |
| 8340    | float  | RD    | Fourier analysis: 11. harmonic current L2 | A    |     |     |
| 8342    | float  | RD    | Fourier analysis: 12. harmonic current L2 | A    |     |     |
| 8344    | float  | RD    | Fourier analysis: 13. harmonic current L2 | A    |     |     |
| 8346    | float  | RD    | Fourier analysis: 14. harmonic current L2 | A    |     |     |
| 8348    | float  | RD    | Fourier analysis: 15. harmonic current L2 | A    |     |     |
| 8350    | float  | RD    | Fourier analysis: 16. harmonic current L2 | A    |     |     |
| 8352    | float  | RD    | Fourier analysis: 17. harmonic current L2 | A    |     |     |
| 8354    | float  | RD    | Fourier analysis: 18. harmonic current L2 | A    |     |     |
| 8356    | float  | RD    | Fourier analysis: 19. harmonic current L2 | A    |     |     |
| 8358    | float  | RD    | Fourier analysis: 20. harmonic current L2 | A    |     |     |

| Address | Format | RD/WR | Note                                      | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 8360    | float  | RD    | Fourier analysis: 21. harmonic current L2 | A    |     |     |
| 8362    | float  | RD    | Fourier analysis: 22. harmonic current L2 | A    |     |     |
| 8364    | float  | RD    | Fourier analysis: 23. harmonic current L2 | A    |     |     |
| 8366    | float  | RD    | Fourier analysis: 24. harmonic current L2 | A    |     |     |
| 8368    | float  | RD    | Fourier analysis: 25. harmonic current L2 | A    |     |     |
| 8370    | float  | RD    | Fourier analysis: 26. harmonic current L2 | A    |     |     |
| 8372    | float  | RD    | Fourier analysis: 27. harmonic current L2 | A    |     |     |
| 8374    | float  | RD    | Fourier analysis: 28. harmonic current L2 | A    |     |     |
| 8376    | float  | RD    | Fourier analysis: 29. harmonic current L2 | A    |     |     |
| 8378    | float  | RD    | Fourier analysis: 30. harmonic current L2 | A    |     |     |
| 8380    | float  | RD    | Fourier analysis: 31. harmonic current L2 | A    |     |     |
| 8382    | float  | RD    | Fourier analysis: 32. harmonic current L2 | A    |     |     |
| 8384    | float  | RD    | Fourier analysis: 33. harmonic current L2 | A    |     |     |
| 8386    | float  | RD    | Fourier analysis: 34. harmonic current L2 | A    |     |     |
| 8388    | float  | RD    | Fourier analysis: 35. harmonic current L2 | A    |     |     |
| 8390    | float  | RD    | Fourier analysis: 36. harmonic current L2 | A    |     |     |
| 8392    | float  | RD    | Fourier analysis: 37. harmonic current L2 | A    |     |     |
| 8394    | float  | RD    | Fourier analysis: 38. harmonic current L2 | A    |     |     |
| 8396    | float  | RD    | Fourier analysis: 39. harmonic current L2 | A    |     |     |
| 8398    | float  | RD    | Fourier analysis: 40. harmonic current L2 | A    |     |     |
| 8400    | float  | RD    | Fourier analysis: 1. harmonic current L3  | A    |     |     |
| 8402    | float  | RD    | Fourier analysis: 2. harmonic current L3  | A    |     |     |
| 8404    | float  | RD    | Fourier analysis: 3. harmonic current L3  | A    |     |     |
| 8406    | float  | RD    | Fourier analysis: 4. harmonic current L3  | A    |     |     |
| 8408    | float  | RD    | Fourier analysis: 5. harmonic current L3  | A    |     |     |
| 8410    | float  | RD    | Fourier analysis: 6. harmonic current L3  | A    |     |     |
| 8412    | float  | RD    | Fourier analysis: 7. harmonic current L3  | A    |     |     |
| 8414    | float  | RD    | Fourier analysis: 8. harmonic current L3  | A    |     |     |
| 8416    | float  | RD    | Fourier analysis: 9. harmonic current L3  | A    |     |     |
| 8418    | float  | RD    | Fourier analysis: 10. harmonic current L3 | A    |     |     |
| 8420    | float  | RD    | Fourier analysis: 11. harmonic current L3 | A    |     |     |
| 8422    | float  | RD    | Fourier analysis: 12. harmonic current L3 | A    |     |     |
| 8424    | float  | RD    | Fourier analysis: 13. harmonic current L3 | A    |     |     |
| 8426    | float  | RD    | Fourier analysis: 14. harmonic current L3 | A    |     |     |
| 8428    | float  | RD    | Fourier analysis: 15. harmonic current L3 | A    |     |     |
| 8430    | float  | RD    | Fourier analysis: 16. harmonic current L3 | A    |     |     |
| 8432    | float  | RD    | Fourier analysis: 17. harmonic current L3 | A    |     |     |
| 8434    | float  | RD    | Fourier analysis: 18. harmonic current L3 | A    |     |     |
| 8436    | float  | RD    | Fourier analysis: 19. harmonic current L3 | A    |     |     |
| 8438    | float  | RD    | Fourier analysis: 20. harmonic current L3 | A    |     |     |
| 8440    | float  | RD    | Fourier analysis: 21. harmonic current L3 | A    |     |     |
| 8442    | float  | RD    | Fourier analysis: 22. harmonic current L3 | A    |     |     |
| 8444    | float  | RD    | Fourier analysis: 23. harmonic current L3 | A    |     |     |
| 8446    | float  | RD    | Fourier analysis: 24. harmonic current L3 | A    |     |     |
| 8448    | float  | RD    | Fourier analysis: 25. harmonic current L3 | A    |     |     |
| 8450    | float  | RD    | Fourier analysis: 26. harmonic current L3 | A    |     |     |
| 8452    | float  | RD    | Fourier analysis: 27. harmonic current L3 | A    |     |     |
| 8454    | float  | RD    | Fourier analysis: 28. harmonic current L3 | A    |     |     |
| 8456    | float  | RD    | Fourier analysis: 29. harmonic current L3 | A    |     |     |

| Address | Format         | RD/WR | Note                                      | Unit | Min | Max |
|---------|----------------|-------|---|------|-----|-----|
| 8458    | float          | RD    | Fourier analysis: 30. harmonic current L3 | A    |     |     |
| 8460    | float          | RD    | Fourier analysis: 31. harmonic current L3 | A    |     |     |
| 8462    | float          | RD    | Fourier analysis: 32. harmonic current L3 | A    |     |     |
| 8464    | float          | RD    | Fourier analysis: 33. harmonic current L3 | A    |     |     |
| 8466    | float          | RD    | Fourier analysis: 34. harmonic current L3 | A    |     |     |
| 8468    | float          | RD    | Fourier analysis: 35. harmonic current L3 | A    |     |     |
| 8470    | float          | RD    | Fourier analysis: 36. harmonic current L3 | A    |     |     |
| 8472    | float          | RD    | Fourier analysis: 37. harmonic current L3 | A    |     |     |
| 8474    | float          | RD    | Fourier analysis: 38. harmonic current L3 | A    |     |     |
| 8476    | float          | RD    | Fourier analysis: 39. harmonic current L3 | A    |     |     |
| 8478    | float          | RD    | Fourier analysis: 40. harmonic current L3 | A    |     |     |
| 11029   | short<br>(x10) | RD    | Fourier analysis: 1. harmonic voltage L1  | V    |     |     |
| 11030   | short<br>(x10) | RD    | Fourier analysis: 3. harmonic voltage L1  | V    |     |     |
| 11031   | short<br>(x10) | RD    | Fourier analysis: 5. harmonic voltage L1  | V    |     |     |
| 11032   | short<br>(x10) | RD    | Fourier analysis: 7. harmonic voltage L1  | V    |     |     |
| 11033   | short<br>(x10) | RD    | Fourier analysis: 9. harmonic voltage L1  | V    |     |     |
| 11034   | short<br>(x10) | RD    | Fourier analysis: 11. harmonic voltage L1 | V    |     |     |
| 11035   | short<br>(x10) | RD    | Fourier analysis: 13. harmonic voltage L1 | V    |     |     |
| 11036   | short<br>(x10) | RD    | Fourier analysis: 15. harmonic voltage L1 | V    |     |     |
| 11037   | short<br>(x10) | RD    | Fourier analysis: 17. harmonic voltage L1 | V    |     |     |
| 11038   | short<br>(x10) | RD    | Fourier analysis: 19. harmonic voltage L1 | V    |     |     |
| 11039   | short<br>(x10) | RD    | Fourier analysis: 21. harmonic voltage L1 | V    |     |     |
| 11040   | short<br>(x10) | RD    | Fourier analysis: 23. harmonic voltage L1 | V    |     |     |
| 11041   | short<br>(x10) | RD    | Fourier analysis: 25. harmonic voltage L1 | V    |     |     |
| 11042   | short<br>(x10) | RD    | Fourier analysis: 1. harmonic voltage L2  | V    |     |     |
| 11043   | short<br>(x10) | RD    | Fourier analysis: 3. harmonic voltage L2  | V    |     |     |
| 11044   | short<br>(x10) | RD    | Fourier analysis: 5. harmonic voltage L2  | V    |     |     |
| 11045   | short<br>(x10) | RD    | Fourier analysis: 7. harmonic voltage L2  | V    |     |     |
| 11046   | short<br>(x10) | RD    | Fourier analysis: 9. harmonic voltage L2  | V    |     |     |
| 11047   | short<br>(x10) | RD    | Fourier analysis: 11. harmonic voltage L2 | V    |     |     |
| 11048   | short<br>(x10) | RD    | Fourier analysis: 13. harmonic voltage L2 | V    |     |     |
| 11049   | short<br>(x10) | RD    | Fourier analysis: 15. harmonic voltage L2 | V    |     |     |

| Address | Format      | RD/WR | Note                                      | Unit | Min | Max |
|---------|-------------|-------|---|------|-----|-----|
| 11050   | short (x10) | RD    | Fourier analysis: 17. harmonic voltage L2 | V    |     |     |
| 11051   | short (x10) | RD    | Fourier analysis: 19. harmonic voltage L2 | V    |     |     |
| 11052   | short (x10) | RD    | Fourier analysis: 21. harmonic voltage L2 | V    |     |     |
| 11053   | short (x10) | RD    | Fourier analysis: 23. harmonic voltage L2 | V    |     |     |
| 11054   | short (x10) | RD    | Fourier analysis: 25. harmonic voltage L2 | V    |     |     |
| 11055   | short (x10) | RD    | Fourier analysis: 1. harmonic voltage L3  | V    |     |     |
| 11056   | short (x10) | RD    | Fourier analysis: 3. harmonic voltage L3  | V    |     |     |
| 11057   | short (x10) | RD    | Fourier analysis: 5. harmonic voltage L3  | V    |     |     |
| 11058   | short (x10) | RD    | Fourier analysis: 7. harmonic voltage L3  | V    |     |     |
| 11059   | short (x10) | RD    | Fourier analysis: 9. harmonic voltage L3  | V    |     |     |
| 11060   | short (x10) | RD    | Fourier analysis: 11. harmonic voltage L3 | V    |     |     |
| 11061   | short (x10) | RD    | Fourier analysis: 13. harmonic voltage L3 | V    |     |     |
| 11062   | short (x10) | RD    | Fourier analysis: 15. harmonic voltage L3 | V    |     |     |
| 11063   | short (x10) | RD    | Fourier analysis: 17. harmonic voltage L3 | V    |     |     |
| 11064   | short (x10) | RD    | Fourier analysis: 19. harmonic voltage L3 | V    |     |     |
| 11065   | short (x10) | RD    | Fourier analysis: 21. harmonic voltage L3 | V    |     |     |
| 11066   | short (x10) | RD    | Fourier analysis: 23. harmonic voltage L3 | V    |     |     |
| 11067   | short (x10) | RD    | Fourier analysis: 25. harmonic voltage L3 | V    |     |     |
| 11068   | short (x10) | RD    | Fourier analysis: 1. harmonic current L1  | A    |     |     |
| 11069   | short (x10) | RD    | Fourier analysis: 3. harmonic current L1  | A    |     |     |
| 11070   | short (x10) | RD    | Fourier analysis: 5. harmonic current L1  | A    |     |     |
| 11071   | short (x10) | RD    | Fourier analysis: 7. harmonic current L1  | A    |     |     |
| 11072   | short (x10) | RD    | Fourier analysis: 9. harmonic current L1  | A    |     |     |
| 11073   | short (x10) | RD    | Fourier analysis: 11. harmonic current L1 | A    |     |     |
| 11074   | short (x10) | RD    | Fourier analysis: 13. harmonic current L1 | A    |     |     |
| 11075   | short (x10) | RD    | Fourier analysis: 15. harmonic current L1 | A    |     |     |
| 11076   | short (x10) | RD    | Fourier analysis: 17. harmonic current L1 | A    |     |     |
| 11077   | short (x10) | RD    | Fourier analysis: 19. harmonic current L1 | A    |     |     |

| Address | Format         | RD/WR | Note                                      | Unit | Min | Max |
|---------|----------------|-------|---|------|-----|-----|
| 11078   | short<br>(x10) | RD    | Fourier analysis: 21. harmonic current L1 | A    |     |     |
| 11079   | short<br>(x10) | RD    | Fourier analysis: 23. harmonic current L1 | A    |     |     |
| 11080   | short<br>(x10) | RD    | Fourier analysis: 25. harmonic current L1 | A    |     |     |
| 11081   | short<br>(x10) | RD    | Fourier analysis: 1. harmonic current L2  | A    |     |     |
| 11082   | short<br>(x10) | RD    | Fourier analysis: 3. harmonic current L2  | A    |     |     |
| 11083   | short<br>(x10) | RD    | Fourier analysis: 5. harmonic current L2  | A    |     |     |
| 11084   | short<br>(x10) | RD    | Fourier analysis: 7. harmonic current L2  | A    |     |     |
| 11085   | short<br>(x10) | RD    | Fourier analysis: 9. harmonic current L2  | A    |     |     |
| 11086   | short<br>(x10) | RD    | Fourier analysis: 11. harmonic current L2 | A    |     |     |
| 11087   | short<br>(x10) | RD    | Fourier analysis: 13. harmonic current L2 | A    |     |     |
| 11088   | short<br>(x10) | RD    | Fourier analysis: 15. harmonic current L2 | A    |     |     |
| 11089   | short<br>(x10) | RD    | Fourier analysis: 17. harmonic current L2 | A    |     |     |
| 11090   | short<br>(x10) | RD    | Fourier analysis: 19. harmonic current L2 | A    |     |     |
| 11091   | short<br>(x10) | RD    | Fourier analysis: 21. harmonic current L2 | A    |     |     |
| 11092   | short<br>(x10) | RD    | Fourier analysis: 23. harmonic current L2 | A    |     |     |
| 11093   | short<br>(x10) | RD    | Fourier analysis: 25. harmonic current L2 | A    |     |     |
| 11094   | short<br>(x10) | RD    | Fourier analysis: 1. harmonic current L3  | A    |     |     |
| 11095   | short<br>(x10) | RD    | Fourier analysis: 3. harmonic current L3  | A    |     |     |
| 11096   | short<br>(x10) | RD    | Fourier analysis: 5. harmonic current L3  | A    |     |     |
| 11097   | short<br>(x10) | RD    | Fourier analysis: 7. harmonic current L3  | A    |     |     |
| 11098   | short<br>(x10) | RD    | Fourier analysis: 9. harmonic current L3  | A    |     |     |
| 11099   | short<br>(x10) | RD    | Fourier analysis: 11. harmonic current L3 | A    |     |     |
| 11100   | short<br>(x10) | RD    | Fourier analysis: 13. harmonic current L3 | A    |     |     |
| 11101   | short<br>(x10) | RD    | Fourier analysis: 15. harmonic current L3 | A    |     |     |
| 11102   | short<br>(x10) | RD    | Fourier analysis: 17. harmonic current L3 | A    |     |     |
| 11103   | short<br>(x10) | RD    | Fourier analysis: 19. harmonic current L3 | A    |     |     |
| 11104   | short<br>(x10) | RD    | Fourier analysis: 21. harmonic current L3 | A    |     |     |
| 11105   | short<br>(x10) | RD    | Fourier analysis: 23. harmonic current L3 | A    |     |     |

| Address | Format         | RD/WR | Note                                      | Unit | Min | Max |
|---------|----------------|-------|---|------|-----|-----|
| 11106   | short<br>(x10) | RD    | Fourier analysis: 25. harmonic current L3 | A    |     |     |

### Maximum values, fourier analysis

|      |       |    |                                     |   |  |  |
|------|-------|----|-------------------------------------|---|--|--|
| 3058 | float | RD | Max. value: 1. harmonic voltage L1  | V |  |  |
| 3060 | float | RD | Max. value: 3. harmonic voltage L1  | V |  |  |
| 3062 | float | RD | Max. value: 5. harmonic voltage L1  | V |  |  |
| 3064 | float | RD | Max. value: 7. harmonic voltage L1  | V |  |  |
| 3066 | float | RD | Max. value: 9. harmonic voltage L1  | V |  |  |
| 3068 | float | RD | Max. value: 11. harmonic voltage L1 | V |  |  |
| 3070 | float | RD | Max. value: 13. harmonic voltage L1 | V |  |  |
| 3072 | float | RD | Max. value: 15. harmonic voltage L1 | V |  |  |
| 3074 | float | RD | Max. value: 17. harmonic voltage L1 | V |  |  |
| 3076 | float | RD | Max. value: 19. harmonic voltage L1 | V |  |  |
| 3078 | float | RD | Max. value: 21. harmonic voltage L1 | V |  |  |
| 3080 | float | RD | Max. value: 23. harmonic voltage L1 | V |  |  |
| 3082 | float | RD | Max. value: 25. harmonic voltage L1 | V |  |  |
| 3084 | float | RD | Max. value: 1. harmonic voltage L2  | V |  |  |
| 3086 | float | RD | Max. value: 3. harmonic voltage L2  | V |  |  |
| 3088 | float | RD | Max. value: 5. harmonic voltage L2  | V |  |  |
| 3090 | float | RD | Max. value: 7. harmonic voltage L2  | V |  |  |
| 3092 | float | RD | Max. value: 9. harmonic voltage L2  | V |  |  |
| 3094 | float | RD | Max. value: 11. harmonic voltage L2 | V |  |  |
| 3096 | float | RD | Max. value: 13. harmonic voltage L2 | V |  |  |
| 3098 | float | RD | Max. value: 15. harmonic voltage L2 | V |  |  |
| 3100 | float | RD | Max. value: 17. harmonic voltage L2 | V |  |  |
| 3102 | float | RD | Max. value: 19. harmonic voltage L2 | V |  |  |
| 3104 | float | RD | Max. value: 21. harmonic voltage L2 | V |  |  |
| 3106 | float | RD | Max. value: 23. harmonic voltage L2 | V |  |  |
| 3108 | float | RD | Max. value: 25. harmonic voltage L2 | V |  |  |
| 3110 | float | RD | Max. value: 1. harmonic voltage L3  | V |  |  |
| 3112 | float | RD | Max. value: 3. harmonic voltage L3  | V |  |  |
| 3114 | float | RD | Max. value: 5. harmonic voltage L3  | V |  |  |
| 3116 | float | RD | Max. value: 7. harmonic voltage L3  | V |  |  |
| 3118 | float | RD | Max. value: 9. harmonic voltage L3  | V |  |  |
| 3120 | float | RD | Max. value: 11. harmonic voltage L3 | V |  |  |
| 3122 | float | RD | Max. value: 13. harmonic voltage L3 | V |  |  |
| 3124 | float | RD | Max. value: 15. harmonic voltage L3 | V |  |  |
| 3126 | float | RD | Max. value: 17. harmonic voltage L3 | V |  |  |
| 3128 | float | RD | Max. value: 19. harmonic voltage L3 | V |  |  |
| 3130 | float | RD | Max. value: 21. harmonic voltage L3 | V |  |  |
| 3132 | float | RD | Max. value: 23. harmonic voltage L3 | V |  |  |
| 3134 | float | RD | Max. value: 25. harmonic voltage L3 | V |  |  |
| 3136 | float | RD | Max. value: 1. harmonic current L1  | A |  |  |
| 3138 | float | RD | Max. value: 3. harmonic current L1  | A |  |  |
| 3140 | float | RD | Max. value: 5. harmonic current L1  | A |  |  |
| 3142 | float | RD | Max. value: 7. harmonic current L1  | A |  |  |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 3144    | float  | RD    | Max. value: 9. harmonic current L1  | A    |     |     |
| 3146    | float  | RD    | Max. value: 11. harmonic current L1 | A    |     |     |
| 3148    | float  | RD    | Max. value: 13. harmonic current L1 | A    |     |     |
| 3150    | float  | RD    | Max. value: 15. harmonic current L1 | A    |     |     |
| 3152    | float  | RD    | Max. value: 17. harmonic current L1 | A    |     |     |
| 3154    | float  | RD    | Max. value: 19. harmonic current L1 | A    |     |     |
| 3156    | float  | RD    | Max. value: 21. harmonic current L1 | A    |     |     |
| 3158    | float  | RD    | Max. value: 23. harmonic current L1 | A    |     |     |
| 3160    | float  | RD    | Max. value: 25. harmonic current L1 | A    |     |     |
| 3162    | float  | RD    | Max. value: 1. harmonic current L2  | A    |     |     |
| 3164    | float  | RD    | Max. value: 3. harmonic current L2  | A    |     |     |
| 3166    | float  | RD    | Max. value: 5. harmonic current L2  | A    |     |     |
| 3168    | float  | RD    | Max. value: 7. harmonic current L2  | A    |     |     |
| 3170    | float  | RD    | Max. value: 9. harmonic current L2  | A    |     |     |
| 3172    | float  | RD    | Max. value: 11. harmonic current L2 | A    |     |     |
| 3174    | float  | RD    | Max. value: 13. harmonic current L2 | A    |     |     |
| 3176    | float  | RD    | Max. value: 15. harmonic current L2 | A    |     |     |
| 3178    | float  | RD    | Max. value: 17. harmonic current L2 | A    |     |     |
| 3180    | float  | RD    | Max. value: 19. harmonic current L2 | A    |     |     |
| 3182    | float  | RD    | Max. value: 21. harmonic current L2 | A    |     |     |
| 3184    | float  | RD    | Max. value: 23. harmonic current L2 | A    |     |     |
| 3186    | float  | RD    | Max. value: 25. harmonic current L2 | A    |     |     |
| 3188    | float  | RD    | Max. value: 1. harmonic current L3  | A    |     |     |
| 3190    | float  | RD    | Max. value: 3. harmonic current L3  | A    |     |     |
| 3192    | float  | RD    | Max. value: 5. harmonic current L3  | A    |     |     |
| 3194    | float  | RD    | Max. value: 7. harmonic current L3  | A    |     |     |
| 3196    | float  | RD    | Max. value: 9. harmonic current L3  | A    |     |     |
| 3198    | float  | RD    | Max. value: 11. harmonic current L3 | A    |     |     |
| 3200    | float  | RD    | Max. value: 13. harmonic current L3 | A    |     |     |
| 3202    | float  | RD    | Max. value: 15. harmonic current L3 | A    |     |     |
| 3204    | float  | RD    | Max. value: 17. harmonic current L3 | A    |     |     |
| 3206    | float  | RD    | Max. value: 19. harmonic current L3 | A    |     |     |
| 3208    | float  | RD    | Max. value: 21. harmonic current L3 | A    |     |     |
| 3210    | float  | RD    | Max. value: 23. harmonic current L3 | A    |     |     |
| 3212    | float  | RD    | Max. value: 25. harmonic current L3 | A    |     |     |
| 8960    | float  | RD    | Max. value: 1. harmonic voltage L1  | V    |     |     |
| 8962    | float  | RD    | Max. value: 2. harmonic voltage L1  | V    |     |     |
| 8964    | float  | RD    | Max. value: 3. harmonic voltage L1  | V    |     |     |
| 8966    | float  | RD    | Max. value: 4. harmonic voltage L1  | V    |     |     |
| 8968    | float  | RD    | Max. value: 5. harmonic voltage L1  | V    |     |     |
| 8970    | float  | RD    | Max. value: 6. harmonic voltage L1  | V    |     |     |
| 8972    | float  | RD    | Max. value: 7. harmonic voltage L1  | V    |     |     |
| 8974    | float  | RD    | Max. value: 8. harmonic voltage L1  | V    |     |     |
| 8976    | float  | RD    | Max. value: 9. harmonic voltage L1  | V    |     |     |
| 8978    | float  | RD    | Max. value: 10. harmonic voltage L1 | V    |     |     |
| 8980    | float  | RD    | Max. value: 11. harmonic voltage L1 | V    |     |     |
| 8982    | float  | RD    | Max. value: 12. harmonic voltage L1 | V    |     |     |
| 8984    | float  | RD    | Max. value: 13. harmonic voltage L1 | V    |     |     |
| 8986    | float  | RD    | Max. value: 14. harmonic voltage L1 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 8988    | float  | RD    | Max. value: 15. harmonic voltage L1 | V    |     |     |
| 8990    | float  | RD    | Max. value: 16. harmonic voltage L1 | V    |     |     |
| 8992    | float  | RD    | Max. value: 17. harmonic voltage L1 | V    |     |     |
| 8994    | float  | RD    | Max. value: 18. harmonic voltage L1 | V    |     |     |
| 8996    | float  | RD    | Max. value: 19. harmonic voltage L1 | V    |     |     |
| 8998    | float  | RD    | Max. value: 20. harmonic voltage L1 | V    |     |     |
| 9000    | float  | RD    | Max. value: 21. harmonic voltage L1 | V    |     |     |
| 9002    | float  | RD    | Max. value: 22. harmonic voltage L1 | V    |     |     |
| 9004    | float  | RD    | Max. value: 23. harmonic voltage L1 | V    |     |     |
| 9006    | float  | RD    | Max. value: 24. harmonic voltage L1 | V    |     |     |
| 9008    | float  | RD    | Max. value: 25. harmonic voltage L1 | V    |     |     |
| 9010    | float  | RD    | Max. value: 26. harmonic voltage L1 | V    |     |     |
| 9012    | float  | RD    | Max. value: 26. harmonic voltage L1 | V    |     |     |
| 9014    | float  | RD    | Max. value: 28. harmonic voltage L1 | V    |     |     |
| 9016    | float  | RD    | Max. value: 29. harmonic voltage L1 | V    |     |     |
| 9018    | float  | RD    | Max. value: 30. harmonic voltage L1 | V    |     |     |
| 9020    | float  | RD    | Max. value: 31. harmonic voltage L1 | V    |     |     |
| 9022    | float  | RD    | Max. value: 32. harmonic voltage L1 | V    |     |     |
| 9024    | float  | RD    | Max. value: 33. harmonic voltage L1 | V    |     |     |
| 9026    | float  | RD    | Max. value: 34. harmonic voltage L1 | V    |     |     |
| 9028    | float  | RD    | Max. value: 35. harmonic voltage L1 | V    |     |     |
| 9030    | float  | RD    | Max. value: 36. harmonic voltage L1 | V    |     |     |
| 9032    | float  | RD    | Max. value: 37. harmonic voltage L1 | V    |     |     |
| 9034    | float  | RD    | Max. value: 38. harmonic voltage L1 | V    |     |     |
| 9036    | float  | RD    | Max. value: 39. harmonic voltage L1 | V    |     |     |
| 9038    | float  | RD    | Max. value: 40. harmonic voltage L1 | V    |     |     |
| 9040    | float  | RD    | Max. value: 1. harmonic voltage L2  | V    |     |     |
| 9042    | float  | RD    | Max. value: 2. harmonic voltage L2  | V    |     |     |
| 9044    | float  | RD    | Max. value: 3. harmonic voltage L2  | V    |     |     |
| 9046    | float  | RD    | Max. value: 4. harmonic voltage L2  | V    |     |     |
| 9048    | float  | RD    | Max. value: 5. harmonic voltage L2  | V    |     |     |
| 9050    | float  | RD    | Max. value: 6. harmonic voltage L2  | V    |     |     |
| 9052    | float  | RD    | Max. value: 7. harmonic voltage L2  | V    |     |     |
| 9054    | float  | RD    | Max. value: 8. harmonic voltage L2  | V    |     |     |
| 9056    | float  | RD    | Max. value: 9. harmonic voltage L2  | V    |     |     |
| 9058    | float  | RD    | Max. value: 10. harmonic voltage L2 | V    |     |     |
| 9060    | float  | RD    | Max. value: 11. harmonic voltage L2 | V    |     |     |
| 9062    | float  | RD    | Max. value: 12. harmonic voltage L2 | V    |     |     |
| 9064    | float  | RD    | Max. value: 13. harmonic voltage L2 | V    |     |     |
| 9066    | float  | RD    | Max. value: 14. harmonic voltage L2 | V    |     |     |
| 9068    | float  | RD    | Max. value: 15. harmonic voltage L2 | V    |     |     |
| 9070    | float  | RD    | Max. value: 16. harmonic voltage L2 | V    |     |     |
| 9072    | float  | RD    | Max. value: 17. harmonic voltage L2 | V    |     |     |
| 9074    | float  | RD    | Max. value: 18. harmonic voltage L2 | V    |     |     |
| 9076    | float  | RD    | Max. value: 19. harmonic voltage L2 | V    |     |     |
| 9078    | float  | RD    | Max. value: 20. harmonic voltage L2 | V    |     |     |
| 9080    | float  | RD    | Max. value: 21. harmonic voltage L2 | V    |     |     |
| 9082    | float  | RD    | Max. value: 22. harmonic voltage L2 | V    |     |     |
| 9084    | float  | RD    | Max. value: 23. harmonic voltage L2 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 9086    | float  | RD    | Max. value: 24. harmonic voltage L2 | V    |     |     |
| 9088    | float  | RD    | Max. value: 25. harmonic voltage L2 | V    |     |     |
| 9090    | float  | RD    | Max. value: 26. harmonic voltage L2 | V    |     |     |
| 9092    | float  | RD    | Max. value: 27. harmonic voltage L2 | V    |     |     |
| 9094    | float  | RD    | Max. value: 28. harmonic voltage L2 | V    |     |     |
| 9096    | float  | RD    | Max. value: 29. harmonic voltage L2 | V    |     |     |
| 9098    | float  | RD    | Max. value: 30. harmonic voltage L2 | V    |     |     |
| 9100    | float  | RD    | Max. value: 31. harmonic voltage L2 | V    |     |     |
| 9102    | float  | RD    | Max. value: 32. harmonic voltage L2 | V    |     |     |
| 9104    | float  | RD    | Max. value: 33. harmonic voltage L2 | V    |     |     |
| 9106    | float  | RD    | Max. value: 34. harmonic voltage L2 | V    |     |     |
| 9108    | float  | RD    | Max. value: 35. harmonic voltage L2 | V    |     |     |
| 9110    | float  | RD    | Max. value: 36. harmonic voltage L2 | V    |     |     |
| 9112    | float  | RD    | Max. value: 37. harmonic voltage L2 | V    |     |     |
| 9114    | float  | RD    | Max. value: 38. harmonic voltage L2 | V    |     |     |
| 9116    | float  | RD    | Max. value: 39. harmonic voltage L2 | V    |     |     |
| 9118    | float  | RD    | Max. value: 40. harmonic voltage L2 | V    |     |     |
| 9120    | float  | RD    | Max. value: 1. harmonic voltage L3  | V    |     |     |
| 9122    | float  | RD    | Max. value: 2. harmonic voltage L3  | V    |     |     |
| 9124    | float  | RD    | Max. value: 3. harmonic voltage L3  | V    |     |     |
| 9126    | float  | RD    | Max. value: 4. harmonic voltage L3  | V    |     |     |
| 9128    | float  | RD    | Max. value: 5. harmonic voltage L3  | V    |     |     |
| 9130    | float  | RD    | Max. value: 6. harmonic voltage L3  | V    |     |     |
| 9132    | float  | RD    | Max. value: 7. harmonic voltage L3  | V    |     |     |
| 9134    | float  | RD    | Max. value: 8. harmonic voltage L3  | V    |     |     |
| 9136    | float  | RD    | Max. value: 9. harmonic voltage L3  | V    |     |     |
| 9138    | float  | RD    | Max. value: 10. harmonic voltage L3 | V    |     |     |
| 9140    | float  | RD    | Max. value: 11. harmonic voltage L3 | V    |     |     |
| 9142    | float  | RD    | Max. value: 12. harmonic voltage L3 | V    |     |     |
| 9144    | float  | RD    | Max. value: 13. harmonic voltage L3 | V    |     |     |
| 9146    | float  | RD    | Max. value: 14. harmonic voltage L3 | V    |     |     |
| 9148    | float  | RD    | Max. value: 15. harmonic voltage L3 | V    |     |     |
| 9150    | float  | RD    | Max. value: 16. harmonic voltage L3 | V    |     |     |
| 9152    | float  | RD    | Max. value: 17. harmonic voltage L3 | V    |     |     |
| 9154    | float  | RD    | Max. value: 18. harmonic voltage L3 | V    |     |     |
| 9156    | float  | RD    | Max. value: 19. harmonic voltage L3 | V    |     |     |
| 9158    | float  | RD    | Max. value: 20. harmonic voltage L3 | V    |     |     |
| 9160    | float  | RD    | Max. value: 21. harmonic voltage L3 | V    |     |     |
| 9162    | float  | RD    | Max. value: 22. harmonic voltage L3 | V    |     |     |
| 9164    | float  | RD    | Max. value: 23. harmonic voltage L3 | V    |     |     |
| 9166    | float  | RD    | Max. value: 24. harmonic voltage L3 | V    |     |     |
| 9168    | float  | RD    | Max. value: 25. harmonic voltage L3 | V    |     |     |
| 9170    | float  | RD    | Max. value: 26. harmonic voltage L3 | V    |     |     |
| 9172    | float  | RD    | Max. value: 27. harmonic voltage L3 | V    |     |     |
| 9174    | float  | RD    | Max. value: 28. harmonic voltage L3 | V    |     |     |
| 9176    | float  | RD    | Max. value: 29. harmonic voltage L3 | V    |     |     |
| 9178    | float  | RD    | Max. value: 30. harmonic voltage L3 | V    |     |     |
| 9180    | float  | RD    | Max. value: 31. harmonic voltage L3 | V    |     |     |
| 9182    | float  | RD    | Max. value: 32. harmonic voltage L3 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 9184    | float  | RD    | Max. value: 33. harmonic voltage L3 | V    |     |     |
| 9186    | float  | RD    | Max. value: 34. harmonic voltage L3 | V    |     |     |
| 9188    | float  | RD    | Max. value: 35. harmonic voltage L3 | V    |     |     |
| 9190    | float  | RD    | Max. value: 36. harmonic voltage L3 | V    |     |     |
| 9192    | float  | RD    | Max. value: 37. harmonic voltage L3 | V    |     |     |
| 9194    | float  | RD    | Max. value: 38. harmonic voltage L3 | V    |     |     |
| 9196    | float  | RD    | Max. value: 39. harmonic voltage L3 | V    |     |     |
| 9198    | float  | RD    | Max. value: 40. harmonic voltage L3 | V    |     |     |
| 9200    | float  | RD    | Max. value: 1. harmonic current L1  | A    |     |     |
| 9202    | float  | RD    | Max. value: 2. harmonic current L1  | A    |     |     |
| 9204    | float  | RD    | Max. value: 3. harmonic current L1  | A    |     |     |
| 9206    | float  | RD    | Max. value: 4. harmonic current L1  | A    |     |     |
| 9208    | float  | RD    | Max. value: 5. harmonic current L1  | A    |     |     |
| 9210    | float  | RD    | Max. value: 6. harmonic current L1  | A    |     |     |
| 9212    | float  | RD    | Max. value: 7. harmonic current L1  | A    |     |     |
| 9214    | float  | RD    | Max. value: 8. harmonic current L1  | A    |     |     |
| 9216    | float  | RD    | Max. value: 9. harmonic current L1  | A    |     |     |
| 9218    | float  | RD    | Max. value: 10. harmonic current L1 | A    |     |     |
| 9220    | float  | RD    | Max. value: 11. harmonic current L1 | A    |     |     |
| 9222    | float  | RD    | Max. value: 12. harmonic current L1 | A    |     |     |
| 9224    | float  | RD    | Max. value: 13. harmonic current L1 | A    |     |     |
| 9226    | float  | RD    | Max. value: 14. harmonic current L1 | A    |     |     |
| 9228    | float  | RD    | Max. value: 15. harmonic current L1 | A    |     |     |
| 9230    | float  | RD    | Max. value: 16. harmonic current L1 | A    |     |     |
| 9232    | float  | RD    | Max. value: 17. harmonic current L1 | A    |     |     |
| 9234    | float  | RD    | Max. value: 18. harmonic current L1 | A    |     |     |
| 9236    | float  | RD    | Max. value: 19. harmonic current L1 | A    |     |     |
| 9238    | float  | RD    | Max. value: 20. harmonic current L1 | A    |     |     |
| 9240    | float  | RD    | Max. value: 21. harmonic current L1 | A    |     |     |
| 9242    | float  | RD    | Max. value: 22. harmonic current L1 | A    |     |     |
| 9244    | float  | RD    | Max. value: 23. harmonic current L1 | A    |     |     |
| 9246    | float  | RD    | Max. value: 24. harmonic current L1 | A    |     |     |
| 9248    | float  | RD    | Max. value: 25. harmonic current L1 | A    |     |     |
| 9250    | float  | RD    | Max. value: 26. harmonic current L1 | A    |     |     |
| 9252    | float  | RD    | Max. value: 27. harmonic current L1 | A    |     |     |
| 9254    | float  | RD    | Max. value: 28. harmonic current L1 | A    |     |     |
| 9256    | float  | RD    | Max. value: 29. harmonic current L1 | A    |     |     |
| 9258    | float  | RD    | Max. value: 30. harmonic current L1 | A    |     |     |
| 9260    | float  | RD    | Max. value: 31. harmonic current L1 | A    |     |     |
| 9262    | float  | RD    | Max. value: 32. harmonic current L1 | A    |     |     |
| 9264    | float  | RD    | Max. value: 33. harmonic current L1 | A    |     |     |
| 9266    | float  | RD    | Max. value: 34. harmonic current L1 | A    |     |     |
| 9268    | float  | RD    | Max. value: 35. harmonic current L1 | A    |     |     |
| 9270    | float  | RD    | Max. value: 36. harmonic current L1 | A    |     |     |
| 9272    | float  | RD    | Max. value: 37. harmonic current L1 | A    |     |     |
| 9274    | float  | RD    | Max. value: 38. harmonic current L1 | A    |     |     |
| 9276    | float  | RD    | Max. value: 39. harmonic current L1 | A    |     |     |
| 9278    | float  | RD    | Max. value: 40. harmonic current L1 | A    |     |     |
| 9280    | float  | RD    | Max. value: 1. harmonic current L2  | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 9282    | float  | RD    | Max. value: 2. harmonic current L2  | A    |     |     |
| 9284    | float  | RD    | Max. value: 3. harmonic current L2  | A    |     |     |
| 9286    | float  | RD    | Max. value: 4. harmonic current L2  | A    |     |     |
| 9288    | float  | RD    | Max. value: 5. harmonic current L2  | A    |     |     |
| 9290    | float  | RD    | Max. value: 6. harmonic current L2  | A    |     |     |
| 9292    | float  | RD    | Max. value: 7. harmonic current L2  | A    |     |     |
| 9294    | float  | RD    | Max. value: 8. harmonic current L2  | A    |     |     |
| 9296    | float  | RD    | Max. value: 9. harmonic current L2  | A    |     |     |
| 9298    | float  | RD    | Max. value: 10. harmonic current L2 | A    |     |     |
| 9300    | float  | RD    | Max. value: 11. harmonic current L2 | A    |     |     |
| 9302    | float  | RD    | Max. value: 12. harmonic current L2 | A    |     |     |
| 9304    | float  | RD    | Max. value: 13. harmonic current L2 | A    |     |     |
| 9306    | float  | RD    | Max. value: 14. harmonic current L2 | A    |     |     |
| 9308    | float  | RD    | Max. value: 15. harmonic current L2 | A    |     |     |
| 9310    | float  | RD    | Max. value: 16. harmonic current L2 | A    |     |     |
| 9312    | float  | RD    | Max. value: 17. harmonic current L2 | A    |     |     |
| 9314    | float  | RD    | Max. value: 18. harmonic current L2 | A    |     |     |
| 9316    | float  | RD    | Max. value: 19. harmonic current L2 | A    |     |     |
| 9318    | float  | RD    | Max. value: 20. harmonic current L2 | A    |     |     |
| 9320    | float  | RD    | Max. value: 21. harmonic current L2 | A    |     |     |
| 9322    | float  | RD    | Max. value: 22. harmonic current L2 | A    |     |     |
| 9324    | float  | RD    | Max. value: 23. harmonic current L2 | A    |     |     |
| 9326    | float  | RD    | Max. value: 24. harmonic current L2 | A    |     |     |
| 9328    | float  | RD    | Max. value: 25. harmonic current L2 | A    |     |     |
| 9330    | float  | RD    | Max. value: 26. harmonic current L2 | A    |     |     |
| 9332    | float  | RD    | Max. value: 27. harmonic current L2 | A    |     |     |
| 9334    | float  | RD    | Max. value: 28. harmonic current L2 | A    |     |     |
| 9336    | float  | RD    | Max. value: 29. harmonic current L2 | A    |     |     |
| 9338    | float  | RD    | Max. value: 30. harmonic current L2 | A    |     |     |
| 9340    | float  | RD    | Max. value: 31. harmonic current L2 | A    |     |     |
| 9342    | float  | RD    | Max. value: 32. harmonic current L2 | A    |     |     |
| 9344    | float  | RD    | Max. value: 33. harmonic current L2 | A    |     |     |
| 9346    | float  | RD    | Max. value: 34. harmonic current L2 | A    |     |     |
| 9348    | float  | RD    | Max. value: 35. harmonic current L2 | A    |     |     |
| 9350    | float  | RD    | Max. value: 36. harmonic current L2 | A    |     |     |
| 9352    | float  | RD    | Max. value: 37. harmonic current L2 | A    |     |     |
| 9354    | float  | RD    | Max. value: 38. harmonic current L2 | A    |     |     |
| 9356    | float  | RD    | Max. value: 39. harmonic current L2 | A    |     |     |
| 9358    | float  | RD    | Max. value: 40. harmonic current L2 | A    |     |     |
| 9360    | float  | RD    | Max. value: 1. harmonic current L3  | A    |     |     |
| 9362    | float  | RD    | Max. value: 2. harmonic current L3  | A    |     |     |
| 9364    | float  | RD    | Max. value: 3. harmonic current L3  | A    |     |     |
| 9366    | float  | RD    | Max. value: 4. harmonic current L3  | A    |     |     |
| 9368    | float  | RD    | Max. value: 5. harmonic current L3  | A    |     |     |
| 9370    | float  | RD    | Max. value: 6. harmonic current L3  | A    |     |     |
| 9372    | float  | RD    | Max. value: 7. harmonic current L3  | A    |     |     |
| 9374    | float  | RD    | Max. value: 8. harmonic current L3  | A    |     |     |
| 9376    | float  | RD    | Max. value: 9. harmonic current L3  | A    |     |     |
| 9378    | float  | RD    | Max. value: 10. harmonic current L3 | A    |     |     |

| Address | Format         | RD/WR | Note                                | Unit | Min | Max |
|---------|----------------|-------|-------------------------------------|------|-----|-----|
| 9380    | float          | RD    | Max. value: 11. harmonic current L3 | A    |     |     |
| 9382    | float          | RD    | Max. value: 12. harmonic current L3 | A    |     |     |
| 9384    | float          | RD    | Max. value: 13. harmonic current L3 | A    |     |     |
| 9386    | float          | RD    | Max. value: 14. harmonic current L3 | A    |     |     |
| 9388    | float          | RD    | Max. value: 15. harmonic current L3 | A    |     |     |
| 9390    | float          | RD    | Max. value: 16. harmonic current L3 | A    |     |     |
| 9392    | float          | RD    | Max. value: 17. harmonic current L3 | A    |     |     |
| 9394    | float          | RD    | Max. value: 18. harmonic current L3 | A    |     |     |
| 9396    | float          | RD    | Max. value: 19. harmonic current L3 | A    |     |     |
| 9398    | float          | RD    | Max. value: 20. harmonic current L3 | A    |     |     |
| 9400    | float          | RD    | Max. value: 21. harmonic current L3 | A    |     |     |
| 9402    | float          | RD    | Max. value: 22. harmonic current L3 | A    |     |     |
| 9404    | float          | RD    | Max. value: 23. harmonic current L3 | A    |     |     |
| 9406    | float          | RD    | Max. value: 24. harmonic current L3 | A    |     |     |
| 9408    | float          | RD    | Max. value: 25. harmonic current L3 | A    |     |     |
| 9410    | float          | RD    | Max. value: 26. harmonic current L3 | A    |     |     |
| 9412    | float          | RD    | Max. value: 27. harmonic current L3 | A    |     |     |
| 9414    | float          | RD    | Max. value: 28. harmonic current L3 | A    |     |     |
| 9416    | float          | RD    | Max. value: 29. harmonic current L3 | A    |     |     |
| 9418    | float          | RD    | Max. value: 30. harmonic current L3 | A    |     |     |
| 9420    | float          | RD    | Max. value: 31. harmonic current L3 | A    |     |     |
| 9422    | float          | RD    | Max. value: 32. harmonic current L3 | A    |     |     |
| 9424    | float          | RD    | Max. value: 33. harmonic current L3 | A    |     |     |
| 9426    | float          | RD    | Max. value: 34. harmonic current L3 | A    |     |     |
| 9428    | float          | RD    | Max. value: 35. harmonic current L3 | A    |     |     |
| 9430    | float          | RD    | Max. value: 36. harmonic current L3 | A    |     |     |
| 9432    | float          | RD    | Max. value: 37. harmonic current L3 | A    |     |     |
| 9434    | float          | RD    | Max. value: 38. harmonic current L3 | A    |     |     |
| 9436    | float          | RD    | Max. value: 39. harmonic current L3 | A    |     |     |
| 9438    | float          | RD    | Max. value: 40. harmonic current L3 | A    |     |     |
| 13029   | short<br>(x10) | RD    | Max. value: 1. harmonic voltage L1  | V    |     |     |
| 13030   | short<br>(x10) | RD    | Max. value: 3. harmonic voltage L1  | V    |     |     |
| 13031   | short<br>(x10) | RD    | Max. value: 5. harmonic voltage L1  | V    |     |     |
| 13032   | short<br>(x10) | RD    | Max. value: 7. harmonic voltage L1  | V    |     |     |
| 13033   | short<br>(x10) | RD    | Max. value: 9. harmonic voltage L1  | V    |     |     |
| 13034   | short<br>(x10) | RD    | Max. value: 11. harmonic voltage L1 | V    |     |     |
| 13035   | short<br>(x10) | RD    | Max. value: 13. harmonic voltage L1 | V    |     |     |
| 13036   | short<br>(x10) | RD    | Max. value: 15. harmonic voltage L1 | V    |     |     |
| 13037   | short<br>(x10) | RD    | Max. value: 17. harmonic voltage L1 | V    |     |     |
| 13038   | short<br>(x10) | RD    | Max. value: 19. harmonic voltage L1 | V    |     |     |

| Address | Format         | RD/WR | Note                                | Unit | Min | Max |
|---------|----------------|-------|-------------------------------------|------|-----|-----|
| 13039   | short<br>(x10) | RD    | Max. value: 21. harmonic voltage L1 | V    |     |     |
| 13040   | short<br>(x10) | RD    | Max. value: 23. harmonic voltage L1 | V    |     |     |
| 13041   | short<br>(x10) | RD    | Max. value: 25. harmonic voltage L1 | V    |     |     |
| 13042   | short<br>(x10) | RD    | Max. value: 1. harmonic voltage L2  | V    |     |     |
| 13043   | short<br>(x10) | RD    | Max. value: 3. harmonic voltage L2  | V    |     |     |
| 13044   | short<br>(x10) | RD    | Max. value: 5. harmonic voltage L2  | V    |     |     |
| 13045   | short<br>(x10) | RD    | Max. value: 7. harmonic voltage L2  | V    |     |     |
| 13046   | short<br>(x10) | RD    | Max. value: 9. harmonic voltage L2  | V    |     |     |
| 13047   | short<br>(x10) | RD    | Max. value: 11. harmonic voltage L2 | V    |     |     |
| 13048   | short<br>(x10) | RD    | Max. value: 13. harmonic voltage L2 | V    |     |     |
| 13049   | short<br>(x10) | RD    | Max. value: 15. harmonic voltage L2 | V    |     |     |
| 13050   | short<br>(x10) | RD    | Max. value: 17. harmonic voltage L2 | V    |     |     |
| 13051   | short<br>(x10) | RD    | Max. value: 19. harmonic voltage L2 | V    |     |     |
| 13052   | short<br>(x10) | RD    | Max. value: 21. harmonic voltage L2 | V    |     |     |
| 13053   | short<br>(x10) | RD    | Max. value: 23. harmonic voltage L2 | V    |     |     |
| 13054   | short<br>(x10) | RD    | Max. value: 25. harmonic voltage L2 | V    |     |     |
| 13055   | short<br>(x10) | RD    | Max. value: 1. harmonic voltage L3  | V    |     |     |
| 13056   | short<br>(x10) | RD    | Max. value: 3. harmonic voltage L3  | V    |     |     |
| 13057   | short<br>(x10) | RD    | Max. value: 5. harmonic voltage L3  | V    |     |     |
| 13058   | short<br>(x10) | RD    | Max. value: 7. harmonic voltage L3  | V    |     |     |
| 13059   | short<br>(x10) | RD    | Max. value: 9. harmonic voltage L3  | V    |     |     |
| 13060   | short<br>(x10) | RD    | Max. value: 11. harmonic voltage L3 | V    |     |     |
| 13061   | short<br>(x10) | RD    | Max. value: 13. harmonic voltage L3 | V    |     |     |
| 13062   | short<br>(x10) | RD    | Max. value: 15. harmonic voltage L3 | V    |     |     |
| 13063   | short<br>(x10) | RD    | Max. value: 17. harmonic voltage L3 | V    |     |     |
| 13064   | short<br>(x10) | RD    | Max. value: 19. harmonic voltage L3 | V    |     |     |
| 13065   | short<br>(x10) | RD    | Max. value: 21. harmonic voltage L3 | V    |     |     |
| 13066   | short<br>(x10) | RD    | Max. value: 23. harmonic voltage L3 | V    |     |     |

| Address | Format           | RD/WR | Note                                | Unit | Min | Max |
|---------|------------------|-------|-------------------------------------|------|-----|-----|
| 13067   | short<br>(x10)   | RD    | Max. value: 25. harmonic voltage L3 | V    |     |     |
| 13068   | short<br>(x1000) | RD    | Max. value: 1. harmonic current L1  | A    |     |     |
| 13069   | short<br>(x1000) | RD    | Max. value: 3. harmonic current L1  | A    |     |     |
| 13070   | short<br>(x1000) | RD    | Max. value: 5. harmonic current L1  | A    |     |     |
| 13071   | short<br>(x1000) | RD    | Max. value: 7. harmonic current L1  | A    |     |     |
| 13072   | short<br>(x1000) | RD    | Max. value: 9. harmonic current L1  | A    |     |     |
| 13073   | short<br>(x1000) | RD    | Max. value: 11. harmonic current L1 | A    |     |     |
| 13074   | short<br>(x1000) | RD    | Max. value: 13. harmonic current L1 | A    |     |     |
| 13075   | short<br>(x1000) | RD    | Max. value: 15. harmonic current L1 | A    |     |     |
| 13076   | short<br>(x1000) | RD    | Max. value: 17. harmonic current L1 | A    |     |     |
| 13077   | short<br>(x1000) | RD    | Max. value: 19. harmonic current L1 | A    |     |     |
| 13078   | short<br>(x1000) | RD    | Max. value: 21. harmonic current L1 | A    |     |     |
| 13079   | short<br>(x1000) | RD    | Max. value: 23. harmonic current L1 | A    |     |     |
| 13080   | short<br>(x1000) | RD    | Max. value: 25. harmonic current L1 | A    |     |     |
| 13081   | short<br>(x1000) | RD    | Max. value: 1. harmonic current L2  | A    |     |     |
| 13082   | short<br>(x1000) | RD    | Max. value: 3. harmonic current L2  | A    |     |     |
| 13083   | short<br>(x1000) | RD    | Max. value: 5. harmonic current L2  | A    |     |     |
| 13084   | short<br>(x1000) | RD    | Max. value: 7. harmonic current L2  | A    |     |     |
| 13085   | short<br>(x1000) | RD    | Max. value: 9. harmonic current L2  | A    |     |     |
| 13086   | short<br>(x1000) | RD    | Max. value: 11. harmonic current L2 | A    |     |     |
| 13087   | short<br>(x1000) | RD    | Max. value: 13. harmonic current L2 | A    |     |     |
| 13088   | short<br>(x1000) | RD    | Max. value: 15. harmonic current L2 | A    |     |     |
| 13089   | short<br>(x1000) | RD    | Max. value: 17. harmonic current L2 | A    |     |     |
| 13090   | short<br>(x1000) | RD    | Max. value: 19. harmonic current L2 | A    |     |     |
| 13091   | short<br>(x1000) | RD    | Max. value: 21. harmonic current L2 | A    |     |     |
| 13092   | short<br>(x1000) | RD    | Max. value: 23. harmonic current L2 | A    |     |     |
| 13093   | short<br>(x1000) | RD    | Max. value: 25. harmonic current L2 | A    |     |     |
| 13094   | short<br>(x1000) | RD    | Max. value: 1. harmonic current L3  | A    |     |     |

| Address | Format           | RD/WR | Note                                | Unit | Min | Max |
|---------|------------------|-------|-------------------------------------|------|-----|-----|
| 13095   | short<br>(x1000) | RD    | Max. value: 3. harmonic current L3  | A    |     |     |
| 13096   | short<br>(x1000) | RD    | Max. value: 5. harmonic current L3  | A    |     |     |
| 13097   | short<br>(x1000) | RD    | Max. value: 7. harmonic current L3  | A    |     |     |
| 13098   | short<br>(x1000) | RD    | Max. value: 9. harmonic current L3  | A    |     |     |
| 13099   | short<br>(x1000) | RD    | Max. value: 11. harmonic current L3 | A    |     |     |
| 13100   | short<br>(x1000) | RD    | Max. value: 13. harmonic current L3 | A    |     |     |
| 13101   | short<br>(x1000) | RD    | Max. value: 15. harmonic current L3 | A    |     |     |
| 13102   | short<br>(x1000) | RD    | Max. value: 17. harmonic current L3 | A    |     |     |
| 13103   | short<br>(x1000) | RD    | Max. value: 17. harmonic current L3 | A    |     |     |
| 13104   | short<br>(x1000) | RD    | Max. value: 21. harmonic current L3 | A    |     |     |
| 13105   | short<br>(x1000) | RD    | Max. value: 23. harmonic current L3 | A    |     |     |
| 13106   | short<br>(x1000) | RD    | Max. value: 25. harmonic current L3 | A    |     |     |

### Maximum values, timestamp, fourier analysis

|      |      |    |  |   |  |  |
|------|------|----|--|---|--|--|
| 3358 | uint | RD | UTC timestamp, max. value: 1. harmonic voltage L1  | s |  |  |
| 3360 | uint | RD | UTC timestamp, max. value: 3. harmonic voltage L1  | s |  |  |
| 3362 | uint | RD | UTC timestamp, max. value: 5. harmonic voltage L1  | s |  |  |
| 3364 | uint | RD | UTC timestamp, max. value: 7. harmonic voltage L1  | s |  |  |
| 3366 | uint | RD | UTC timestamp, max. value: 9. harmonic voltage L1  | s |  |  |
| 3368 | uint | RD | UTC timestamp, max. value: 11. harmonic voltage L1 | s |  |  |
| 3370 | uint | RD | UTC timestamp, max. value: 13. harmonic voltage L1 | s |  |  |
| 3372 | uint | RD | UTC timestamp, max. value: 15. harmonic voltage L1 | s |  |  |
| 3374 | uint | RD | UTC timestamp, max. value: 17. harmonic voltage L1 | s |  |  |
| 3376 | uint | RD | UTC timestamp, max. value: 19. harmonic voltage L1 | s |  |  |
| 3378 | uint | RD | UTC timestamp, max. value: 21. harmonic voltage L1 | s |  |  |
| 3380 | uint | RD | UTC timestamp, max. value: 23. harmonic voltage L1 | s |  |  |
| 3382 | uint | RD | UTC timestamp, max. value: 25. harmonic voltage L1 | s |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 3384    | uint   | RD    | UTC timestamp, max. value: 1. harmonic voltage L2  | s    |     |     |
| 3386    | uint   | RD    | UTC timestamp, max. value: 3. harmonic voltage L2  | s    |     |     |
| 3388    | uint   | RD    | UTC timestamp, max. value: 5. harmonic voltage L2  | s    |     |     |
| 3390    | uint   | RD    | UTC timestamp, max. value: 7. harmonic voltage L2  | s    |     |     |
| 3392    | uint   | RD    | UTC timestamp, max. value: 9. harmonic voltage L2  | s    |     |     |
| 3394    | uint   | RD    | UTC timestamp, max. value: 11. harmonic voltage L2 | s    |     |     |
| 3396    | uint   | RD    | UTC timestamp, max. value: 13. harmonic voltage L2 | s    |     |     |
| 3398    | uint   | RD    | UTC timestamp, max. value: 15. harmonic voltage L2 | s    |     |     |
| 3400    | uint   | RD    | UTC timestamp, max. value: 17. harmonic voltage L2 | s    |     |     |
| 3402    | uint   | RD    | UTC timestamp, max. value: 19. harmonic voltage L2 | s    |     |     |
| 3404    | uint   | RD    | UTC timestamp, max. value: 21. harmonic voltage L2 | s    |     |     |
| 3406    | uint   | RD    | UTC timestamp, max. value: 23. harmonic voltage L2 | s    |     |     |
| 3408    | uint   | RD    | UTC timestamp, max. value: 25. harmonic voltage L2 | s    |     |     |
| 3410    | uint   | RD    | UTC timestamp, max. value: 1. harmonic voltage L3  | s    |     |     |
| 3412    | uint   | RD    | UTC timestamp, max. value: 3. harmonic voltage L3  | s    |     |     |
| 3414    | uint   | RD    | UTC timestamp, max. value: 5. harmonic voltage L3  | s    |     |     |
| 3416    | uint   | RD    | UTC timestamp, max. value: 7. harmonic voltage L3  | s    |     |     |
| 3418    | uint   | RD    | UTC timestamp, max. value: 9. harmonic voltage L3  | s    |     |     |
| 3420    | uint   | RD    | UTC timestamp, max. value: 11. harmonic voltage L3 | s    |     |     |
| 3422    | uint   | RD    | UTC timestamp, max. value: 13. harmonic voltage L3 | s    |     |     |
| 3424    | uint   | RD    | UTC timestamp, max. value: 15. harmonic voltage L3 | s    |     |     |
| 3426    | uint   | RD    | UTC timestamp, max. value: 17. harmonic voltage L3 | s    |     |     |
| 3428    | uint   | RD    | UTC timestamp, max. value: 19. harmonic voltage L3 | s    |     |     |
| 3430    | uint   | RD    | UTC timestamp, max. value: 21. harmonic voltage L3 | s    |     |     |
| 3432    | uint   | RD    | UTC timestamp, max. value: 23. harmonic voltage L3 | s    |     |     |
| 3434    | uint   | RD    | UTC timestamp, max. value: 25. harmonic voltage L3 | s    |     |     |
| 3436    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L1  | s    |     |     |
| 3438    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L1  | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 3440    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L1  | s    |     |     |
| 3442    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L1  | s    |     |     |
| 3444    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L1  | s    |     |     |
| 3446    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L1 | s    |     |     |
| 3448    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L1 | s    |     |     |
| 3450    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L1 | s    |     |     |
| 3452    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L1 | s    |     |     |
| 3454    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L1 | s    |     |     |
| 3456    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L1 | s    |     |     |
| 3458    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L1 | s    |     |     |
| 3460    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L1 | s    |     |     |
| 3462    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L2  | s    |     |     |
| 3464    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L2  | s    |     |     |
| 3466    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L2  | s    |     |     |
| 3468    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L2  | s    |     |     |
| 3470    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L2  | s    |     |     |
| 3472    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L2 | s    |     |     |
| 3474    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L2 | s    |     |     |
| 3476    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L2 | s    |     |     |
| 3478    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L2 | s    |     |     |
| 3480    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L2 | s    |     |     |
| 3482    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L2 | s    |     |     |
| 3484    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L2 | s    |     |     |
| 3486    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L2 | s    |     |     |
| 3488    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L3  | s    |     |     |
| 3490    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L3  | s    |     |     |
| 3492    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L3  | s    |     |     |
| 3494    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L3  | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 3496    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L3  | s    |     |     |
| 3498    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L3 | s    |     |     |
| 3500    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L3 | s    |     |     |
| 3502    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L3 | s    |     |     |
| 3504    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L3 | s    |     |     |
| 3506    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L3 | s    |     |     |
| 3508    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L3 | s    |     |     |
| 3510    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L3 | s    |     |     |
| 3512    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L3 | s    |     |     |
| 9440    | uint   | RD    | UTC timestamp, max. value: 1. harmonic voltage L1  | s    |     |     |
| 9442    | uint   | RD    | UTC timestamp, max. value: 2. harmonic voltage L1  | s    |     |     |
| 9444    | uint   | RD    | UTC timestamp, max. value: 3. harmonic voltage L1  | s    |     |     |
| 9446    | uint   | RD    | UTC timestamp, max. value: 4. harmonic voltage L1  | s    |     |     |
| 9448    | uint   | RD    | UTC timestamp, max. value: 5. harmonic voltage L1  | s    |     |     |
| 9450    | uint   | RD    | UTC timestamp, max. value: 6. harmonic voltage L1  | s    |     |     |
| 9452    | uint   | RD    | UTC timestamp, max. value: 7. harmonic voltage L1  | s    |     |     |
| 9454    | uint   | RD    | UTC timestamp, max. value: 8. harmonic voltage L1  | s    |     |     |
| 9456    | uint   | RD    | UTC timestamp, max. value: 9. harmonic voltage L1  | s    |     |     |
| 9458    | uint   | RD    | UTC timestamp, max. value: 10. harmonic voltage L1 | s    |     |     |
| 9460    | uint   | RD    | UTC timestamp, max. value: 11. harmonic voltage L1 | s    |     |     |
| 9462    | uint   | RD    | UTC timestamp, max. value: 12. harmonic voltage L1 | s    |     |     |
| 9464    | uint   | RD    | UTC timestamp, max. value: 13. harmonic voltage L1 | s    |     |     |
| 9466    | uint   | RD    | UTC timestamp, max. value: 14. harmonic voltage L1 | s    |     |     |
| 9468    | uint   | RD    | UTC timestamp, max. value: 15. harmonic voltage L1 | s    |     |     |
| 9470    | uint   | RD    | UTC timestamp, max. value: 16. harmonic voltage L1 | s    |     |     |
| 9472    | uint   | RD    | UTC timestamp, max. value: 17. harmonic voltage L1 | s    |     |     |
| 9474    | uint   | RD    | UTC timestamp, max. value: 18. harmonic voltage L1 | s    |     |     |
| 9476    | uint   | RD    | UTC timestamp, max. value: 19. harmonic voltage L1 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9478    | uint   | RD    | UTC timestamp, max. value: 20. harmonic voltage L1 | s    |     |     |
| 9480    | uint   | RD    | UTC timestamp, max. value: 21. harmonic voltage L1 | s    |     |     |
| 9482    | uint   | RD    | UTC timestamp, max. value: 22. harmonic voltage L1 | s    |     |     |
| 9484    | uint   | RD    | UTC timestamp, max. value: 23. harmonic voltage L1 | s    |     |     |
| 9486    | uint   | RD    | UTC timestamp, max. value: 24. harmonic voltage L1 | s    |     |     |
| 9488    | uint   | RD    | UTC timestamp, max. value: 25. harmonic voltage L1 | s    |     |     |
| 9490    | uint   | RD    | UTC timestamp, max. value: 26. harmonic voltage L1 | s    |     |     |
| 9492    | uint   | RD    | UTC timestamp, max. value: 27. harmonic voltage L1 | s    |     |     |
| 9494    | uint   | RD    | UTC timestamp, max. value: 28. harmonic voltage L1 | s    |     |     |
| 9496    | uint   | RD    | UTC timestamp, max. value: 29. harmonic voltage L1 | s    |     |     |
| 9498    | uint   | RD    | UTC timestamp, max. value: 30. harmonic voltage L1 | s    |     |     |
| 9500    | uint   | RD    | UTC timestamp, max. value: 31. harmonic voltage L1 | s    |     |     |
| 9502    | uint   | RD    | UTC timestamp, max. value: 32. harmonic voltage L1 | s    |     |     |
| 9504    | uint   | RD    | UTC timestamp, max. value: 33. harmonic voltage L1 | s    |     |     |
| 9506    | uint   | RD    | UTC timestamp, max. value: 34. harmonic voltage L1 | s    |     |     |
| 9508    | uint   | RD    | UTC timestamp, max. value: 35. harmonic voltage L1 | s    |     |     |
| 9510    | uint   | RD    | UTC timestamp, max. value: 36. harmonic voltage L1 | s    |     |     |
| 9512    | uint   | RD    | UTC timestamp, max. value: 37. harmonic voltage L1 | s    |     |     |
| 9514    | uint   | RD    | UTC timestamp, max. value: 38. harmonic voltage L1 | s    |     |     |
| 9516    | uint   | RD    | UTC timestamp, max. value: 39. harmonic voltage L1 | s    |     |     |
| 9518    | uint   | RD    | UTC timestamp, max. value: 40. harmonic voltage L1 | s    |     |     |
| 9520    | uint   | RD    | UTC timestamp, max. value: 1. harmonic voltage L2  | s    |     |     |
| 9522    | uint   | RD    | UTC timestamp, max. value: 2. harmonic voltage L2  | s    |     |     |
| 9524    | uint   | RD    | UTC timestamp, max. value: 3. harmonic voltage L2  | s    |     |     |
| 9526    | uint   | RD    | UTC timestamp, max. value: 4. harmonic voltage L2  | s    |     |     |
| 9528    | uint   | RD    | UTC timestamp, max. value: 5. harmonic voltage L2  | s    |     |     |
| 9530    | uint   | RD    | UTC timestamp, max. value: 6. harmonic voltage L2  | s    |     |     |
| 9532    | uint   | RD    | UTC timestamp, max. value: 7. harmonic voltage L2  | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9534    | uint   | RD    | UTC timestamp, max. value: 8. harmonic voltage L2  | s    |     |     |
| 9536    | uint   | RD    | UTC timestamp, max. value: 9. harmonic voltage L2  | s    |     |     |
| 9538    | uint   | RD    | UTC timestamp, max. value: 10. harmonic voltage L2 | s    |     |     |
| 9540    | uint   | RD    | UTC timestamp, max. value: 11. harmonic voltage L2 | s    |     |     |
| 9542    | uint   | RD    | UTC timestamp, max. value: 12. harmonic voltage L2 | s    |     |     |
| 9544    | uint   | RD    | UTC timestamp, max. value: 13. harmonic voltage L2 | s    |     |     |
| 9546    | uint   | RD    | UTC timestamp, max. value: 14. harmonic voltage L2 | s    |     |     |
| 9548    | uint   | RD    | UTC timestamp, max. value: 15. harmonic voltage L2 | s    |     |     |
| 9550    | uint   | RD    | UTC timestamp, max. value: 16. harmonic voltage L2 | s    |     |     |
| 9552    | uint   | RD    | UTC timestamp, max. value: 17. harmonic voltage L2 | s    |     |     |
| 9554    | uint   | RD    | UTC timestamp, max. value: 18. harmonic voltage L2 | s    |     |     |
| 9556    | uint   | RD    | UTC timestamp, max. value: 19. harmonic voltage L2 | s    |     |     |
| 9558    | uint   | RD    | UTC timestamp, max. value: 20. harmonic voltage L2 | s    |     |     |
| 9560    | uint   | RD    | UTC timestamp, max. value: 21. harmonic voltage L2 | s    |     |     |
| 9562    | uint   | RD    | UTC timestamp, max. value: 22. harmonic voltage L2 | s    |     |     |
| 9564    | uint   | RD    | UTC timestamp, max. value: 23. harmonic voltage L2 | s    |     |     |
| 9566    | uint   | RD    | UTC timestamp, max. value: 24. harmonic voltage L2 | s    |     |     |
| 9568    | uint   | RD    | UTC timestamp, max. value: 25. harmonic voltage L2 | s    |     |     |
| 9570    | uint   | RD    | UTC timestamp, max. value: 26. harmonic voltage L2 | s    |     |     |
| 9572    | uint   | RD    | UTC timestamp, max. value: 27. harmonic voltage L2 | s    |     |     |
| 9574    | uint   | RD    | UTC timestamp, max. value: 28. harmonic voltage L2 | s    |     |     |
| 9576    | uint   | RD    | UTC timestamp, max. value: 29. harmonic voltage L2 | s    |     |     |
| 9578    | uint   | RD    | UTC timestamp, max. value: 30. harmonic voltage L2 | s    |     |     |
| 9580    | uint   | RD    | UTC timestamp, max. value: 31. harmonic voltage L2 | s    |     |     |
| 9582    | uint   | RD    | UTC timestamp, max. value: 32. harmonic voltage L2 | s    |     |     |
| 9584    | uint   | RD    | UTC timestamp, max. value: 33. harmonic voltage L2 | s    |     |     |
| 9586    | uint   | RD    | UTC timestamp, max. value: 34. harmonic voltage L2 | s    |     |     |
| 9588    | uint   | RD    | UTC timestamp, max. value: 35. harmonic voltage L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9590    | uint   | RD    | UTC timestamp, max. value: 36. harmonic voltage L2 | s    |     |     |
| 9592    | uint   | RD    | UTC timestamp, max. value: 37. harmonic voltage L2 | s    |     |     |
| 9594    | uint   | RD    | UTC timestamp, max. value: 38. harmonic voltage L2 | s    |     |     |
| 9596    | uint   | RD    | UTC timestamp, max. value: 39. harmonic voltage L2 | s    |     |     |
| 9598    | uint   | RD    | UTC timestamp, max. value: 40. harmonic voltage L2 | s    |     |     |
| 9600    | uint   | RD    | UTC timestamp, max. value: 1. harmonic voltage L3  | s    |     |     |
| 9602    | uint   | RD    | UTC timestamp, max. value: 2. harmonic voltage L3  | s    |     |     |
| 9604    | uint   | RD    | UTC timestamp, max. value: 3. harmonic voltage L3  | s    |     |     |
| 9606    | uint   | RD    | UTC timestamp, max. value: 4. harmonic voltage L3  | s    |     |     |
| 9608    | uint   | RD    | UTC timestamp, max. value: 5. harmonic voltage L3  | s    |     |     |
| 9610    | uint   | RD    | UTC timestamp, max. value: 6. harmonic voltage L3  | s    |     |     |
| 9612    | uint   | RD    | UTC timestamp, max. value: 7. harmonic voltage L3  | s    |     |     |
| 9614    | uint   | RD    | UTC timestamp, max. value: 8. harmonic voltage L3  | s    |     |     |
| 9616    | uint   | RD    | UTC timestamp, max. value: 9. harmonic voltage L3  | s    |     |     |
| 9618    | uint   | RD    | UTC timestamp, max. value: 10. harmonic voltage L3 | s    |     |     |
| 9620    | uint   | RD    | UTC timestamp, max. value: 11. harmonic voltage L3 | s    |     |     |
| 9622    | uint   | RD    | UTC timestamp, max. value: 12. harmonic voltage L3 | s    |     |     |
| 9624    | uint   | RD    | UTC timestamp, max. value: 13. harmonic voltage L3 | s    |     |     |
| 9626    | uint   | RD    | UTC timestamp, max. value: 14. harmonic voltage L3 | s    |     |     |
| 9628    | uint   | RD    | UTC timestamp, max. value: 15. harmonic voltage L3 | s    |     |     |
| 9630    | uint   | RD    | UTC timestamp, max. value: 16. harmonic voltage L3 | s    |     |     |
| 9632    | uint   | RD    | UTC timestamp, max. value: 17. harmonic voltage L3 | s    |     |     |
| 9634    | uint   | RD    | UTC timestamp, max. value: 18. harmonic voltage L3 | s    |     |     |
| 9636    | uint   | RD    | UTC timestamp, max. value: 19. harmonic voltage L3 | s    |     |     |
| 9638    | uint   | RD    | UTC timestamp, max. value: 20. harmonic voltage L3 | s    |     |     |
| 9640    | uint   | RD    | UTC timestamp, max. value: 21. harmonic voltage L3 | s    |     |     |
| 9642    | uint   | RD    | UTC timestamp, max. value: 22. harmonic voltage L3 | s    |     |     |
| 9644    | uint   | RD    | UTC timestamp, max. value: 23. harmonic voltage L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9646    | uint   | RD    | UTC timestamp, max. value: 24. harmonic voltage L3 | s    |     |     |
| 9648    | uint   | RD    | UTC timestamp, max. value: 25. harmonic voltage L3 | s    |     |     |
| 9650    | uint   | RD    | UTC timestamp, max. value: 26. harmonic voltage L3 | s    |     |     |
| 9652    | uint   | RD    | UTC timestamp, max. value: 27. harmonic voltage L3 | s    |     |     |
| 9654    | uint   | RD    | UTC timestamp, max. value: 28. harmonic voltage L3 | s    |     |     |
| 9656    | uint   | RD    | UTC timestamp, max. value: 29. harmonic voltage L3 | s    |     |     |
| 9658    | uint   | RD    | UTC timestamp, max. value: 30. harmonic voltage L3 | s    |     |     |
| 9660    | uint   | RD    | UTC timestamp, max. value: 31. harmonic voltage L3 | s    |     |     |
| 9662    | uint   | RD    | UTC timestamp, max. value: 32. harmonic voltage L3 | s    |     |     |
| 9664    | uint   | RD    | UTC timestamp, max. value: 33. harmonic voltage L3 | s    |     |     |
| 9666    | uint   | RD    | UTC timestamp, max. value: 34. harmonic voltage L3 | s    |     |     |
| 9668    | uint   | RD    | UTC timestamp, max. value: 35. harmonic voltage L3 | s    |     |     |
| 9670    | uint   | RD    | UTC timestamp, max. value: 36. harmonic voltage L3 | s    |     |     |
| 9672    | uint   | RD    | UTC timestamp, max. value: 37. harmonic voltage L3 | s    |     |     |
| 9674    | uint   | RD    | UTC timestamp, max. value: 38. harmonic voltage L3 | s    |     |     |
| 9676    | uint   | RD    | UTC timestamp, max. value: 39. harmonic voltage L3 | s    |     |     |
| 9678    | uint   | RD    | UTC timestamp, max. value: 40. harmonic voltage L3 | s    |     |     |
| 9680    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L1  | s    |     |     |
| 9682    | uint   | RD    | UTC timestamp, max. value: 2. harmonic current L1  | s    |     |     |
| 9684    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L1  | s    |     |     |
| 9686    | uint   | RD    | UTC timestamp, max. value: 4. harmonic current L1  | s    |     |     |
| 9688    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L1  | s    |     |     |
| 9690    | uint   | RD    | UTC timestamp, max. value: 6. harmonic current L1  | s    |     |     |
| 9692    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L1  | s    |     |     |
| 9694    | uint   | RD    | UTC timestamp, max. value: 8. harmonic current L1  | s    |     |     |
| 9696    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L1  | s    |     |     |
| 9698    | uint   | RD    | UTC timestamp, max. value: 10. harmonic current L1 | s    |     |     |
| 9700    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L1 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9702    | uint   | RD    | UTC timestamp, max. value: 12. harmonic current L1 | s    |     |     |
| 9704    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L1 | s    |     |     |
| 9706    | uint   | RD    | UTC timestamp, max. value: 14. harmonic current L1 | s    |     |     |
| 9708    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L1 | s    |     |     |
| 9710    | uint   | RD    | UTC timestamp, max. value: 16. harmonic current L1 | s    |     |     |
| 9712    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L1 | s    |     |     |
| 9714    | uint   | RD    | UTC timestamp, max. value: 18. harmonic current L1 | s    |     |     |
| 9716    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L1 | s    |     |     |
| 9718    | uint   | RD    | UTC timestamp, max. value: 20. harmonic current L1 | s    |     |     |
| 9720    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L1 | s    |     |     |
| 9722    | uint   | RD    | UTC timestamp, max. value: 22. harmonic current L1 | s    |     |     |
| 9724    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L1 | s    |     |     |
| 9726    | uint   | RD    | UTC timestamp, max. value: 24. harmonic current L1 | s    |     |     |
| 9728    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L1 | s    |     |     |
| 9730    | uint   | RD    | UTC timestamp, max. value: 26. harmonic current L1 | s    |     |     |
| 9732    | uint   | RD    | UTC timestamp, max. value: 27. harmonic current L1 | s    |     |     |
| 9734    | uint   | RD    | UTC timestamp, max. value: 28. harmonic current L1 | s    |     |     |
| 9736    | uint   | RD    | UTC timestamp, max. value: 29. harmonic current L1 | s    |     |     |
| 9738    | uint   | RD    | UTC timestamp, max. value: 30. harmonic current L1 | s    |     |     |
| 9740    | uint   | RD    | UTC timestamp, max. value: 31. harmonic current L1 | s    |     |     |
| 9742    | uint   | RD    | UTC timestamp, max. value: 32. harmonic current L1 | s    |     |     |
| 9744    | uint   | RD    | UTC timestamp, max. value: 33. harmonic current L1 | s    |     |     |
| 9746    | uint   | RD    | UTC timestamp, max. value: 34. harmonic current L1 | s    |     |     |
| 9748    | uint   | RD    | UTC timestamp, max. value: 35. harmonic current L1 | s    |     |     |
| 9750    | uint   | RD    | UTC timestamp, max. value: 36. harmonic current L1 | s    |     |     |
| 9752    | uint   | RD    | UTC timestamp, max. value: 37. harmonic current L1 | s    |     |     |
| 9754    | uint   | RD    | UTC timestamp, max. value: 38. harmonic current L1 | s    |     |     |
| 9756    | uint   | RD    | UTC timestamp, max. value: 39. harmonic current L1 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9758    | uint   | RD    | UTC timestamp, max. value: 40. harmonic current L1 | s    |     |     |
| 9760    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L2  | s    |     |     |
| 9762    | uint   | RD    | UTC timestamp, max. value: 2. harmonic current L2  | s    |     |     |
| 9764    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L2  | s    |     |     |
| 9766    | uint   | RD    | UTC timestamp, max. value: 4. harmonic current L2  | s    |     |     |
| 9768    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L2  | s    |     |     |
| 9770    | uint   | RD    | UTC timestamp, max. value: 6. harmonic current L2  | s    |     |     |
| 9772    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L2  | s    |     |     |
| 9774    | uint   | RD    | UTC timestamp, max. value: 8. harmonic current L2  | s    |     |     |
| 9776    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L2  | s    |     |     |
| 9778    | uint   | RD    | UTC timestamp, max. value: 10. harmonic current L2 | s    |     |     |
| 9780    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L2 | s    |     |     |
| 9782    | uint   | RD    | UTC timestamp, max. value: 12. harmonic current L2 | s    |     |     |
| 9784    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L2 | s    |     |     |
| 9786    | uint   | RD    | UTC timestamp, max. value: 14. harmonic current L2 | s    |     |     |
| 9788    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L2 | s    |     |     |
| 9790    | uint   | RD    | UTC timestamp, max. value: 16. harmonic current L2 | s    |     |     |
| 9792    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L2 | s    |     |     |
| 9794    | uint   | RD    | UTC timestamp, max. value: 18. harmonic current L2 | s    |     |     |
| 9796    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L2 | s    |     |     |
| 9798    | uint   | RD    | UTC timestamp, max. value: 20. harmonic current L2 | s    |     |     |
| 9800    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L2 | s    |     |     |
| 9802    | uint   | RD    | UTC timestamp, max. value: 22. harmonic current L2 | s    |     |     |
| 9804    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L2 | s    |     |     |
| 9806    | uint   | RD    | UTC timestamp, max. value: 24. harmonic current L2 | s    |     |     |
| 9808    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L2 | s    |     |     |
| 9810    | uint   | RD    | UTC timestamp, max. value: 26. harmonic current L2 | s    |     |     |
| 9812    | uint   | RD    | UTC timestamp, max. value: 27. harmonic current L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9814    | uint   | RD    | UTC timestamp, max. value: 28. harmonic current L2 | s    |     |     |
| 9816    | uint   | RD    | UTC timestamp, max. value: 29. harmonic current L2 | s    |     |     |
| 9818    | uint   | RD    | UTC timestamp, max. value: 30. harmonic current L2 | s    |     |     |
| 9820    | uint   | RD    | UTC timestamp, max. value: 31. harmonic current L2 | s    |     |     |
| 9822    | uint   | RD    | UTC timestamp, max. value: 32. harmonic current L2 | s    |     |     |
| 9824    | uint   | RD    | UTC timestamp, max. value: 33. harmonic current L2 | s    |     |     |
| 9826    | uint   | RD    | UTC timestamp, max. value: 34. harmonic current L2 | s    |     |     |
| 9828    | uint   | RD    | UTC timestamp, max. value: 35. harmonic current L2 | s    |     |     |
| 9830    | uint   | RD    | UTC timestamp, max. value: 36. harmonic current L2 | s    |     |     |
| 9832    | uint   | RD    | UTC timestamp, max. value: 37. harmonic current L2 | s    |     |     |
| 9834    | uint   | RD    | UTC timestamp, max. value: 38. harmonic current L2 | s    |     |     |
| 9836    | uint   | RD    | UTC timestamp, max. value: 39. harmonic current L2 | s    |     |     |
| 9838    | uint   | RD    | UTC timestamp, max. value: 40. harmonic current L2 | s    |     |     |
| 9840    | uint   | RD    | UTC timestamp, max. value: 1. harmonic current L3  | s    |     |     |
| 9842    | uint   | RD    | UTC timestamp, max. value: 2. harmonic current L3  | s    |     |     |
| 9844    | uint   | RD    | UTC timestamp, max. value: 3. harmonic current L3  | s    |     |     |
| 9846    | uint   | RD    | UTC timestamp, max. value: 4. harmonic current L3  | s    |     |     |
| 9848    | uint   | RD    | UTC timestamp, max. value: 5. harmonic current L3  | s    |     |     |
| 9850    | uint   | RD    | UTC timestamp, max. value: 6. harmonic current L3  | s    |     |     |
| 9852    | uint   | RD    | UTC timestamp, max. value: 7. harmonic current L3  | s    |     |     |
| 9854    | uint   | RD    | UTC timestamp, max. value: 8. harmonic current L3  | s    |     |     |
| 9856    | uint   | RD    | UTC timestamp, max. value: 9. harmonic current L3  | s    |     |     |
| 9858    | uint   | RD    | UTC timestamp, max. value: 10. harmonic current L3 | s    |     |     |
| 9860    | uint   | RD    | UTC timestamp, max. value: 11. harmonic current L3 | s    |     |     |
| 9862    | uint   | RD    | UTC timestamp, max. value: 12. harmonic current L3 | s    |     |     |
| 9864    | uint   | RD    | UTC timestamp, max. value: 13. harmonic current L3 | s    |     |     |
| 9866    | uint   | RD    | UTC timestamp, max. value: 14. harmonic current L3 | s    |     |     |
| 9868    | uint   | RD    | UTC timestamp, max. value: 15. harmonic current L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 9870    | uint   | RD    | UTC timestamp, max. value: 16. harmonic current L3 | s    |     |     |
| 9872    | uint   | RD    | UTC timestamp, max. value: 17. harmonic current L3 | s    |     |     |
| 9874    | uint   | RD    | UTC timestamp, max. value: 18. harmonic current L3 | s    |     |     |
| 9876    | uint   | RD    | UTC timestamp, max. value: 19. harmonic current L3 | s    |     |     |
| 9878    | uint   | RD    | UTC timestamp, max. value: 20. harmonic current L3 | s    |     |     |
| 9880    | uint   | RD    | UTC timestamp, max. value: 21. harmonic current L3 | s    |     |     |
| 9882    | uint   | RD    | UTC timestamp, max. value: 22. harmonic current L3 | s    |     |     |
| 9884    | uint   | RD    | UTC timestamp, max. value: 23. harmonic current L3 | s    |     |     |
| 9886    | uint   | RD    | UTC timestamp, max. value: 24. harmonic current L3 | s    |     |     |
| 9888    | uint   | RD    | UTC timestamp, max. value: 25. harmonic current L3 | s    |     |     |
| 9890    | uint   | RD    | UTC timestamp, max. value: 26. harmonic current L3 | s    |     |     |
| 9892    | uint   | RD    | UTC timestamp, max. value: 27. harmonic current L3 | s    |     |     |
| 9894    | uint   | RD    | UTC timestamp, max. value: 28. harmonic current L3 | s    |     |     |
| 9896    | uint   | RD    | UTC timestamp, max. value: 29. harmonic current L3 | s    |     |     |
| 9898    | uint   | RD    | UTC timestamp, max. value: 30. harmonic current L3 | s    |     |     |
| 9900    | uint   | RD    | UTC timestamp, max. value: 31. harmonic current L3 | s    |     |     |
| 9902    | uint   | RD    | UTC timestamp, max. value: 32. harmonic current L3 | s    |     |     |
| 9904    | uint   | RD    | UTC timestamp, max. value: 33. harmonic current L3 | s    |     |     |
| 9906    | uint   | RD    | UTC timestamp, max. value: 34. harmonic current L3 | s    |     |     |
| 9908    | uint   | RD    | UTC timestamp, max. value: 35. harmonic current L3 | s    |     |     |
| 9910    | uint   | RD    | UTC timestamp, max. value: 36. harmonic current L3 | s    |     |     |
| 9912    | uint   | RD    | UTC timestamp, max. value: 37. harmonic current L3 | s    |     |     |
| 9914    | uint   | RD    | UTC timestamp, max. value: 38. harmonic current L3 | s    |     |     |
| 9916    | uint   | RD    | UTC timestamp, max. value: 39. harmonic current L3 | s    |     |     |
| 9918    | uint   | RD    | UTC timestamp, max. value: 40. harmonic current L3 | s    |     |     |

| Address                                 | Format | RD/WR | Note                                | Unit | Min | Max |
|---|--------|-------|-------------------------------------|------|-----|-----|
| <b>Minimum values, fourier analysis</b> |        |       |                                     |      |     |     |
| 4020                                    | float  | RD    | Min. value: 1. harmonic voltage L1  | V    |     |     |
| 4022                                    | float  | RD    | Min. value: 3. harmonic voltage L1  | V    |     |     |
| 4024                                    | float  | RD    | Min. value: 5. harmonic voltage L1  | V    |     |     |
| 4026                                    | float  | RD    | Min. value: 7. harmonic voltage L1  | V    |     |     |
| 4028                                    | float  | RD    | Min. value: 9. harmonic voltage L1  | V    |     |     |
| 4030                                    | float  | RD    | Min. value: 11. harmonic voltage L1 | V    |     |     |
| 4032                                    | float  | RD    | Min. value: 13. harmonic voltage L1 | V    |     |     |
| 4034                                    | float  | RD    | Min. value: 15. harmonic voltage L1 | V    |     |     |
| 4036                                    | float  | RD    | Min. value: 17. harmonic voltage L1 | V    |     |     |
| 4038                                    | float  | RD    | Min. value: 19. harmonic voltage L1 | V    |     |     |
| 4040                                    | float  | RD    | Min. value: 21. harmonic voltage L1 | V    |     |     |
| 4042                                    | float  | RD    | Min. value: 23. harmonic voltage L1 | V    |     |     |
| 4044                                    | float  | RD    | Min. value: 25. harmonic voltage L1 | V    |     |     |
| 4046                                    | float  | RD    | Min. value: 1. harmonic voltage L2  | V    |     |     |
| 4048                                    | float  | RD    | Min. value: 3. harmonic voltage L2  | V    |     |     |
| 4050                                    | float  | RD    | Min. value: 5. harmonic voltage L2  | V    |     |     |
| 4052                                    | float  | RD    | Min. value: 7. harmonic voltage L2  | V    |     |     |
| 4054                                    | float  | RD    | Min. value: 9. harmonic voltage L2  | V    |     |     |
| 4056                                    | float  | RD    | Min. value: 11. harmonic voltage L2 | V    |     |     |
| 4058                                    | float  | RD    | Min. value: 13. harmonic voltage L2 | V    |     |     |
| 4060                                    | float  | RD    | Min. value: 15. harmonic voltage L2 | V    |     |     |
| 4062                                    | float  | RD    | Min. value: 17. harmonic voltage L2 | V    |     |     |
| 4064                                    | float  | RD    | Min. value: 19. harmonic voltage L2 | V    |     |     |
| 4066                                    | float  | RD    | Min. value: 21. harmonic voltage L2 | V    |     |     |
| 4068                                    | float  | RD    | Min. value: 23. harmonic voltage L2 | V    |     |     |
| 4070                                    | float  | RD    | Min. value: 25. harmonic voltage L2 | V    |     |     |
| 4072                                    | float  | RD    | Min. value: 1. harmonic voltage L3  | V    |     |     |
| 4074                                    | float  | RD    | Min. value: 3. harmonic voltage L3  | V    |     |     |
| 4076                                    | float  | RD    | Min. value: 5. harmonic voltage L3  | V    |     |     |
| 4078                                    | float  | RD    | Min. value: 7. harmonic voltage L3  | V    |     |     |
| 4080                                    | float  | RD    | Min. value: 9. harmonic voltage L3  | V    |     |     |
| 4082                                    | float  | RD    | Min. value: 11. harmonic voltage L3 | V    |     |     |
| 4084                                    | float  | RD    | Min. value: 13. harmonic voltage L3 | V    |     |     |
| 4086                                    | float  | RD    | Min. value: 15. harmonic voltage L3 | V    |     |     |
| 4088                                    | float  | RD    | Min. value: 17. harmonic voltage L3 | V    |     |     |
| 4090                                    | float  | RD    | Min. value: 19. harmonic voltage L3 | V    |     |     |
| 4092                                    | float  | RD    | Min. value: 21. harmonic voltage L3 | V    |     |     |
| 4094                                    | float  | RD    | Min. value: 23. harmonic voltage L3 | V    |     |     |
| 4096                                    | float  | RD    | Min. value: 25. harmonic voltage L3 | V    |     |     |
| 9920                                    | float  | RD    | Min. value: 1. harmonic voltage L1  | V    |     |     |
| 9922                                    | float  | RD    | Min. value: 2. harmonic voltage L1  | V    |     |     |
| 9924                                    | float  | RD    | Min. value: 3. harmonic voltage L1  | V    |     |     |
| 9926                                    | float  | RD    | Min. value: 4. harmonic voltage L1  | V    |     |     |
| 9928                                    | float  | RD    | Min. value: 5. harmonic voltage L1  | V    |     |     |
| 9930                                    | float  | RD    | Min. value: 6. harmonic voltage L1  | V    |     |     |
| 9932                                    | float  | RD    | Min. value: 7. harmonic voltage L1  | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 9934    | float  | RD    | Min. value: 8. harmonic voltage L1  | V    |     |     |
| 9936    | float  | RD    | Min. value: 9. harmonic voltage L1  | V    |     |     |
| 9938    | float  | RD    | Min. value: 10. harmonic voltage L1 | V    |     |     |
| 9940    | float  | RD    | Min. value: 11. harmonic voltage L1 | V    |     |     |
| 9942    | float  | RD    | Min. value: 12. harmonic voltage L1 | V    |     |     |
| 9944    | float  | RD    | Min. value: 13. harmonic voltage L1 | V    |     |     |
| 9946    | float  | RD    | Min. value: 14. harmonic voltage L1 | V    |     |     |
| 9948    | float  | RD    | Min. value: 15. harmonic voltage L1 | V    |     |     |
| 9950    | float  | RD    | Min. value: 16. harmonic voltage L1 | V    |     |     |
| 9952    | float  | RD    | Min. value: 17. harmonic voltage L1 | V    |     |     |
| 9954    | float  | RD    | Min. value: 18. harmonic voltage L1 | V    |     |     |
| 9956    | float  | RD    | Min. value: 19. harmonic voltage L1 | V    |     |     |
| 9958    | float  | RD    | Min. value: 20. harmonic voltage L1 | V    |     |     |
| 9960    | float  | RD    | Min. value: 21. harmonic voltage L1 | V    |     |     |
| 9962    | float  | RD    | Min. value: 22. harmonic voltage L1 | V    |     |     |
| 9964    | float  | RD    | Min. value: 23. harmonic voltage L1 | V    |     |     |
| 9966    | float  | RD    | Min. value: 24. harmonic voltage L1 | V    |     |     |
| 9968    | float  | RD    | Min. value: 25. harmonic voltage L1 | V    |     |     |
| 9970    | float  | RD    | Min. value: 26. harmonic voltage L1 | V    |     |     |
| 9972    | float  | RD    | Min. value: 27. harmonic voltage L1 | V    |     |     |
| 9974    | float  | RD    | Min. value: 28. harmonic voltage L1 | V    |     |     |
| 9976    | float  | RD    | Min. value: 29. harmonic voltage L1 | V    |     |     |
| 9978    | float  | RD    | Min. value: 30. harmonic voltage L1 | V    |     |     |
| 9980    | float  | RD    | Min. value: 31. harmonic voltage L1 | V    |     |     |
| 9982    | float  | RD    | Min. value: 32. harmonic voltage L1 | V    |     |     |
| 9984    | float  | RD    | Min. value: 33. harmonic voltage L1 | V    |     |     |
| 9986    | float  | RD    | Min. value: 34. harmonic voltage L1 | V    |     |     |
| 9988    | float  | RD    | Min. value: 35. harmonic voltage L1 | V    |     |     |
| 9990    | float  | RD    | Min. value: 36. harmonic voltage L1 | V    |     |     |
| 9992    | float  | RD    | Min. value: 37. harmonic voltage L1 | V    |     |     |
| 9994    | float  | RD    | Min. value: 38. harmonic voltage L1 | V    |     |     |
| 9996    | float  | RD    | Min. value: 39. harmonic voltage L1 | V    |     |     |
| 9998    | float  | RD    | Min. value: 40. harmonic voltage L1 | V    |     |     |
| 10000   | float  | RD    | Min. value: 1. harmonic voltage L2  | V    |     |     |
| 10002   | float  | RD    | Min. value: 2. harmonic voltage L2  | V    |     |     |
| 10004   | float  | RD    | Min. value: 3. harmonic voltage L2  | V    |     |     |
| 10006   | float  | RD    | Min. value: 4. harmonic voltage L2  | V    |     |     |
| 10008   | float  | RD    | Min. value: 5. harmonic voltage L2  | V    |     |     |
| 10010   | float  | RD    | Min. value: 6. harmonic voltage L2  | V    |     |     |
| 10012   | float  | RD    | Min. value: 7. harmonic voltage L2  | V    |     |     |
| 10014   | float  | RD    | Min. value: 8. harmonic voltage L2  | V    |     |     |
| 10016   | float  | RD    | Min. value: 9. harmonic voltage L2  | V    |     |     |
| 10018   | float  | RD    | Min. value: 10. harmonic voltage L2 | V    |     |     |
| 10020   | float  | RD    | Min. value: 11. harmonic voltage L2 | V    |     |     |
| 10022   | float  | RD    | Min. value: 12. harmonic voltage L2 | V    |     |     |
| 10024   | float  | RD    | Min. value: 13. harmonic voltage L2 | V    |     |     |
| 10026   | float  | RD    | Min. value: 14. harmonic voltage L2 | V    |     |     |
| 10028   | float  | RD    | Min. value: 15. harmonic voltage L2 | V    |     |     |
| 10030   | float  | RD    | Min. value: 16. harmonic voltage L2 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 10032   | float  | RD    | Min. value: 17. harmonic voltage L2 | V    |     |     |
| 10034   | float  | RD    | Min. value: 18. harmonic voltage L2 | V    |     |     |
| 10036   | float  | RD    | Min. value: 19. harmonic voltage L2 | V    |     |     |
| 10038   | float  | RD    | Min. value: 20. harmonic voltage L2 | V    |     |     |
| 10040   | float  | RD    | Min. value: 21. harmonic voltage L2 | V    |     |     |
| 10042   | float  | RD    | Min. value: 22. harmonic voltage L2 | V    |     |     |
| 10044   | float  | RD    | Min. value: 23. harmonic voltage L2 | V    |     |     |
| 10046   | float  | RD    | Min. value: 24. harmonic voltage L2 | V    |     |     |
| 10048   | float  | RD    | Min. value: 25. harmonic voltage L2 | V    |     |     |
| 10050   | float  | RD    | Min. value: 26. harmonic voltage L2 | V    |     |     |
| 10052   | float  | RD    | Min. value: 27. harmonic voltage L2 | V    |     |     |
| 10054   | float  | RD    | Min. value: 28. harmonic voltage L2 | V    |     |     |
| 10056   | float  | RD    | Min. value: 29. harmonic voltage L2 | V    |     |     |
| 10058   | float  | RD    | Min. value: 30. harmonic voltage L2 | V    |     |     |
| 10060   | float  | RD    | Min. value: 31. harmonic voltage L2 | V    |     |     |
| 10062   | float  | RD    | Min. value: 32. harmonic voltage L2 | V    |     |     |
| 10064   | float  | RD    | Min. value: 33. harmonic voltage L2 | V    |     |     |
| 10066   | float  | RD    | Min. value: 34. harmonic voltage L2 | V    |     |     |
| 10068   | float  | RD    | Min. value: 35. harmonic voltage L2 | V    |     |     |
| 10070   | float  | RD    | Min. value: 36. harmonic voltage L2 | V    |     |     |
| 10072   | float  | RD    | Min. value: 37. harmonic voltage L2 | V    |     |     |
| 10074   | float  | RD    | Min. value: 38. harmonic voltage L2 | V    |     |     |
| 10076   | float  | RD    | Min. value: 39. harmonic voltage L2 | V    |     |     |
| 10078   | float  | RD    | Min. value: 40. harmonic voltage L2 | V    |     |     |
| 10080   | float  | RD    | Min. value: 1. harmonic voltage L3  | V    |     |     |
| 10082   | float  | RD    | Min. value: 2. harmonic voltage L3  | V    |     |     |
| 10084   | float  | RD    | Min. value: 3. harmonic voltage L3  | V    |     |     |
| 10086   | float  | RD    | Min. value: 4. harmonic voltage L3  | V    |     |     |
| 10088   | float  | RD    | Min. value: 5. harmonic voltage L3  | V    |     |     |
| 10090   | float  | RD    | Min. value: 6. harmonic voltage L3  | V    |     |     |
| 10092   | float  | RD    | Min. value: 7. harmonic voltage L3  | V    |     |     |
| 10094   | float  | RD    | Min. value: 8. harmonic voltage L3  | V    |     |     |
| 10096   | float  | RD    | Min. value: 9. harmonic voltage L3  | V    |     |     |
| 10098   | float  | RD    | Min. value: 10. harmonic voltage L3 | V    |     |     |
| 10100   | float  | RD    | Min. value: 11. harmonic voltage L3 | V    |     |     |
| 10102   | float  | RD    | Min. value: 12. harmonic voltage L3 | V    |     |     |
| 10104   | float  | RD    | Min. value: 13. harmonic voltage L3 | V    |     |     |
| 10106   | float  | RD    | Min. value: 14. harmonic voltage L3 | V    |     |     |
| 10108   | float  | RD    | Min. value: 15. harmonic voltage L3 | V    |     |     |
| 10110   | float  | RD    | Min. value: 16. harmonic voltage L3 | V    |     |     |
| 10112   | float  | RD    | Min. value: 17. harmonic voltage L3 | V    |     |     |
| 10114   | float  | RD    | Min. value: 18. harmonic voltage L3 | V    |     |     |
| 10116   | float  | RD    | Min. value: 19. harmonic voltage L3 | V    |     |     |
| 10118   | float  | RD    | Min. value: 20. harmonic voltage L3 | V    |     |     |
| 10120   | float  | RD    | Min. value: 21. harmonic voltage L3 | V    |     |     |
| 10122   | float  | RD    | Min. value: 22. harmonic voltage L3 | V    |     |     |
| 10124   | float  | RD    | Min. value: 23. harmonic voltage L3 | V    |     |     |
| 10126   | float  | RD    | Min. value: 24. harmonic voltage L3 | V    |     |     |
| 10128   | float  | RD    | Min. value: 25. harmonic voltage L3 | V    |     |     |

| Address | Format         | RD/WR | Note                                | Unit | Min | Max |
|---------|----------------|-------|-------------------------------------|------|-----|-----|
| 10130   | float          | RD    | Min. value: 26. harmonic voltage L3 | V    |     |     |
| 10132   | float          | RD    | Min. value: 27. harmonic voltage L3 | V    |     |     |
| 10134   | float          | RD    | Min. value: 28. harmonic voltage L3 | V    |     |     |
| 10136   | float          | RD    | Min. value: 29. harmonic voltage L3 | V    |     |     |
| 10138   | float          | RD    | Min. value: 30. harmonic voltage L3 | V    |     |     |
| 10140   | float          | RD    | Min. value: 31. harmonic voltage L3 | V    |     |     |
| 10142   | float          | RD    | Min. value: 32. harmonic voltage L3 | V    |     |     |
| 10144   | float          | RD    | Min. value: 33. harmonic voltage L3 | V    |     |     |
| 10146   | float          | RD    | Min. value: 34. harmonic voltage L3 | V    |     |     |
| 10148   | float          | RD    | Min. value: 35. harmonic voltage L3 | V    |     |     |
| 10150   | float          | RD    | Min. value: 36. harmonic voltage L3 | V    |     |     |
| 10152   | float          | RD    | Min. value: 37. harmonic voltage L3 | V    |     |     |
| 10154   | float          | RD    | Min. value: 38. harmonic voltage L3 | V    |     |     |
| 10156   | float          | RD    | Min. value: 39. harmonic voltage L3 | V    |     |     |
| 10158   | float          | RD    | Min. value: 40. harmonic voltage L3 | V    |     |     |
| 14010   | short<br>(x10) | RD    | Min. value: 1. harmonic voltage L1  | V    |     |     |
| 14011   | short<br>(x10) | RD    | Min. value: 3. harmonic voltage L1  | V    |     |     |
| 14012   | short<br>(x10) | RD    | Min. value: 5. harmonic voltage L1  | V    |     |     |
| 14013   | short<br>(x10) | RD    | Min. value: 7. harmonic voltage L1  | V    |     |     |
| 14014   | short<br>(x10) | RD    | Min. value: 9. harmonic voltage L1  | V    |     |     |
| 14015   | short<br>(x10) | RD    | Min. value: 11. harmonic voltage L1 | V    |     |     |
| 14016   | short<br>(x10) | RD    | Min. value: 13. harmonic voltage L1 | V    |     |     |
| 14017   | short<br>(x10) | RD    | Min. value: 15. harmonic voltage L1 | V    |     |     |
| 14018   | short<br>(x10) | RD    | Min. value: 17. harmonic voltage L1 | V    |     |     |
| 14019   | short<br>(x10) | RD    | Min. value: 19. harmonic voltage L1 | V    |     |     |
| 14020   | short<br>(x10) | RD    | Min. value: 21. harmonic voltage L1 | V    |     |     |
| 14021   | short<br>(x10) | RD    | Min. value: 23. harmonic voltage L1 | V    |     |     |
| 14022   | short<br>(x10) | RD    | Min. value: 25. harmonic voltage L1 | V    |     |     |
| 14023   | short<br>(x10) | RD    | Min. value: 1. harmonic voltage L2  | V    |     |     |
| 14024   | short<br>(x10) | RD    | Min. value: 3. harmonic voltage L2  | V    |     |     |
| 14025   | short<br>(x10) | RD    | Min. value: 5. harmonic voltage L2  | V    |     |     |
| 14026   | short<br>(x10) | RD    | Min. value: 7. harmonic voltage L2  | V    |     |     |
| 14027   | short<br>(x10) | RD    | Min. value: 9. harmonic voltage L2  | V    |     |     |
| 14028   | short<br>(x10) | RD    | Min. value: 11. harmonic voltage L2 | V    |     |     |

| Address | Format      | RD/WR | Note                                | Unit | Min | Max |
|---------|-------------|-------|-------------------------------------|------|-----|-----|
| 14029   | short (x10) | RD    | Min. value: 13. harmonic voltage L2 | V    |     |     |
| 14030   | short (x10) | RD    | Min. value: 15. harmonic voltage L2 | V    |     |     |
| 14031   | short (x10) | RD    | Min. value: 17. harmonic voltage L2 | V    |     |     |
| 14032   | short (x10) | RD    | Min. value: 19. harmonic voltage L2 | V    |     |     |
| 14033   | short (x10) | RD    | Min. value: 21. harmonic voltage L2 | V    |     |     |
| 14034   | short (x10) | RD    | Min. value: 23. harmonic voltage L2 | V    |     |     |
| 14035   | short (x10) | RD    | Min. value: 25. harmonic voltage L2 | V    |     |     |
| 14036   | short (x10) | RD    | Min. value: 1. harmonic voltage L3  | V    |     |     |
| 14037   | short (x10) | RD    | Min. value: 3. harmonic voltage L3  | V    |     |     |
| 14038   | short (x10) | RD    | Min. value: 5. harmonic voltage L3  | V    |     |     |
| 14039   | short (x10) | RD    | Min. value: 7. harmonic voltage L3  | V    |     |     |
| 14040   | short (x10) | RD    | Min. value: 9. harmonic voltage L3  | V    |     |     |
| 14041   | short (x10) | RD    | Min. value: 11. harmonic voltage L3 | V    |     |     |
| 14042   | short (x10) | RD    | Min. value: 13. harmonic voltage L3 | V    |     |     |
| 14043   | short (x10) | RD    | Min. value: 15. harmonic voltage L3 | V    |     |     |
| 14044   | short (x10) | RD    | Min. value: 17. harmonic voltage L3 | V    |     |     |
| 14045   | short (x10) | RD    | Min. value: 19. harmonic voltage L3 | V    |     |     |
| 14046   | short (x10) | RD    | Min. value: 21. harmonic voltage L3 | V    |     |     |
| 14047   | short (x10) | RD    | Min. value: 23. harmonic voltage L3 | V    |     |     |
| 14048   | short (x10) | RD    | Min. value: 25. harmonic voltage L3 | V    |     |     |

### Minimum values, timestamp, fourier analysis

|      |      |    |   |   |  |  |
|------|------|----|---|---|--|--|
| 4220 | uint | RD | UTC timestamp, min. value: 1. harmonic voltage L1 | s |  |  |
| 4222 | uint | RD | UTC timestamp, min. value: 3. harmonic voltage L1 | s |  |  |
| 4224 | uint | RD | UTC timestamp, min. value: 5. harmonic voltage L1 | s |  |  |
| 4226 | uint | RD | UTC timestamp, min. value: 7. harmonic voltage L1 | s |  |  |
| 4228 | uint | RD | UTC timestamp, min. value: 9. harmonic voltage L1 | s |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 4230    | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L1 | s    |     |     |
| 4232    | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L1 | s    |     |     |
| 4234    | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L1 | s    |     |     |
| 4236    | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L1 | s    |     |     |
| 4238    | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L1 | s    |     |     |
| 4240    | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L1 | s    |     |     |
| 4242    | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L1 | s    |     |     |
| 4244    | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L1 | s    |     |     |
| 4246    | uint   | RD    | UTC timestamp, min. value: 1. harmonic voltage L2  | s    |     |     |
| 4248    | uint   | RD    | UTC timestamp, min. value: 3. harmonic voltage L2  | s    |     |     |
| 4250    | uint   | RD    | UTC timestamp, min. value: 5. harmonic voltage L2  | s    |     |     |
| 4252    | uint   | RD    | UTC timestamp, min. value: 7. harmonic voltage L2  | s    |     |     |
| 4254    | uint   | RD    | UTC timestamp, min. value: 9. harmonic voltage L2  | s    |     |     |
| 4256    | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L2 | s    |     |     |
| 4258    | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L2 | s    |     |     |
| 4260    | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L2 | s    |     |     |
| 4262    | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L2 | s    |     |     |
| 4264    | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L2 | s    |     |     |
| 4266    | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L2 | s    |     |     |
| 4268    | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L2 | s    |     |     |
| 4270    | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L2 | s    |     |     |
| 4272    | uint   | RD    | UTC timestamp, min. value: 1. harmonic voltage L3  | s    |     |     |
| 4274    | uint   | RD    | UTC timestamp, min. value: 3. harmonic voltage L3  | s    |     |     |
| 4276    | uint   | RD    | UTC timestamp, min. value: 5. harmonic voltage L3  | s    |     |     |
| 4278    | uint   | RD    | UTC timestamp, min. value: 7. harmonic voltage L3  | s    |     |     |
| 4280    | uint   | RD    | UTC timestamp, min. value: 9. harmonic voltage L3  | s    |     |     |
| 4282    | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L3 | s    |     |     |
| 4284    | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 4286    | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L3 | s    |     |     |
| 4288    | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L3 | s    |     |     |
| 4290    | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L3 | s    |     |     |
| 4292    | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L3 | s    |     |     |
| 4294    | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L3 | s    |     |     |
| 4296    | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L3 | s    |     |     |
| 10160   | uint   | RD    | UTC timestamp, min. value: 1. harmonic voltage L1  | s    |     |     |
| 10162   | uint   | RD    | UTC timestamp, min. value: 2. harmonic voltage L1  | s    |     |     |
| 10164   | uint   | RD    | UTC timestamp, min. value: 3. harmonic voltage L1  | s    |     |     |
| 10166   | uint   | RD    | UTC timestamp, min. value: 4. harmonic voltage L1  | s    |     |     |
| 10168   | uint   | RD    | UTC timestamp, min. value: 5. harmonic voltage L1  | s    |     |     |
| 10170   | uint   | RD    | UTC timestamp, min. value: 6. harmonic voltage L1  | s    |     |     |
| 10172   | uint   | RD    | UTC timestamp, min. value: 7. harmonic voltage L1  | s    |     |     |
| 10174   | uint   | RD    | UTC timestamp, min. value: 8. harmonic voltage L1  | s    |     |     |
| 10176   | uint   | RD    | UTC timestamp, min. value: 9. harmonic voltage L1  | s    |     |     |
| 10178   | uint   | RD    | UTC timestamp, min. value: 10. harmonic voltage L1 | s    |     |     |
| 10180   | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L1 | s    |     |     |
| 10182   | uint   | RD    | UTC timestamp, min. value: 12. harmonic voltage L1 | s    |     |     |
| 10184   | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L1 | s    |     |     |
| 10186   | uint   | RD    | UTC timestamp, min. value: 14. harmonic voltage L1 | s    |     |     |
| 10188   | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L1 | s    |     |     |
| 10190   | uint   | RD    | UTC timestamp, min. value: 16. harmonic voltage L1 | s    |     |     |
| 10192   | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L1 | s    |     |     |
| 10194   | uint   | RD    | UTC timestamp, min. value: 18. harmonic voltage L1 | s    |     |     |
| 10196   | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L1 | s    |     |     |
| 10198   | uint   | RD    | UTC timestamp, min. value: 20. harmonic voltage L1 | s    |     |     |
| 10200   | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L1 | s    |     |     |
| 10202   | uint   | RD    | UTC timestamp, min. value: 22. harmonic voltage L1 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 10204   | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L1 | s    |     |     |
| 10206   | uint   | RD    | UTC timestamp, min. value: 24. harmonic voltage L1 | s    |     |     |
| 10208   | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L1 | s    |     |     |
| 10210   | uint   | RD    | UTC timestamp, min. value: 26. harmonic voltage L1 | s    |     |     |
| 10212   | uint   | RD    | UTC timestamp, min. value: 27. harmonic voltage L1 | s    |     |     |
| 10214   | uint   | RD    | UTC timestamp, min. value: 28. harmonic voltage L1 | s    |     |     |
| 10216   | uint   | RD    | UTC timestamp, min. value: 29. harmonic voltage L1 | s    |     |     |
| 10218   | uint   | RD    | UTC timestamp, min. value: 30. harmonic voltage L1 | s    |     |     |
| 10220   | uint   | RD    | UTC timestamp, min. value: 31. harmonic voltage L1 | s    |     |     |
| 10222   | uint   | RD    | UTC timestamp, min. value: 32. harmonic voltage L1 | s    |     |     |
| 10224   | uint   | RD    | UTC timestamp, min. value: 33. harmonic voltage L1 | s    |     |     |
| 10226   | uint   | RD    | UTC timestamp, min. value: 34. harmonic voltage L1 | s    |     |     |
| 10228   | uint   | RD    | UTC timestamp, min. value: 35. harmonic voltage L1 | s    |     |     |
| 10230   | uint   | RD    | UTC timestamp, min. value: 36. harmonic voltage L1 | s    |     |     |
| 10232   | uint   | RD    | UTC timestamp, min. value: 37. harmonic voltage L1 | s    |     |     |
| 10234   | uint   | RD    | UTC timestamp, min. value: 38. harmonic voltage L1 | s    |     |     |
| 10236   | uint   | RD    | UTC timestamp, min. value: 39. harmonic voltage L1 | s    |     |     |
| 10238   | uint   | RD    | UTC timestamp, min. value: 40. harmonic voltage L1 | s    |     |     |
| 10240   | uint   | RD    | UTC timestamp, min. value: 1. harmonic voltage L2  | s    |     |     |
| 10242   | uint   | RD    | UTC timestamp, min. value: 2. harmonic voltage L2  | s    |     |     |
| 10244   | uint   | RD    | UTC timestamp, min. value: 3. harmonic voltage L2  | s    |     |     |
| 10246   | uint   | RD    | UTC timestamp, min. value: 4. harmonic voltage L2  | s    |     |     |
| 10248   | uint   | RD    | UTC timestamp, min. value: 5. harmonic voltage L2  | s    |     |     |
| 10250   | uint   | RD    | UTC timestamp, min. value: 6. harmonic voltage L2  | s    |     |     |
| 10252   | uint   | RD    | UTC timestamp, min. value: 7. harmonic voltage L2  | s    |     |     |
| 10254   | uint   | RD    | UTC timestamp, min. value: 8. harmonic voltage L2  | s    |     |     |
| 10256   | uint   | RD    | UTC timestamp, min. value: 9. harmonic voltage L2  | s    |     |     |
| 10258   | uint   | RD    | UTC timestamp, min. value: 10. harmonic voltage L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 10260   | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L2 | s    |     |     |
| 10262   | uint   | RD    | UTC timestamp, min. value: 12. harmonic voltage L2 | s    |     |     |
| 10264   | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L2 | s    |     |     |
| 10266   | uint   | RD    | UTC timestamp, min. value: 14. harmonic voltage L2 | s    |     |     |
| 10268   | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L2 | s    |     |     |
| 10270   | uint   | RD    | UTC timestamp, min. value: 16. harmonic voltage L2 | s    |     |     |
| 10272   | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L2 | s    |     |     |
| 10274   | uint   | RD    | UTC timestamp, min. value: 18. harmonic voltage L2 | s    |     |     |
| 10276   | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L2 | s    |     |     |
| 10278   | uint   | RD    | UTC timestamp, min. value: 20. harmonic voltage L2 | s    |     |     |
| 10280   | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L2 | s    |     |     |
| 10282   | uint   | RD    | UTC timestamp, min. value: 22. harmonic voltage L2 | s    |     |     |
| 10284   | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L2 | s    |     |     |
| 10286   | uint   | RD    | UTC timestamp, min. value: 24. harmonic voltage L2 | s    |     |     |
| 10288   | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L2 | s    |     |     |
| 10290   | uint   | RD    | UTC timestamp, min. value: 26. harmonic voltage L2 | s    |     |     |
| 10292   | uint   | RD    | UTC timestamp, min. value: 27. harmonic voltage L2 | s    |     |     |
| 10294   | uint   | RD    | UTC timestamp, min. value: 28. harmonic voltage L2 | s    |     |     |
| 10296   | uint   | RD    | UTC timestamp, min. value: 29. harmonic voltage L2 | s    |     |     |
| 10298   | uint   | RD    | UTC timestamp, min. value: 30. harmonic voltage L2 | s    |     |     |
| 10300   | uint   | RD    | UTC timestamp, min. value: 31. harmonic voltage L2 | s    |     |     |
| 10302   | uint   | RD    | UTC timestamp, min. value: 32. harmonic voltage L2 | s    |     |     |
| 10304   | uint   | RD    | UTC timestamp, min. value: 33. harmonic voltage L2 | s    |     |     |
| 10306   | uint   | RD    | UTC timestamp, min. value: 34. harmonic voltage L2 | s    |     |     |
| 10308   | uint   | RD    | UTC timestamp, min. value: 35. harmonic voltage L2 | s    |     |     |
| 10310   | uint   | RD    | UTC timestamp, min. value: 36. harmonic voltage L2 | s    |     |     |
| 10312   | uint   | RD    | UTC timestamp, min. value: 37. harmonic voltage L2 | s    |     |     |
| 10314   | uint   | RD    | UTC timestamp, min. value: 38. harmonic voltage L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 10316   | uint   | RD    | UTC timestamp, min. value: 39. harmonic voltage L2 | s    |     |     |
| 10318   | uint   | RD    | UTC timestamp, min. value: 40. harmonic voltage L2 | s    |     |     |
| 10320   | uint   | RD    | UTC timestamp, min. value: 1. harmonic voltage L3  | s    |     |     |
| 10322   | uint   | RD    | UTC timestamp, min. value: 2. harmonic voltage L3  | s    |     |     |
| 10324   | uint   | RD    | UTC timestamp, min. value: 3. harmonic voltage L3  | s    |     |     |
| 10326   | uint   | RD    | UTC timestamp, min. value: 4. harmonic voltage L3  | s    |     |     |
| 10328   | uint   | RD    | UTC timestamp, min. value: 5. harmonic voltage L3  | s    |     |     |
| 10330   | uint   | RD    | UTC timestamp, min. value: 6. harmonic voltage L3  | s    |     |     |
| 10332   | uint   | RD    | UTC timestamp, min. value: 7. harmonic voltage L3  | s    |     |     |
| 10334   | uint   | RD    | UTC timestamp, min. value: 8. harmonic voltage L3  | s    |     |     |
| 10336   | uint   | RD    | UTC timestamp, min. value: 9. harmonic voltage L3  | s    |     |     |
| 10338   | uint   | RD    | UTC timestamp, min. value: 10. harmonic voltage L3 | s    |     |     |
| 10340   | uint   | RD    | UTC timestamp, min. value: 11. harmonic voltage L3 | s    |     |     |
| 10342   | uint   | RD    | UTC timestamp, min. value: 12. harmonic voltage L3 | s    |     |     |
| 10344   | uint   | RD    | UTC timestamp, min. value: 13. harmonic voltage L3 | s    |     |     |
| 10346   | uint   | RD    | UTC timestamp, min. value: 14. harmonic voltage L3 | s    |     |     |
| 10348   | uint   | RD    | UTC timestamp, min. value: 15. harmonic voltage L3 | s    |     |     |
| 10350   | uint   | RD    | UTC timestamp, min. value: 16. harmonic voltage L3 | s    |     |     |
| 10352   | uint   | RD    | UTC timestamp, min. value: 17. harmonic voltage L3 | s    |     |     |
| 10354   | uint   | RD    | UTC timestamp, min. value: 18. harmonic voltage L3 | s    |     |     |
| 10356   | uint   | RD    | UTC timestamp, min. value: 19. harmonic voltage L3 | s    |     |     |
| 10358   | uint   | RD    | UTC timestamp, min. value: 20. harmonic voltage L3 | s    |     |     |
| 10360   | uint   | RD    | UTC timestamp, min. value: 21. harmonic voltage L3 | s    |     |     |
| 10362   | uint   | RD    | UTC timestamp, min. value: 22. harmonic voltage L3 | s    |     |     |
| 10364   | uint   | RD    | UTC timestamp, min. value: 23. harmonic voltage L3 | s    |     |     |
| 10366   | uint   | RD    | UTC timestamp, min. value: 24. harmonic voltage L3 | s    |     |     |
| 10368   | uint   | RD    | UTC timestamp, min. value: 25. harmonic voltage L3 | s    |     |     |
| 10370   | uint   | RD    | UTC timestamp, min. value: 26. harmonic voltage L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 10372   | uint   | RD    | UTC timestamp, min. value: 27. harmonic voltage L3 | s    |     |     |
| 10374   | uint   | RD    | UTC timestamp, min. value: 28. harmonic voltage L3 | s    |     |     |
| 10376   | uint   | RD    | UTC timestamp, min. value: 29. harmonic voltage L3 | s    |     |     |
| 10378   | uint   | RD    | UTC timestamp, min. value: 30. harmonic voltage L3 | s    |     |     |
| 10380   | uint   | RD    | UTC timestamp, min. value: 31. harmonic voltage L3 | s    |     |     |
| 10382   | uint   | RD    | UTC timestamp, min. value: 32. harmonic voltage L3 | s    |     |     |
| 10384   | uint   | RD    | UTC timestamp, min. value: 33. harmonic voltage L3 | s    |     |     |
| 10386   | uint   | RD    | UTC timestamp, min. value: 34. harmonic voltage L3 | s    |     |     |
| 10388   | uint   | RD    | UTC timestamp, min. value: 35. harmonic voltage L3 | s    |     |     |
| 10390   | uint   | RD    | UTC timestamp, min. value: 36. harmonic voltage L3 | s    |     |     |
| 10392   | uint   | RD    | UTC timestamp, min. value: 37. harmonic voltage L3 | s    |     |     |
| 10394   | uint   | RD    | UTC timestamp, min. value: 38. harmonic voltage L3 | s    |     |     |
| 10396   | uint   | RD    | UTC timestamp, min. value: 39. harmonic voltage L3 | s    |     |     |
| 10398   | uint   | RD    | UTC timestamp, min. value: 40. harmonic voltage L3 | s    |     |     |

### Moving mean values, fourier analysis

|      |       |    |                                     |   |  |  |
|------|-------|----|-------------------------------------|---|--|--|
| 2058 | float | RD | Mean value: 1. harmonic voltage L1  | V |  |  |
| 2060 | float | RD | Mean value: 3. harmonic voltage L1  | V |  |  |
| 2062 | float | RD | Mean value: 5. harmonic voltage L1  | V |  |  |
| 2064 | float | RD | Mean value: 7. harmonic voltage L1  | V |  |  |
| 2066 | float | RD | Mean value: 9. harmonic voltage L1  | V |  |  |
| 2068 | float | RD | Mean value: 11. harmonic voltage L1 | V |  |  |
| 2070 | float | RD | Mean value: 13. harmonic voltage L1 | V |  |  |
| 2072 | float | RD | Mean value: 15. harmonic voltage L1 | V |  |  |
| 2074 | float | RD | Mean value: 17. harmonic voltage L1 | V |  |  |
| 2076 | float | RD | Mean value: 19. harmonic voltage L1 | V |  |  |
| 2078 | float | RD | Mean value: 21. harmonic voltage L1 | V |  |  |
| 2080 | float | RD | Mean value: 23. harmonic voltage L1 | V |  |  |
| 2082 | float | RD | Mean value: 25. harmonic voltage L1 | V |  |  |
| 2084 | float | RD | Mean value: 1. harmonic voltage L2  | V |  |  |
| 2086 | float | RD | Mean value: 3. harmonic voltage L2  | V |  |  |
| 2088 | float | RD | Mean value: 5. harmonic voltage L2  | V |  |  |
| 2090 | float | RD | Mean value: 7. harmonic voltage L2  | V |  |  |
| 2092 | float | RD | Mean value: 9. harmonic voltage L2  | V |  |  |
| 2094 | float | RD | Mean value: 11. harmonic voltage L2 | V |  |  |
| 2096 | float | RD | Mean value: 13. harmonic voltage L2 | V |  |  |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 2098    | float  | RD    | Mean value: 15. harmonic voltage L2 | V    |     |     |
| 2100    | float  | RD    | Mean value: 17. harmonic voltage L2 | V    |     |     |
| 2102    | float  | RD    | Mean value: 19. harmonic voltage L2 | V    |     |     |
| 2104    | float  | RD    | Mean value: 21. harmonic voltage L2 | V    |     |     |
| 2106    | float  | RD    | Mean value: 23. harmonic voltage L2 | V    |     |     |
| 2108    | float  | RD    | Mean value: 25. harmonic voltage L2 | V    |     |     |
| 2110    | float  | RD    | Mean value: 1. harmonic voltage L3  | V    |     |     |
| 2112    | float  | RD    | Mean value: 3. harmonic voltage L3  | V    |     |     |
| 2114    | float  | RD    | Mean value: 5. harmonic voltage L3  | V    |     |     |
| 2116    | float  | RD    | Mean value: 7. harmonic voltage L3  | V    |     |     |
| 2118    | float  | RD    | Mean value: 9. harmonic voltage L3  | V    |     |     |
| 2120    | float  | RD    | Mean value: 11. harmonic voltage L3 | V    |     |     |
| 2122    | float  | RD    | Mean value: 13. harmonic voltage L3 | V    |     |     |
| 2124    | float  | RD    | Mean value: 15. harmonic voltage L3 | V    |     |     |
| 2126    | float  | RD    | Mean value: 17. harmonic voltage L3 | V    |     |     |
| 2128    | float  | RD    | Mean value: 19. harmonic voltage L3 | V    |     |     |
| 2130    | float  | RD    | Mean value: 21. harmonic voltage L3 | V    |     |     |
| 2132    | float  | RD    | Mean value: 23. harmonic voltage L3 | V    |     |     |
| 2134    | float  | RD    | Mean value: 25. harmonic voltage L3 | V    |     |     |
| 2136    | float  | RD    | Mean value: 1. harmonic current L1  | A    |     |     |
| 2138    | float  | RD    | Mean value: 3. harmonic current L1  | A    |     |     |
| 2140    | float  | RD    | Mean value: 5. harmonic current L1  | A    |     |     |
| 2142    | float  | RD    | Mean value: 7. harmonic current L1  | A    |     |     |
| 2144    | float  | RD    | Mean value: 9. harmonic current L1  | A    |     |     |
| 2146    | float  | RD    | Mean value: 11. harmonic current L1 | A    |     |     |
| 2148    | float  | RD    | Mean value: 13. harmonic current L1 | A    |     |     |
| 2150    | float  | RD    | Mean value: 15. harmonic current L1 | A    |     |     |
| 2152    | float  | RD    | Mean value: 17. harmonic current L1 | A    |     |     |
| 2154    | float  | RD    | Mean value: 19. harmonic current L1 | A    |     |     |
| 2156    | float  | RD    | Mean value: 21. harmonic current L1 | A    |     |     |
| 2158    | float  | RD    | Mean value: 23. harmonic current L1 | A    |     |     |
| 2160    | float  | RD    | Mean value: 25. harmonic current L1 | A    |     |     |
| 2162    | float  | RD    | Mean value: 1. harmonic current L2  | A    |     |     |
| 2164    | float  | RD    | Mean value: 3. harmonic current L2  | A    |     |     |
| 2166    | float  | RD    | Mean value: 5. harmonic current L2  | A    |     |     |
| 2168    | float  | RD    | Mean value: 7. harmonic current L2  | A    |     |     |
| 2170    | float  | RD    | Mean value: 9. harmonic current L2  | A    |     |     |
| 2172    | float  | RD    | Mean value: 11. harmonic current L2 | A    |     |     |
| 2174    | float  | RD    | Mean value: 13. harmonic current L2 | A    |     |     |
| 2176    | float  | RD    | Mean value: 15. harmonic current L2 | A    |     |     |
| 2178    | float  | RD    | Mean value: 17. harmonic current L2 | A    |     |     |
| 2180    | float  | RD    | Mean value: 19. harmonic current L2 | A    |     |     |
| 2182    | float  | RD    | Mean value: 21. harmonic current L2 | A    |     |     |
| 2184    | float  | RD    | Mean value: 23. harmonic current L2 | A    |     |     |
| 2186    | float  | RD    | Mean value: 25. harmonic current L2 | A    |     |     |
| 2188    | float  | RD    | Mean value: 1. harmonic current L3  | A    |     |     |
| 2190    | float  | RD    | Mean value: 3. harmonic current L3  | A    |     |     |
| 2192    | float  | RD    | Mean value: 5. harmonic current L3  | A    |     |     |
| 2194    | float  | RD    | Mean value: 7. harmonic current L3  | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 2196    | float  | RD    | Mean value: 9. harmonic current L3  | A    |     |     |
| 2198    | float  | RD    | Mean value: 11. harmonic current L3 | A    |     |     |
| 2200    | float  | RD    | Mean value: 13. harmonic current L3 | A    |     |     |
| 2202    | float  | RD    | Mean value: 15. harmonic current L3 | A    |     |     |
| 2204    | float  | RD    | Mean value: 17. harmonic current L3 | A    |     |     |
| 2206    | float  | RD    | Mean value: 19. harmonic current L3 | A    |     |     |
| 2208    | float  | RD    | Mean value: 21. harmonic current L3 | A    |     |     |
| 2210    | float  | RD    | Mean value: 23. harmonic current L3 | A    |     |     |
| 2212    | float  | RD    | Mean value: 25. harmonic current L3 | A    |     |     |
| 8480    | float  | RD    | Mean value: 1. harmonic voltage L1  | V    |     |     |
| 8482    | float  | RD    | Mean value: 2. harmonic voltage L1  | V    |     |     |
| 8484    | float  | RD    | Mean value: 3. harmonic voltage L1  | V    |     |     |
| 8486    | float  | RD    | Mean value: 4. harmonic voltage L1  | V    |     |     |
| 8488    | float  | RD    | Mean value: 5. harmonic voltage L1  | V    |     |     |
| 8490    | float  | RD    | Mean value: 6. harmonic voltage L1  | V    |     |     |
| 8492    | float  | RD    | Mean value: 7. harmonic voltage L1  | V    |     |     |
| 8494    | float  | RD    | Mean value: 8. harmonic voltage L1  | V    |     |     |
| 8496    | float  | RD    | Mean value: 9. harmonic voltage L1  | V    |     |     |
| 8498    | float  | RD    | Mean value: 10. harmonic voltage L1 | V    |     |     |
| 8500    | float  | RD    | Mean value: 11. harmonic voltage L1 | V    |     |     |
| 8502    | float  | RD    | Mean value: 12. harmonic voltage L1 | V    |     |     |
| 8504    | float  | RD    | Mean value: 13. harmonic voltage L1 | V    |     |     |
| 8506    | float  | RD    | Mean value: 14. harmonic voltage L1 | V    |     |     |
| 8508    | float  | RD    | Mean value: 15. harmonic voltage L1 | V    |     |     |
| 8510    | float  | RD    | Mean value: 16. harmonic voltage L1 | V    |     |     |
| 8512    | float  | RD    | Mean value: 17. harmonic voltage L1 | V    |     |     |
| 8514    | float  | RD    | Mean value: 18. harmonic voltage L1 | V    |     |     |
| 8516    | float  | RD    | Mean value: 19. harmonic voltage L1 | V    |     |     |
| 8518    | float  | RD    | Mean value: 20. harmonic voltage L1 | V    |     |     |
| 8520    | float  | RD    | Mean value: 21. harmonic voltage L1 | V    |     |     |
| 8522    | float  | RD    | Mean value: 22. harmonic voltage L1 | V    |     |     |
| 8524    | float  | RD    | Mean value: 23. harmonic voltage L1 | V    |     |     |
| 8526    | float  | RD    | Mean value: 24. harmonic voltage L1 | V    |     |     |
| 8528    | float  | RD    | Mean value: 25. harmonic voltage L1 | V    |     |     |
| 8530    | float  | RD    | Mean value: 26. harmonic voltage L1 | V    |     |     |
| 8532    | float  | RD    | Mean value: 27. harmonic voltage L1 | V    |     |     |
| 8534    | float  | RD    | Mean value: 28. harmonic voltage L1 | V    |     |     |
| 8536    | float  | RD    | Mean value: 29. harmonic voltage L1 | V    |     |     |
| 8538    | float  | RD    | Mean value: 30. harmonic voltage L1 | V    |     |     |
| 8540    | float  | RD    | Mean value: 31. harmonic voltage L1 | V    |     |     |
| 8542    | float  | RD    | Mean value: 32. harmonic voltage L1 | V    |     |     |
| 8544    | float  | RD    | Mean value: 33. harmonic voltage L1 | V    |     |     |
| 8546    | float  | RD    | Mean value: 34. harmonic voltage L1 | V    |     |     |
| 8548    | float  | RD    | Mean value: 35. harmonic voltage L1 | V    |     |     |
| 8550    | float  | RD    | Mean value: 36. harmonic voltage L1 | V    |     |     |
| 8552    | float  | RD    | Mean value: 37. harmonic voltage L1 | V    |     |     |
| 8554    | float  | RD    | Mean value: 38. harmonic voltage L1 | V    |     |     |
| 8556    | float  | RD    | Mean value: 39. harmonic voltage L1 | V    |     |     |
| 8558    | float  | RD    | Mean value: 40. harmonic voltage L1 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 8560    | float  | RD    | Mean value: 1. harmonic voltage L2  | V    |     |     |
| 8562    | float  | RD    | Mean value: 2. harmonic voltage L2  | V    |     |     |
| 8564    | float  | RD    | Mean value: 3. harmonic voltage L2  | V    |     |     |
| 8566    | float  | RD    | Mean value: 4. harmonic voltage L2  | V    |     |     |
| 8568    | float  | RD    | Mean value: 5. harmonic voltage L2  | V    |     |     |
| 8570    | float  | RD    | Mean value: 6. harmonic voltage L2  | V    |     |     |
| 8572    | float  | RD    | Mean value: 7. harmonic voltage L2  | V    |     |     |
| 8574    | float  | RD    | Mean value: 8. harmonic voltage L2  | V    |     |     |
| 8576    | float  | RD    | Mean value: 9. harmonic voltage L2  | V    |     |     |
| 8578    | float  | RD    | Mean value: 10. harmonic voltage L2 | V    |     |     |
| 8580    | float  | RD    | Mean value: 11. harmonic voltage L2 | V    |     |     |
| 8582    | float  | RD    | Mean value: 12. harmonic voltage L2 | V    |     |     |
| 8584    | float  | RD    | Mean value: 13. harmonic voltage L2 | V    |     |     |
| 8586    | float  | RD    | Mean value: 14. harmonic voltage L2 | V    |     |     |
| 8588    | float  | RD    | Mean value: 15. harmonic voltage L2 | V    |     |     |
| 8590    | float  | RD    | Mean value: 16. harmonic voltage L2 | V    |     |     |
| 8592    | float  | RD    | Mean value: 17. harmonic voltage L2 | V    |     |     |
| 8594    | float  | RD    | Mean value: 18. harmonic voltage L2 | V    |     |     |
| 8596    | float  | RD    | Mean value: 19. harmonic voltage L2 | V    |     |     |
| 8598    | float  | RD    | Mean value: 20. harmonic voltage L2 | V    |     |     |
| 8600    | float  | RD    | Mean value: 21. harmonic voltage L2 | V    |     |     |
| 8602    | float  | RD    | Mean value: 22. harmonic voltage L2 | V    |     |     |
| 8604    | float  | RD    | Mean value: 23. harmonic voltage L2 | V    |     |     |
| 8606    | float  | RD    | Mean value: 24. harmonic voltage L2 | V    |     |     |
| 8608    | float  | RD    | Mean value: 25. harmonic voltage L2 | V    |     |     |
| 8610    | float  | RD    | Mean value: 26. harmonic voltage L2 | V    |     |     |
| 8612    | float  | RD    | Mean value: 27. harmonic voltage L2 | V    |     |     |
| 8614    | float  | RD    | Mean value: 28. harmonic voltage L2 | V    |     |     |
| 8616    | float  | RD    | Mean value: 29. harmonic voltage L2 | V    |     |     |
| 8618    | float  | RD    | Mean value: 30. harmonic voltage L2 | V    |     |     |
| 8620    | float  | RD    | Mean value: 31. harmonic voltage L2 | V    |     |     |
| 8622    | float  | RD    | Mean value: 32. harmonic voltage L2 | V    |     |     |
| 8624    | float  | RD    | Mean value: 33. harmonic voltage L2 | V    |     |     |
| 8626    | float  | RD    | Mean value: 34. harmonic voltage L2 | V    |     |     |
| 8628    | float  | RD    | Mean value: 35. harmonic voltage L2 | V    |     |     |
| 8630    | float  | RD    | Mean value: 36. harmonic voltage L2 | V    |     |     |
| 8632    | float  | RD    | Mean value: 37. harmonic voltage L2 | V    |     |     |
| 8634    | float  | RD    | Mean value: 38. harmonic voltage L2 | V    |     |     |
| 8636    | float  | RD    | Mean value: 39. harmonic voltage L2 | V    |     |     |
| 8638    | float  | RD    | Mean value: 40. harmonic voltage L2 | V    |     |     |
| 8640    | float  | RD    | Mean value: 1. harmonic voltage L3  | V    |     |     |
| 8642    | float  | RD    | Mean value: 2. harmonic voltage L3  | V    |     |     |
| 8644    | float  | RD    | Mean value: 3. harmonic voltage L3  | V    |     |     |
| 8646    | float  | RD    | Mean value: 4. harmonic voltage L3  | V    |     |     |
| 8648    | float  | RD    | Mean value: 5. harmonic voltage L3  | V    |     |     |
| 8650    | float  | RD    | Mean value: 6. harmonic voltage L3  | V    |     |     |
| 8652    | float  | RD    | Mean value: 7. harmonic voltage L3  | V    |     |     |
| 8654    | float  | RD    | Mean value: 8. harmonic voltage L3  | V    |     |     |
| 8656    | float  | RD    | Mean value: 9. harmonic voltage L3  | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 8658    | float  | RD    | Mean value: 10. harmonic voltage L3 | V    |     |     |
| 8660    | float  | RD    | Mean value: 11. harmonic voltage L3 | V    |     |     |
| 8662    | float  | RD    | Mean value: 12. harmonic voltage L3 | V    |     |     |
| 8664    | float  | RD    | Mean value: 13. harmonic voltage L3 | V    |     |     |
| 8666    | float  | RD    | Mean value: 14. harmonic voltage L3 | V    |     |     |
| 8668    | float  | RD    | Mean value: 15. harmonic voltage L3 | V    |     |     |
| 8670    | float  | RD    | Mean value: 16. harmonic voltage L3 | V    |     |     |
| 8672    | float  | RD    | Mean value: 17. harmonic voltage L3 | V    |     |     |
| 8674    | float  | RD    | Mean value: 18. harmonic voltage L3 | V    |     |     |
| 8676    | float  | RD    | Mean value: 19. harmonic voltage L3 | V    |     |     |
| 8678    | float  | RD    | Mean value: 20. harmonic voltage L3 | V    |     |     |
| 8680    | float  | RD    | Mean value: 21. harmonic voltage L3 | V    |     |     |
| 8682    | float  | RD    | Mean value: 22. harmonic voltage L3 | V    |     |     |
| 8684    | float  | RD    | Mean value: 23. harmonic voltage L3 | V    |     |     |
| 8686    | float  | RD    | Mean value: 24. harmonic voltage L3 | V    |     |     |
| 8688    | float  | RD    | Mean value: 25. harmonic voltage L3 | V    |     |     |
| 8690    | float  | RD    | Mean value: 26. harmonic voltage L3 | V    |     |     |
| 8692    | float  | RD    | Mean value: 27. harmonic voltage L3 | V    |     |     |
| 8694    | float  | RD    | Mean value: 28. harmonic voltage L3 | V    |     |     |
| 8696    | float  | RD    | Mean value: 29. harmonic voltage L3 | V    |     |     |
| 8698    | float  | RD    | Mean value: 30. harmonic voltage L3 | V    |     |     |
| 8700    | float  | RD    | Mean value: 31. harmonic voltage L3 | V    |     |     |
| 8702    | float  | RD    | Mean value: 32. harmonic voltage L3 | V    |     |     |
| 8704    | float  | RD    | Mean value: 33. harmonic voltage L3 | V    |     |     |
| 8706    | float  | RD    | Mean value: 34. harmonic voltage L3 | V    |     |     |
| 8708    | float  | RD    | Mean value: 35. harmonic voltage L3 | V    |     |     |
| 8710    | float  | RD    | Mean value: 36. harmonic voltage L3 | V    |     |     |
| 8712    | float  | RD    | Mean value: 37. harmonic voltage L3 | V    |     |     |
| 8714    | float  | RD    | Mean value: 38. harmonic voltage L3 | V    |     |     |
| 8716    | float  | RD    | Mean value: 39. harmonic voltage L3 | V    |     |     |
| 8718    | float  | RD    | Mean value: 40. harmonic voltage L3 | V    |     |     |
| 8720    | float  | RD    | Mean value: 1. harmonic current L1  | A    |     |     |
| 8722    | float  | RD    | Mean value: 2. harmonic current L1  | A    |     |     |
| 8724    | float  | RD    | Mean value: 3. harmonic current L1  | A    |     |     |
| 8726    | float  | RD    | Mean value: 4. harmonic current L1  | A    |     |     |
| 8728    | float  | RD    | Mean value: 5. harmonic current L1  | A    |     |     |
| 8730    | float  | RD    | Mean value: 6. harmonic current L1  | A    |     |     |
| 8732    | float  | RD    | Mean value: 7. harmonic current L1  | A    |     |     |
| 8734    | float  | RD    | Mean value: 8. harmonic current L1  | A    |     |     |
| 8736    | float  | RD    | Mean value: 9. harmonic current L1  | A    |     |     |
| 8738    | float  | RD    | Mean value: 10. harmonic current L1 | A    |     |     |
| 8740    | float  | RD    | Mean value: 11. harmonic current L1 | A    |     |     |
| 8742    | float  | RD    | Mean value: 12. harmonic current L1 | A    |     |     |
| 8744    | float  | RD    | Mean value: 13. harmonic current L1 | A    |     |     |
| 8746    | float  | RD    | Mean value: 14. harmonic current L1 | A    |     |     |
| 8748    | float  | RD    | Mean value: 15. harmonic current L1 | A    |     |     |
| 8750    | float  | RD    | Mean value: 16. harmonic current L1 | A    |     |     |
| 8752    | float  | RD    | Mean value: 17. harmonic current L1 | A    |     |     |
| 8754    | float  | RD    | Mean value: 18. harmonic current L1 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 8756    | float  | RD    | Mean value: 19. harmonic current L1 | A    |     |     |
| 8758    | float  | RD    | Mean value: 20. harmonic current L1 | A    |     |     |
| 8760    | float  | RD    | Mean value: 21. harmonic current L1 | A    |     |     |
| 8762    | float  | RD    | Mean value: 22. harmonic current L1 | A    |     |     |
| 8764    | float  | RD    | Mean value: 23. harmonic current L1 | A    |     |     |
| 8766    | float  | RD    | Mean value: 24. harmonic current L1 | A    |     |     |
| 8768    | float  | RD    | Mean value: 25. harmonic current L1 | A    |     |     |
| 8770    | float  | RD    | Mean value: 26. harmonic current L1 | A    |     |     |
| 8772    | float  | RD    | Mean value: 27. harmonic current L1 | A    |     |     |
| 8774    | float  | RD    | Mean value: 28. harmonic current L1 | A    |     |     |
| 8776    | float  | RD    | Mean value: 29. harmonic current L1 | A    |     |     |
| 8778    | float  | RD    | Mean value: 30. harmonic current L1 | A    |     |     |
| 8780    | float  | RD    | Mean value: 31. harmonic current L1 | A    |     |     |
| 8782    | float  | RD    | Mean value: 32. harmonic current L1 | A    |     |     |
| 8784    | float  | RD    | Mean value: 33. harmonic current L1 | A    |     |     |
| 8786    | float  | RD    | Mean value: 34. harmonic current L1 | A    |     |     |
| 8788    | float  | RD    | Mean value: 35. harmonic current L1 | A    |     |     |
| 8790    | float  | RD    | Mean value: 36. harmonic current L1 | A    |     |     |
| 8792    | float  | RD    | Mean value: 37. harmonic current L1 | A    |     |     |
| 8794    | float  | RD    | Mean value: 38. harmonic current L1 | A    |     |     |
| 8796    | float  | RD    | Mean value: 39. harmonic current L1 | A    |     |     |
| 8798    | float  | RD    | Mean value: 40. harmonic current L1 | A    |     |     |
| 8800    | float  | RD    | Mean value: 1. harmonic current L2  | A    |     |     |
| 8802    | float  | RD    | Mean value: 2. harmonic current L2  | A    |     |     |
| 8804    | float  | RD    | Mean value: 3. harmonic current L2  | A    |     |     |
| 8806    | float  | RD    | Mean value: 4. harmonic current L2  | A    |     |     |
| 8808    | float  | RD    | Mean value: 5. harmonic current L2  | A    |     |     |
| 8810    | float  | RD    | Mean value: 6. harmonic current L2  | A    |     |     |
| 8812    | float  | RD    | Mean value: 7. harmonic current L2  | A    |     |     |
| 8814    | float  | RD    | Mean value: 8. harmonic current L2  | A    |     |     |
| 8816    | float  | RD    | Mean value: 9. harmonic current L2  | A    |     |     |
| 8818    | float  | RD    | Mean value: 10. harmonic current L2 | A    |     |     |
| 8820    | float  | RD    | Mean value: 11. harmonic current L2 | A    |     |     |
| 8822    | float  | RD    | Mean value: 12. harmonic current L2 | A    |     |     |
| 8824    | float  | RD    | Mean value: 13. harmonic current L2 | A    |     |     |
| 8826    | float  | RD    | Mean value: 14. harmonic current L2 | A    |     |     |
| 8828    | float  | RD    | Mean value: 15. harmonic current L2 | A    |     |     |
| 8830    | float  | RD    | Mean value: 16. harmonic current L2 | A    |     |     |
| 8832    | float  | RD    | Mean value: 17. harmonic current L2 | A    |     |     |
| 8834    | float  | RD    | Mean value: 18. harmonic current L2 | A    |     |     |
| 8836    | float  | RD    | Mean value: 19. harmonic current L2 | A    |     |     |
| 8838    | float  | RD    | Mean value: 20. harmonic current L2 | A    |     |     |
| 8840    | float  | RD    | Mean value: 21. harmonic current L2 | A    |     |     |
| 8842    | float  | RD    | Mean value: 22. harmonic current L2 | A    |     |     |
| 8844    | float  | RD    | Mean value: 23. harmonic current L2 | A    |     |     |
| 8846    | float  | RD    | Mean value: 24. harmonic current L2 | A    |     |     |
| 8848    | float  | RD    | Mean value: 25. harmonic current L2 | A    |     |     |
| 8850    | float  | RD    | Mean value: 26. harmonic current L2 | A    |     |     |
| 8852    | float  | RD    | Mean value: 27. harmonic current L2 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 8854    | float  | RD    | Mean value: 28. harmonic current L2 | A    |     |     |
| 8856    | float  | RD    | Mean value: 29. harmonic current L2 | A    |     |     |
| 8858    | float  | RD    | Mean value: 30. harmonic current L2 | A    |     |     |
| 8860    | float  | RD    | Mean value: 31. harmonic current L2 | A    |     |     |
| 8862    | float  | RD    | Mean value: 32. harmonic current L2 | A    |     |     |
| 8864    | float  | RD    | Mean value: 33. harmonic current L2 | A    |     |     |
| 8866    | float  | RD    | Mean value: 34. harmonic current L2 | A    |     |     |
| 8868    | float  | RD    | Mean value: 35. harmonic current L2 | A    |     |     |
| 8870    | float  | RD    | Mean value: 36. harmonic current L2 | A    |     |     |
| 8872    | float  | RD    | Mean value: 37. harmonic current L2 | A    |     |     |
| 8874    | float  | RD    | Mean value: 38. harmonic current L2 | A    |     |     |
| 8876    | float  | RD    | Mean value: 39. harmonic current L2 | A    |     |     |
| 8878    | float  | RD    | Mean value: 40. harmonic current L2 | A    |     |     |
| 8880    | float  | RD    | Mean value: 1. harmonic current L3  | A    |     |     |
| 8882    | float  | RD    | Mean value: 2. harmonic current L3  | A    |     |     |
| 8884    | float  | RD    | Mean value: 3. harmonic current L3  | A    |     |     |
| 8886    | float  | RD    | Mean value: 4. harmonic current L3  | A    |     |     |
| 8888    | float  | RD    | Mean value: 5. harmonic current L3  | A    |     |     |
| 8890    | float  | RD    | Mean value: 6. harmonic current L3  | A    |     |     |
| 8892    | float  | RD    | Mean value: 7. harmonic current L3  | A    |     |     |
| 8894    | float  | RD    | Mean value: 8. harmonic current L3  | A    |     |     |
| 8896    | float  | RD    | Mean value: 9. harmonic current L3  | A    |     |     |
| 8898    | float  | RD    | Mean value: 10. harmonic current L3 | A    |     |     |
| 8900    | float  | RD    | Mean value: 11. harmonic current L3 | A    |     |     |
| 8902    | float  | RD    | Mean value: 12. harmonic current L3 | A    |     |     |
| 8904    | float  | RD    | Mean value: 13. harmonic current L3 | A    |     |     |
| 8906    | float  | RD    | Mean value: 14. harmonic current L3 | A    |     |     |
| 8908    | float  | RD    | Mean value: 15. harmonic current L3 | A    |     |     |
| 8910    | float  | RD    | Mean value: 16. harmonic current L3 | A    |     |     |
| 8912    | float  | RD    | Mean value: 17. harmonic current L3 | A    |     |     |
| 8914    | float  | RD    | Mean value: 18. harmonic current L3 | A    |     |     |
| 8916    | float  | RD    | Mean value: 19. harmonic current L3 | A    |     |     |
| 8918    | float  | RD    | Mean value: 20. harmonic current L3 | A    |     |     |
| 8920    | float  | RD    | Mean value: 21. harmonic current L3 | A    |     |     |
| 8922    | float  | RD    | Mean value: 22. harmonic current L3 | A    |     |     |
| 8924    | float  | RD    | Mean value: 23. harmonic current L3 | A    |     |     |
| 8926    | float  | RD    | Mean value: 24. harmonic current L3 | A    |     |     |
| 8928    | float  | RD    | Mean value: 25. harmonic current L3 | A    |     |     |
| 8930    | float  | RD    | Mean value: 26. harmonic current L3 | A    |     |     |
| 8932    | float  | RD    | Mean value: 27. harmonic current L3 | A    |     |     |
| 8934    | float  | RD    | Mean value: 28. harmonic current L3 | A    |     |     |
| 8936    | float  | RD    | Mean value: 29. harmonic current L3 | A    |     |     |
| 8938    | float  | RD    | Mean value: 30. harmonic current L3 | A    |     |     |
| 8940    | float  | RD    | Mean value: 31. harmonic current L3 | A    |     |     |
| 8942    | float  | RD    | Mean value: 32. harmonic current L3 | A    |     |     |
| 8944    | float  | RD    | Mean value: 33. harmonic current L3 | A    |     |     |
| 8946    | float  | RD    | Mean value: 34. harmonic current L3 | A    |     |     |
| 8948    | float  | RD    | Mean value: 35. harmonic current L3 | A    |     |     |
| 8950    | float  | RD    | Mean value: 36. harmonic current L3 | A    |     |     |

| Address | Format         | RD/WR | Note                                | Unit | Min | Max |
|---------|----------------|-------|-------------------------------------|------|-----|-----|
| 8952    | float          | RD    | Mean value: 37. harmonic current L3 | A    |     |     |
| 8954    | float          | RD    | Mean value: 38. harmonic current L3 | A    |     |     |
| 8956    | float          | RD    | Mean value: 39. harmonic current L3 | A    |     |     |
| 8958    | float          | RD    | Mean value: 40. harmonic current L3 | A    |     |     |
| 12029   | short<br>(x10) | RD    | Mean value: 1. harmonic voltage L1  | V    |     |     |
| 12030   | short<br>(x10) | RD    | Mean value: 3. harmonic voltage L1  | V    |     |     |
| 12031   | short<br>(x10) | RD    | Mean value: 5. harmonic voltage L1  | V    |     |     |
| 12032   | short<br>(x10) | RD    | Mean value: 7. harmonic voltage L1  | V    |     |     |
| 12033   | short<br>(x10) | RD    | Mean value: 9. harmonic voltage L1  | V    |     |     |
| 12034   | short<br>(x10) | RD    | Mean value: 11. harmonic voltage L1 | V    |     |     |
| 12035   | short<br>(x10) | RD    | Mean value: 13. harmonic voltage L1 | V    |     |     |
| 12036   | short<br>(x10) | RD    | Mean value: 15. harmonic voltage L1 | V    |     |     |
| 12037   | short<br>(x10) | RD    | Mean value: 17. harmonic voltage L1 | V    |     |     |
| 12038   | short<br>(x10) | RD    | Mean value: 19. harmonic voltage L1 | V    |     |     |
| 12039   | short<br>(x10) | RD    | Mean value: 21. harmonic voltage L1 | V    |     |     |
| 12040   | short<br>(x10) | RD    | Mean value: 23. harmonic voltage L1 | V    |     |     |
| 12041   | short<br>(x10) | RD    | Mean value: 25. harmonic voltage L1 | V    |     |     |
| 12042   | short<br>(x10) | RD    | Mean value: 1. harmonic voltage L2  | V    |     |     |
| 12043   | short<br>(x10) | RD    | Mean value: 3. harmonic voltage L2  | V    |     |     |
| 12044   | short<br>(x10) | RD    | Mean value: 5. harmonic voltage L2  | V    |     |     |
| 12045   | short<br>(x10) | RD    | Mean value: 7. harmonic voltage L2  | V    |     |     |
| 12046   | short<br>(x10) | RD    | Mean value: 9. harmonic voltage L2  | V    |     |     |
| 12047   | short<br>(x10) | RD    | Mean value: 11. harmonic voltage L2 | V    |     |     |
| 12048   | short<br>(x10) | RD    | Mean value: 13. harmonic voltage L2 | V    |     |     |
| 12049   | short<br>(x10) | RD    | Mean value: 15. harmonic voltage L2 | V    |     |     |
| 12050   | short<br>(x10) | RD    | Mean value: 17. harmonic voltage L2 | V    |     |     |
| 12051   | short<br>(x10) | RD    | Mean value: 19. harmonic voltage L2 | V    |     |     |
| 12052   | short<br>(x10) | RD    | Mean value: 21. harmonic voltage L2 | V    |     |     |
| 12053   | short<br>(x10) | RD    | Mean value: 23. harmonic voltage L2 | V    |     |     |

| Address | Format           | RD/WR | Note                                | Unit | Min | Max |
|---------|------------------|-------|-------------------------------------|------|-----|-----|
| 12054   | short<br>(x10)   | RD    | Mean value: 25. harmonic voltage L2 | V    |     |     |
| 12055   | short<br>(x10)   | RD    | Mean value: 1. harmonic voltage L3  | V    |     |     |
| 12056   | short<br>(x10)   | RD    | Mean value: 3. harmonic voltage L3  | V    |     |     |
| 12057   | short<br>(x10)   | RD    | Mean value: 5. harmonic voltage L3  | V    |     |     |
| 12058   | short<br>(x10)   | RD    | Mean value: 7. harmonic voltage L3  | V    |     |     |
| 12059   | short<br>(x10)   | RD    | Mean value: 9. harmonic voltage L3  | V    |     |     |
| 12060   | short<br>(x10)   | RD    | Mean value: 11. harmonic voltage L3 | V    |     |     |
| 12061   | short<br>(x10)   | RD    | Mean value: 13. harmonic voltage L3 | V    |     |     |
| 12062   | short<br>(x10)   | RD    | Mean value: 15. harmonic voltage L3 | V    |     |     |
| 12063   | short<br>(x10)   | RD    | Mean value: 17. harmonic voltage L3 | V    |     |     |
| 12064   | short<br>(x10)   | RD    | Mean value: 19. harmonic voltage L3 | V    |     |     |
| 12065   | short<br>(x10)   | RD    | Mean value: 21. harmonic voltage L3 | V    |     |     |
| 12066   | short<br>(x10)   | RD    | Mean value: 23. harmonic voltage L3 | V    |     |     |
| 12067   | short<br>(x10)   | RD    | Mean value: 25. harmonic voltage L3 | V    |     |     |
| 12068   | short<br>(x1000) | RD    | Mean value: 1. harmonic current L1  | A    |     |     |
| 12069   | short<br>(x1000) | RD    | Mean value: 3. harmonic current L1  | A    |     |     |
| 12070   | short<br>(x1000) | RD    | Mean value: 5. harmonic current L1  | A    |     |     |
| 12071   | short<br>(x1000) | RD    | Mean value: 7. harmonic current L1  | A    |     |     |
| 12072   | short<br>(x1000) | RD    | Mean value: 9. harmonic current L1  | A    |     |     |
| 12073   | short<br>(x1000) | RD    | Mean value: 11. harmonic current L1 | A    |     |     |
| 12074   | short<br>(x1000) | RD    | Mean value: 13. harmonic current L1 | A    |     |     |
| 12075   | short<br>(x1000) | RD    | Mean value: 15. harmonic current L1 | A    |     |     |
| 12076   | short<br>(x1000) | RD    | Mean value: 17. harmonic current L1 | A    |     |     |
| 12077   | short<br>(x1000) | RD    | Mean value: 19. harmonic current L1 | A    |     |     |
| 12078   | short<br>(x1000) | RD    | Mean value: 21. harmonic current L1 | A    |     |     |
| 12079   | short<br>(x1000) | RD    | Mean value: 23. harmonic current L1 | A    |     |     |
| 12080   | short<br>(x1000) | RD    | Mean value: 25. harmonic current L1 | A    |     |     |
| 12081   | short<br>(x1000) | RD    | Mean value: 1. harmonic current L2  | A    |     |     |

| Address | Format           | RD/WR | Note                                | Unit | Min | Max |
|---------|------------------|-------|-------------------------------------|------|-----|-----|
| 12082   | short<br>(x1000) | RD    | Mean value: 3. harmonic current L2  | A    |     |     |
| 12083   | short<br>(x1000) | RD    | Mean value: 5. harmonic current L2  | A    |     |     |
| 12084   | short<br>(x1000) | RD    | Mean value: 7. harmonic current L2  | A    |     |     |
| 12085   | short<br>(x1000) | RD    | Mean value: 9. harmonic current L2  | A    |     |     |
| 12086   | short<br>(x1000) | RD    | Mean value: 11. harmonic current L2 | A    |     |     |
| 12087   | short<br>(x1000) | RD    | Mean value: 13. harmonic current L2 | A    |     |     |
| 12088   | short<br>(x1000) | RD    | Mean value: 15. harmonic current L2 | A    |     |     |
| 12089   | short<br>(x1000) | RD    | Mean value: 17. harmonic current L2 | A    |     |     |
| 12090   | short<br>(x1000) | RD    | Mean value: 19. harmonic current L2 | A    |     |     |
| 12091   | short<br>(x1000) | RD    | Mean value: 21. harmonic current L2 | A    |     |     |
| 12092   | short<br>(x1000) | RD    | Mean value: 23. harmonic current L2 | A    |     |     |
| 12093   | short<br>(x1000) | RD    | Mean value: 25. harmonic current L2 | A    |     |     |
| 12094   | short<br>(x1000) | RD    | Mean value: 1. harmonic current L3  | A    |     |     |
| 12095   | short<br>(x1000) | RD    | Mean value: 3. harmonic current L3  | A    |     |     |
| 12096   | short<br>(x1000) | RD    | Mean value: 5. harmonic current L3  | A    |     |     |
| 12097   | short<br>(x1000) | RD    | Mean value: 7. harmonic current L3  | A    |     |     |
| 12098   | short<br>(x1000) | RD    | Mean value: 9. harmonic current L3  | A    |     |     |
| 12099   | short<br>(x1000) | RD    | Mean value: 11. harmonic current L3 | A    |     |     |
| 12100   | short<br>(x1000) | RD    | Mean value: 13. harmonic current L3 | A    |     |     |
| 12101   | short<br>(x1000) | RD    | Mean value: 15. harmonic current L3 | A    |     |     |
| 12102   | short<br>(x1000) | RD    | Mean value: 17. harmonic current L3 | A    |     |     |
| 12103   | short<br>(x1000) | RD    | Mean value: 19. harmonic current L3 | A    |     |     |
| 12104   | short<br>(x1000) | RD    | Mean value: 21. harmonic current L3 | A    |     |     |
| 12105   | short<br>(x1000) | RD    | Mean value: 23. harmonic current L3 | A    |     |     |
| 12106   | short<br>(x1000) | RD    | Mean value: 25. harmonic current L3 | A    |     |     |

| Address | Format | RD/WR | Note | Unit | Min | Max |
|---------|--------|-------|------|------|-----|-----|
|---------|--------|-------|------|------|-----|-----|

### Measured values, extended fourier analysis (41st - 65th harmonics)

|       |       |    |                         |   |  |  |
|-------|-------|----|-------------------------|---|--|--|
| 17000 | float | RD | 41. harmonic voltage L1 | V |  |  |
| 17002 | float | RD | 42. harmonic voltage L1 | V |  |  |
| 17004 | float | RD | 43. harmonic voltage L1 | V |  |  |
| 17006 | float | RD | 44. harmonic voltage L1 | V |  |  |
| 17008 | float | RD | 45. harmonic voltage L1 | V |  |  |
| 17010 | float | RD | 46. harmonic voltage L1 | V |  |  |
| 17012 | float | RD | 47. harmonic voltage L1 | V |  |  |
| 17014 | float | RD | 48. harmonic voltage L1 | V |  |  |
| 17016 | float | RD | 49. harmonic voltage L1 | V |  |  |
| 17018 | float | RD | 50. harmonic voltage L1 | V |  |  |
| 17020 | float | RD | 51. harmonic voltage L1 | V |  |  |
| 17022 | float | RD | 52. harmonic voltage L1 | V |  |  |
| 17024 | float | RD | 53. harmonic voltage L1 | V |  |  |
| 17026 | float | RD | 54. harmonic voltage L1 | V |  |  |
| 17028 | float | RD | 55. harmonic voltage L1 | V |  |  |
| 17030 | float | RD | 56. harmonic voltage L1 | V |  |  |
| 17032 | float | RD | 57. harmonic voltage L1 | V |  |  |
| 17034 | float | RD | 58. harmonic voltage L1 | V |  |  |
| 17036 | float | RD | 59. harmonic voltage L1 | V |  |  |
| 17038 | float | RD | 60. harmonic voltage L1 | V |  |  |
| 17040 | float | RD | 61. harmonic voltage L1 | V |  |  |
| 17042 | float | RD | 62. harmonic voltage L1 | V |  |  |
| 17044 | float | RD | 63. harmonic voltage L1 | V |  |  |
| 17046 | float | RD | 64. harmonic voltage L1 | V |  |  |
| 17048 | float | RD | 65. harmonic voltage L1 | V |  |  |
| 17050 | float | RD | 41. harmonic voltage L2 | V |  |  |
| 17052 | float | RD | 42. harmonic voltage L2 | V |  |  |
| 17054 | float | RD | 43. harmonic voltage L2 | V |  |  |
| 17056 | float | RD | 44. harmonic voltage L2 | V |  |  |
| 17058 | float | RD | 45. harmonic voltage L2 | V |  |  |
| 17060 | float | RD | 46. harmonic voltage L2 | V |  |  |
| 17062 | float | RD | 47. harmonic voltage L2 | V |  |  |
| 17064 | float | RD | 48. harmonic voltage L2 | V |  |  |
| 17066 | float | RD | 49. harmonic voltage L2 | V |  |  |
| 17068 | float | RD | 50. harmonic voltage L2 | V |  |  |
| 17070 | float | RD | 51. harmonic voltage L2 | V |  |  |
| 17072 | float | RD | 52. harmonic voltage L2 | V |  |  |
| 17074 | float | RD | 53. harmonic voltage L2 | V |  |  |
| 17076 | float | RD | 54. harmonic voltage L2 | V |  |  |
| 17078 | float | RD | 55. harmonic voltage L2 | V |  |  |
| 17080 | float | RD | 56. harmonic voltage L2 | V |  |  |
| 17082 | float | RD | 57. harmonic voltage L2 | V |  |  |
| 17084 | float | RD | 58. harmonic voltage L2 | V |  |  |
| 17086 | float | RD | 59. harmonic voltage L2 | V |  |  |
| 17088 | float | RD | 60. harmonic voltage L2 | V |  |  |
| 17090 | float | RD | 61. harmonic voltage L2 | V |  |  |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 17092   | float  | RD    | 62. harmonic voltage L2 | V    |     |     |
| 17094   | float  | RD    | 63. harmonic voltage L2 | V    |     |     |
| 17096   | float  | RD    | 64. harmonic voltage L2 | V    |     |     |
| 17098   | float  | RD    | 65. harmonic voltage L2 | V    |     |     |
| 17100   | float  | RD    | 41. harmonic voltage L3 | V    |     |     |
| 17102   | float  | RD    | 42. harmonic voltage L3 | V    |     |     |
| 17104   | float  | RD    | 43. harmonic voltage L3 | V    |     |     |
| 17106   | float  | RD    | 44. harmonic voltage L3 | V    |     |     |
| 17108   | float  | RD    | 45. harmonic voltage L3 | V    |     |     |
| 17110   | float  | RD    | 46. harmonic voltage L3 | V    |     |     |
| 17112   | float  | RD    | 47. harmonic voltage L3 | V    |     |     |
| 17114   | float  | RD    | 48. harmonic voltage L3 | V    |     |     |
| 17116   | float  | RD    | 49. harmonic voltage L3 | V    |     |     |
| 17118   | float  | RD    | 50. harmonic voltage L3 | V    |     |     |
| 17120   | float  | RD    | 51. harmonic voltage L3 | V    |     |     |
| 17122   | float  | RD    | 52. harmonic voltage L3 | V    |     |     |
| 17124   | float  | RD    | 53. harmonic voltage L3 | V    |     |     |
| 17126   | float  | RD    | 54. harmonic voltage L3 | V    |     |     |
| 17128   | float  | RD    | 55. harmonic voltage L3 | V    |     |     |
| 17130   | float  | RD    | 56. harmonic voltage L3 | V    |     |     |
| 17132   | float  | RD    | 57. harmonic voltage L3 | V    |     |     |
| 17134   | float  | RD    | 58. harmonic voltage L3 | V    |     |     |
| 17136   | float  | RD    | 59. harmonic voltage L3 | V    |     |     |
| 17138   | float  | RD    | 60. harmonic voltage L3 | V    |     |     |
| 17140   | float  | RD    | 61. harmonic voltage L3 | V    |     |     |
| 17142   | float  | RD    | 62. harmonic voltage L3 | V    |     |     |
| 17144   | float  | RD    | 63. harmonic voltage L3 | V    |     |     |
| 17146   | float  | RD    | 64. harmonic voltage L3 | V    |     |     |
| 17148   | float  | RD    | 65. harmonic voltage L3 | V    |     |     |
| 17150   | float  | RD    | 41. harmonic current L1 | A    |     |     |
| 17152   | float  | RD    | 42. harmonic current L1 | A    |     |     |
| 17154   | float  | RD    | 43. harmonic current L1 | A    |     |     |
| 17156   | float  | RD    | 44. harmonic current L1 | A    |     |     |
| 17158   | float  | RD    | 45. harmonic current L1 | A    |     |     |
| 17160   | float  | RD    | 46. harmonic current L1 | A    |     |     |
| 17162   | float  | RD    | 47. harmonic current L1 | A    |     |     |
| 17164   | float  | RD    | 48. harmonic current L1 | A    |     |     |
| 17166   | float  | RD    | 49. harmonic current L1 | A    |     |     |
| 17168   | float  | RD    | 50. harmonic current L1 | A    |     |     |
| 17170   | float  | RD    | 51. harmonic current L1 | A    |     |     |
| 17172   | float  | RD    | 52. harmonic current L1 | A    |     |     |
| 17174   | float  | RD    | 53. harmonic current L1 | A    |     |     |
| 17176   | float  | RD    | 54. harmonic current L1 | A    |     |     |
| 17178   | float  | RD    | 55. harmonic current L1 | A    |     |     |
| 17180   | float  | RD    | 56. harmonic current L1 | A    |     |     |
| 17182   | float  | RD    | 57. harmonic current L1 | A    |     |     |
| 17184   | float  | RD    | 58. harmonic current L1 | A    |     |     |
| 17186   | float  | RD    | 59. harmonic current L1 | A    |     |     |
| 17188   | float  | RD    | 60. harmonic current L1 | A    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 17190   | float  | RD    | 61. harmonic current L1 | A    |     |     |
| 17192   | float  | RD    | 62. harmonic current L1 | A    |     |     |
| 17194   | float  | RD    | 63. harmonic current L1 | A    |     |     |
| 17196   | float  | RD    | 64. harmonic current L1 | A    |     |     |
| 17198   | float  | RD    | 65. harmonic current L1 | A    |     |     |
| 17200   | float  | RD    | 41. harmonic current L2 | A    |     |     |
| 17202   | float  | RD    | 42. harmonic current L2 | A    |     |     |
| 17204   | float  | RD    | 43. harmonic current L2 | A    |     |     |
| 17206   | float  | RD    | 44. harmonic current L2 | A    |     |     |
| 17208   | float  | RD    | 45. harmonic current L2 | A    |     |     |
| 17210   | float  | RD    | 46. harmonic current L2 | A    |     |     |
| 17212   | float  | RD    | 47. harmonic current L2 | A    |     |     |
| 17214   | float  | RD    | 48. harmonic current L2 | A    |     |     |
| 17216   | float  | RD    | 49. harmonic current L2 | A    |     |     |
| 17218   | float  | RD    | 50. harmonic current L2 | A    |     |     |
| 17220   | float  | RD    | 51. harmonic current L2 | A    |     |     |
| 17222   | float  | RD    | 52. harmonic current L2 | A    |     |     |
| 17224   | float  | RD    | 53. harmonic current L2 | A    |     |     |
| 17226   | float  | RD    | 54. harmonic current L2 | A    |     |     |
| 17228   | float  | RD    | 55. harmonic current L2 | A    |     |     |
| 17230   | float  | RD    | 56. harmonic current L2 | A    |     |     |
| 17232   | float  | RD    | 57. harmonic current L2 | A    |     |     |
| 17234   | float  | RD    | 58. harmonic current L2 | A    |     |     |
| 17236   | float  | RD    | 59. harmonic current L2 | A    |     |     |
| 17238   | float  | RD    | 60. harmonic current L2 | A    |     |     |
| 17240   | float  | RD    | 61. harmonic current L2 | A    |     |     |
| 17242   | float  | RD    | 62. harmonic current L2 | A    |     |     |
| 17244   | float  | RD    | 63. harmonic current L2 | A    |     |     |
| 17246   | float  | RD    | 64. harmonic current L2 | A    |     |     |
| 17248   | float  | RD    | 65. harmonic current L2 | A    |     |     |
| 17250   | float  | RD    | 41. harmonic current L3 | A    |     |     |
| 17252   | float  | RD    | 42. harmonic current L3 | A    |     |     |
| 17254   | float  | RD    | 43. harmonic current L3 | A    |     |     |
| 17256   | float  | RD    | 44. harmonic current L3 | A    |     |     |
| 17258   | float  | RD    | 45. harmonic current L3 | A    |     |     |
| 17260   | float  | RD    | 46. harmonic current L3 | A    |     |     |
| 17262   | float  | RD    | 47. harmonic current L3 | A    |     |     |
| 17264   | float  | RD    | 48. harmonic current L3 | A    |     |     |
| 17266   | float  | RD    | 49. harmonic current L3 | A    |     |     |
| 17268   | float  | RD    | 50. harmonic current L3 | A    |     |     |
| 17270   | float  | RD    | 51. harmonic current L3 | A    |     |     |
| 17272   | float  | RD    | 52. harmonic current L3 | A    |     |     |
| 17274   | float  | RD    | 53. harmonic current L3 | A    |     |     |
| 17276   | float  | RD    | 54. harmonic current L3 | A    |     |     |
| 17278   | float  | RD    | 55. harmonic current L3 | A    |     |     |
| 17280   | float  | RD    | 56. harmonic current L3 | A    |     |     |
| 17282   | float  | RD    | 57. harmonic current L3 | A    |     |     |
| 17284   | float  | RD    | 58. harmonic current L3 | A    |     |     |
| 17286   | float  | RD    | 59. harmonic current L3 | A    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 17288   | float  | RD    | 60. harmonic current L3 | A    |     |     |
| 17290   | float  | RD    | 61. harmonic current L3 | A    |     |     |
| 17292   | float  | RD    | 62. harmonic current L3 | A    |     |     |
| 17294   | float  | RD    | 63. harmonic current L3 | A    |     |     |
| 17296   | float  | RD    | 64. harmonic current L3 | A    |     |     |
| 17298   | float  | RD    | 65. harmonic current L3 | A    |     |     |

### Maximum values, extended fourier analysis

|       |       |    |                                     |   |  |  |
|-------|-------|----|-------------------------------------|---|--|--|
| 17600 | float | RD | Max. value: 41. harmonic voltage L1 | V |  |  |
| 17602 | float | RD | Max. value: 42. harmonic voltage L1 | V |  |  |
| 17604 | float | RD | Max. value: 43. harmonic voltage L1 | V |  |  |
| 17606 | float | RD | Max. value: 44. harmonic voltage L1 | V |  |  |
| 17608 | float | RD | Max. value: 45. harmonic voltage L1 | V |  |  |
| 17610 | float | RD | Max. value: 46. harmonic voltage L1 | V |  |  |
| 17612 | float | RD | Max. value: 47. harmonic voltage L1 | V |  |  |
| 17614 | float | RD | Max. value: 48. harmonic voltage L1 | V |  |  |
| 17616 | float | RD | Max. value: 49. harmonic voltage L1 | V |  |  |
| 17618 | float | RD | Max. value: 50. harmonic voltage L1 | V |  |  |
| 17620 | float | RD | Max. value: 51. harmonic voltage L1 | V |  |  |
| 17622 | float | RD | Max. value: 52. harmonic voltage L1 | V |  |  |
| 17624 | float | RD | Max. value: 53. harmonic voltage L1 | V |  |  |
| 17626 | float | RD | Max. value: 54. harmonic voltage L1 | V |  |  |
| 17628 | float | RD | Max. value: 55. harmonic voltage L1 | V |  |  |
| 17630 | float | RD | Max. value: 56. harmonic voltage L1 | V |  |  |
| 17632 | float | RD | Max. value: 57. harmonic voltage L1 | V |  |  |
| 17634 | float | RD | Max. value: 58. harmonic voltage L1 | V |  |  |
| 17636 | float | RD | Max. value: 59. harmonic voltage L1 | V |  |  |
| 17638 | float | RD | Max. value: 60. harmonic voltage L1 | V |  |  |
| 17640 | float | RD | Max. value: 61. harmonic voltage L1 | V |  |  |
| 17642 | float | RD | Max. value: 62. harmonic voltage L1 | V |  |  |
| 17644 | float | RD | Max. value: 63. harmonic voltage L1 | V |  |  |
| 17646 | float | RD | Max. value: 64. harmonic voltage L1 | V |  |  |
| 17648 | float | RD | Max. value: 65. harmonic voltage L1 | V |  |  |
| 17650 | float | RD | Max. value: 41. harmonic voltage L2 | V |  |  |
| 17652 | float | RD | Max. value: 42. harmonic current L3 | V |  |  |
| 17654 | float | RD | Max. value: 43. harmonic current L3 | V |  |  |
| 17656 | float | RD | Max. value: 44. harmonic current L3 | V |  |  |
| 17658 | float | RD | Max. value: 45. harmonic current L3 | V |  |  |
| 17660 | float | RD | Max. value: 46. harmonic current L3 | V |  |  |
| 17662 | float | RD | Max. value: 47. harmonic current L3 | V |  |  |
| 17664 | float | RD | Max. value: 48. harmonic current L3 | V |  |  |
| 17666 | float | RD | Max. value: 49. harmonic current L3 | V |  |  |
| 17668 | float | RD | Max. value: 50. harmonic current L3 | V |  |  |
| 17670 | float | RD | Max. value: 51. harmonic current L3 | V |  |  |
| 17672 | float | RD | Max. value: 52. harmonic current L3 | V |  |  |
| 17674 | float | RD | Max. value: 53. harmonic current L3 | V |  |  |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17676   | float  | RD    | Max. value: 54. harmonic current L3 | V    |     |     |
| 17678   | float  | RD    | Max. value: 55. harmonic current L3 | V    |     |     |
| 17680   | float  | RD    | Max. value: 56. harmonic current L3 | V    |     |     |
| 17682   | float  | RD    | Max. value: 57. harmonic current L3 | V    |     |     |
| 17684   | float  | RD    | Max. value: 58. harmonic current L3 | V    |     |     |
| 17686   | float  | RD    | Max. value: 59. harmonic current L3 | V    |     |     |
| 17688   | float  | RD    | Max. value: 60. harmonic current L3 | V    |     |     |
| 17690   | float  | RD    | Max. value: 61. harmonic current L3 | V    |     |     |
| 17692   | float  | RD    | Max. value: 62. harmonic current L3 | V    |     |     |
| 17694   | float  | RD    | Max. value: 63. harmonic current L3 | V    |     |     |
| 17696   | float  | RD    | Max. value: 64. harmonic current L3 | V    |     |     |
| 17698   | float  | RD    | Max. value: 65. harmonic current L3 | V    |     |     |
| 17700   | float  | RD    | Max. value: 41. harmonic voltage L3 | V    |     |     |
| 17702   | float  | RD    | Max. value: 42. harmonic voltage L3 | V    |     |     |
| 17704   | float  | RD    | Max. value: 43. harmonic voltage L3 | V    |     |     |
| 17706   | float  | RD    | Max. value: 44. harmonic voltage L3 | V    |     |     |
| 17708   | float  | RD    | Max. value: 45. harmonic voltage L3 | V    |     |     |
| 17710   | float  | RD    | Max. value: 46. harmonic voltage L3 | V    |     |     |
| 17712   | float  | RD    | Max. value: 47. harmonic voltage L3 | V    |     |     |
| 17714   | float  | RD    | Max. value: 48. harmonic voltage L3 | V    |     |     |
| 17716   | float  | RD    | Max. value: 49. harmonic voltage L3 | V    |     |     |
| 17718   | float  | RD    | Max. value: 50. harmonic voltage L3 | V    |     |     |
| 17720   | float  | RD    | Max. value: 51. harmonic voltage L3 | V    |     |     |
| 17722   | float  | RD    | Max. value: 52. harmonic voltage L3 | V    |     |     |
| 17724   | float  | RD    | Max. value: 53. harmonic voltage L3 | V    |     |     |
| 17726   | float  | RD    | Max. value: 54. harmonic voltage L3 | V    |     |     |
| 17728   | float  | RD    | Max. value: 55. harmonic voltage L3 | V    |     |     |
| 17730   | float  | RD    | Max. value: 56. harmonic voltage L3 | V    |     |     |
| 17732   | float  | RD    | Max. value: 57. harmonic voltage L3 | V    |     |     |
| 17734   | float  | RD    | Max. value: 58. harmonic voltage L3 | V    |     |     |
| 17736   | float  | RD    | Max. value: 59. harmonic voltage L3 | V    |     |     |
| 17738   | float  | RD    | Max. value: 60. harmonic voltage L3 | V    |     |     |
| 17740   | float  | RD    | Max. value: 61. harmonic voltage L3 | V    |     |     |
| 17742   | float  | RD    | Max. value: 62. harmonic voltage L3 | V    |     |     |
| 17744   | float  | RD    | Max. value: 63. harmonic voltage L3 | V    |     |     |
| 17746   | float  | RD    | Max. value: 64. harmonic voltage L3 | V    |     |     |
| 17748   | float  | RD    | Max. value: 65. harmonic voltage L3 | V    |     |     |
| 17750   | float  | RD    | Max. value: 41. harmonic current L1 | A    |     |     |
| 17752   | float  | RD    | Max. value: 42. harmonic current L1 | A    |     |     |
| 17754   | float  | RD    | Max. value: 43. harmonic current L1 | A    |     |     |
| 17756   | float  | RD    | Max. value: 44. harmonic current L1 | A    |     |     |
| 17758   | float  | RD    | Max. value: 45. harmonic current L1 | A    |     |     |
| 17760   | float  | RD    | Max. value: 46. harmonic current L1 | A    |     |     |
| 17762   | float  | RD    | Max. value: 47. harmonic current L1 | A    |     |     |
| 17764   | float  | RD    | Max. value: 48. harmonic current L1 | A    |     |     |
| 17766   | float  | RD    | Max. value: 49. harmonic current L1 | A    |     |     |
| 17768   | float  | RD    | Max. value: 50. harmonic current L1 | A    |     |     |
| 17770   | float  | RD    | Max. value: 51. harmonic current L1 | A    |     |     |
| 17772   | float  | RD    | Max. value: 52. harmonic current L1 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17774   | float  | RD    | Max. value: 53. harmonic current L1 | A    |     |     |
| 17776   | float  | RD    | Max. value: 54. harmonic current L1 | A    |     |     |
| 17778   | float  | RD    | Max. value: 55. harmonic current L1 | A    |     |     |
| 17780   | float  | RD    | Max. value: 56. harmonic current L1 | A    |     |     |
| 17782   | float  | RD    | Max. value: 57. harmonic current L1 | A    |     |     |
| 17784   | float  | RD    | Max. value: 58. harmonic current L1 | A    |     |     |
| 17786   | float  | RD    | Max. value: 59. harmonic current L1 | A    |     |     |
| 17788   | float  | RD    | Max. value: 60. harmonic current L1 | A    |     |     |
| 17790   | float  | RD    | Max. value: 61. harmonic current L1 | A    |     |     |
| 17792   | float  | RD    | Max. value: 62. harmonic current L1 | A    |     |     |
| 17794   | float  | RD    | Max. value: 63. harmonic current L1 | A    |     |     |
| 17796   | float  | RD    | Max. value: 64. harmonic current L1 | A    |     |     |
| 17798   | float  | RD    | Max. value: 65. harmonic current L1 | A    |     |     |
| 17800   | float  | RD    | Max. value: 41. harmonic current L2 | A    |     |     |
| 17802   | float  | RD    | Max. value: 42. harmonic current L2 | A    |     |     |
| 17804   | float  | RD    | Max. value: 43. harmonic current L2 | A    |     |     |
| 17806   | float  | RD    | Max. value: 44. harmonic current L2 | A    |     |     |
| 17808   | float  | RD    | Max. value: 45. harmonic current L2 | A    |     |     |
| 17810   | float  | RD    | Max. value: 46. harmonic current L2 | A    |     |     |
| 17812   | float  | RD    | Max. value: 47. harmonic current L2 | A    |     |     |
| 17814   | float  | RD    | Max. value: 48. harmonic current L2 | A    |     |     |
| 17816   | float  | RD    | Max. value: 49. harmonic current L2 | A    |     |     |
| 17818   | float  | RD    | Max. value: 49. harmonic current L2 | A    |     |     |
| 17820   | float  | RD    | Max. value: 49. harmonic current L2 | A    |     |     |
| 17822   | float  | RD    | Max. value: 52. harmonic current L2 | A    |     |     |
| 17824   | float  | RD    | Max. value: 53. harmonic current L2 | A    |     |     |
| 17826   | float  | RD    | Max. value: 54. harmonic current L2 | A    |     |     |
| 17828   | float  | RD    | Max. value: 55. harmonic current L2 | A    |     |     |
| 17830   | float  | RD    | Max. value: 56. harmonic current L2 | A    |     |     |
| 17832   | float  | RD    | Max. value: 57. harmonic current L2 | A    |     |     |
| 17834   | float  | RD    | Max. value: 58. harmonic current L2 | A    |     |     |
| 17836   | float  | RD    | Max. value: 59. harmonic current L2 | A    |     |     |
| 17838   | float  | RD    | Max. value: 60. harmonic current L2 | A    |     |     |
| 17840   | float  | RD    | Max. value: 61. harmonic current L2 | A    |     |     |
| 17842   | float  | RD    | Max. value: 62. harmonic current L2 | A    |     |     |
| 17844   | float  | RD    | Max. value: 63. harmonic current L2 | A    |     |     |
| 17846   | float  | RD    | Max. value: 64. harmonic current L2 | A    |     |     |
| 17848   | float  | RD    | Max. value: 65. harmonic current L2 | A    |     |     |
| 17850   | float  | RD    | Max. value: 41. harmonic current L3 | A    |     |     |
| 17852   | float  | RD    | Max. value: 42. harmonic current L3 | A    |     |     |
| 17854   | float  | RD    | Max. value: 43. harmonic current L3 | A    |     |     |
| 17856   | float  | RD    | Max. value: 44. harmonic current L3 | A    |     |     |
| 17858   | float  | RD    | Max. value: 45. harmonic current L3 | A    |     |     |
| 17860   | float  | RD    | Max. value: 46. harmonic current L3 | A    |     |     |
| 17862   | float  | RD    | Max. value: 47. harmonic current L3 | A    |     |     |
| 17864   | float  | RD    | Max. value: 48. harmonic current L3 | A    |     |     |
| 17866   | float  | RD    | Max. value: 49. harmonic current L3 | A    |     |     |
| 17868   | float  | RD    | Max. value: 50. harmonic current L3 | A    |     |     |
| 17870   | float  | RD    | Max. value: 51. harmonic current L3 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17872   | float  | RD    | Max. value: 52. harmonic current L3 | A    |     |     |
| 17874   | float  | RD    | Max. value: 53. harmonic current L3 | A    |     |     |
| 17876   | float  | RD    | Max. value: 54. harmonic current L3 | A    |     |     |
| 17878   | float  | RD    | Max. value: 55. harmonic current L3 | A    |     |     |
| 17880   | float  | RD    | Max. value: 56. harmonic current L3 | A    |     |     |
| 17882   | float  | RD    | Max. value: 57. harmonic current L3 | A    |     |     |
| 17884   | float  | RD    | Max. value: 58. harmonic current L3 | A    |     |     |
| 17886   | float  | RD    | Max. value: 59. harmonic current L3 | A    |     |     |
| 17888   | float  | RD    | Max. value: 60. harmonic current L3 | A    |     |     |
| 17890   | float  | RD    | Max. value: 61. harmonic current L3 | A    |     |     |
| 17892   | float  | RD    | Max. value: 62. harmonic current L3 | A    |     |     |
| 17894   | float  | RD    | Max. value: 63. harmonic current L3 | A    |     |     |
| 17896   | float  | RD    | Max. value: 64. harmonic current L3 | A    |     |     |
| 17898   | float  | RD    | Max. value: 65. harmonic current L3 | A    |     |     |

### Maximum values, timestamp, extended fourier analysis

|       |      |    |  |   |  |  |
|-------|------|----|--|---|--|--|
| 17900 | uint | RD | UTC timestamp: max. value, 41. harmonic voltage L1 | s |  |  |
| 17902 | uint | RD | UTC timestamp: max. value, 42. harmonic voltage L1 | s |  |  |
| 17904 | uint | RD | UTC timestamp: max. value, 43. harmonic voltage L1 | s |  |  |
| 17906 | uint | RD | UTC timestamp: max. value, 44. harmonic voltage L1 | s |  |  |
| 17908 | uint | RD | UTC timestamp: max. value, 45. harmonic voltage L1 | s |  |  |
| 17910 | uint | RD | UTC timestamp: max. value, 46. harmonic voltage L1 | s |  |  |
| 17912 | uint | RD | UTC timestamp: max. value, 47. harmonic voltage L1 | s |  |  |
| 17914 | uint | RD | UTC timestamp: max. value, 48. harmonic voltage L1 | s |  |  |
| 17916 | uint | RD | UTC timestamp: max. value, 49. harmonic voltage L1 | s |  |  |
| 17918 | uint | RD | UTC timestamp: max. value, 50. harmonic voltage L1 | s |  |  |
| 17920 | uint | RD | UTC timestamp: max. value, 51. harmonic voltage L1 | s |  |  |
| 17922 | uint | RD | UTC timestamp: max. value, 52. harmonic voltage L1 | s |  |  |
| 17924 | uint | RD | UTC timestamp: max. value, 53. harmonic voltage L1 | s |  |  |
| 17926 | uint | RD | UTC timestamp: max. value, 54. harmonic voltage L1 | s |  |  |
| 17928 | uint | RD | UTC timestamp: max. value, 55. harmonic voltage L1 | s |  |  |
| 17930 | uint | RD | UTC timestamp: max. value, 56. harmonic voltage L1 | s |  |  |
| 17932 | uint | RD | UTC timestamp: max. value, 57. harmonic voltage L1 | s |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 17934   | uint   | RD    | UTC timestamp: max. value, 58. harmonic voltage L1 | s    |     |     |
| 17936   | uint   | RD    | UTC timestamp: max. value, 59. harmonic voltage L1 | s    |     |     |
| 17938   | uint   | RD    | UTC timestamp: max. value, 60. harmonic voltage L1 | s    |     |     |
| 17940   | uint   | RD    | UTC timestamp: max. value, 61. harmonic voltage L1 | s    |     |     |
| 17942   | uint   | RD    | UTC timestamp: max. value, 62. harmonic voltage L1 | s    |     |     |
| 17944   | uint   | RD    | UTC timestamp: max. value, 63. harmonic voltage L1 | s    |     |     |
| 17946   | uint   | RD    | UTC timestamp: max. value, 64. harmonic voltage L1 | s    |     |     |
| 17948   | uint   | RD    | UTC timestamp: max. value, 65. harmonic voltage L1 | s    |     |     |
| 17950   | uint   | RD    | UTC timestamp: max. value, 41. harmonic voltage L2 | s    |     |     |
| 17952   | uint   | RD    | UTC timestamp: max. value, 42. harmonic voltage L2 | s    |     |     |
| 17954   | uint   | RD    | UTC timestamp: max. value, 43. harmonic voltage L2 | s    |     |     |
| 17956   | uint   | RD    | UTC timestamp: max. value, 44. harmonic voltage L2 | s    |     |     |
| 17958   | uint   | RD    | UTC timestamp: max. value, 45. harmonic voltage L2 | s    |     |     |
| 17960   | uint   | RD    | UTC timestamp: max. value, 46. harmonic voltage L2 | s    |     |     |
| 17962   | uint   | RD    | UTC timestamp: max. value, 47. harmonic voltage L2 | s    |     |     |
| 17964   | uint   | RD    | UTC timestamp: max. value, 48. harmonic voltage L2 | s    |     |     |
| 17966   | uint   | RD    | UTC timestamp: max. value, 49. harmonic voltage L2 | s    |     |     |
| 17968   | uint   | RD    | UTC timestamp: max. value, 50. harmonic voltage L2 | s    |     |     |
| 17970   | uint   | RD    | UTC timestamp: max. value, 51. harmonic voltage L2 | s    |     |     |
| 17972   | uint   | RD    | UTC timestamp: max. value, 52. harmonic voltage L2 | s    |     |     |
| 17974   | uint   | RD    | UTC timestamp: max. value, 53. harmonic voltage L2 | s    |     |     |
| 17976   | uint   | RD    | UTC timestamp: max. value, 54. harmonic voltage L2 | s    |     |     |
| 17978   | uint   | RD    | UTC timestamp: max. value, 55. harmonic voltage L2 | s    |     |     |
| 17980   | uint   | RD    | UTC timestamp: max. value, 56. harmonic voltage L2 | s    |     |     |
| 17982   | uint   | RD    | UTC timestamp: max. value, 57. harmonic voltage L2 | s    |     |     |
| 17984   | uint   | RD    | UTC timestamp: max. value, 58. harmonic voltage L2 | s    |     |     |
| 17986   | uint   | RD    | UTC timestamp: max. value, 59. harmonic voltage L2 | s    |     |     |
| 17988   | uint   | RD    | UTC timestamp: max. value, 60. harmonic voltage L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 17990   | uint   | RD    | UTC timestamp: max. value, 61. harmonic voltage L2 | s    |     |     |
| 17992   | uint   | RD    | UTC timestamp: max. value, 62. harmonic voltage L2 | s    |     |     |
| 17994   | uint   | RD    | UTC timestamp: max. value, 63. harmonic voltage L2 | s    |     |     |
| 17996   | uint   | RD    | UTC timestamp: max. value, 64. harmonic voltage L2 | s    |     |     |
| 17998   | uint   | RD    | UTC timestamp: max. value, 65. harmonic voltage L2 | s    |     |     |
| 18000   | uint   | RD    | UTC timestamp: max. value, 41. harmonic voltage L3 | s    |     |     |
| 18002   | uint   | RD    | UTC timestamp: max. value, 42. harmonic voltage L3 | s    |     |     |
| 18004   | uint   | RD    | UTC timestamp: max. value, 43. harmonic voltage L3 | s    |     |     |
| 18006   | uint   | RD    | UTC timestamp: max. value, 44. harmonic voltage L3 | s    |     |     |
| 18008   | uint   | RD    | UTC timestamp: max. value, 45. harmonic voltage L3 | s    |     |     |
| 18010   | uint   | RD    | UTC timestamp: max. value, 46. harmonic voltage L3 | s    |     |     |
| 18012   | uint   | RD    | UTC timestamp: max. value, 47. harmonic voltage L3 | s    |     |     |
| 18014   | uint   | RD    | UTC timestamp: max. value, 48. harmonic voltage L3 | s    |     |     |
| 18016   | uint   | RD    | UTC timestamp: max. value, 49. harmonic voltage L3 | s    |     |     |
| 18018   | uint   | RD    | UTC timestamp: max. value, 50. harmonic voltage L3 | s    |     |     |
| 18020   | uint   | RD    | UTC timestamp: max. value, 51. harmonic voltage L3 | s    |     |     |
| 18022   | uint   | RD    | UTC timestamp: max. value, 52. harmonic voltage L3 | s    |     |     |
| 18024   | uint   | RD    | UTC timestamp: max. value, 53. harmonic voltage L3 | s    |     |     |
| 18026   | uint   | RD    | UTC timestamp: max. value, 54. harmonic voltage L3 | s    |     |     |
| 18028   | uint   | RD    | UTC timestamp: max. value, 55. harmonic voltage L3 | s    |     |     |
| 18030   | uint   | RD    | UTC timestamp: max. value, 56. harmonic voltage L3 | s    |     |     |
| 18032   | uint   | RD    | UTC timestamp: max. value, 57. harmonic voltage L3 | s    |     |     |
| 18034   | uint   | RD    | UTC timestamp: max. value, 58. harmonic voltage L3 | s    |     |     |
| 18036   | uint   | RD    | UTC timestamp: max. value, 59. harmonic voltage L3 | s    |     |     |
| 18038   | uint   | RD    | UTC timestamp: max. value, 60. harmonic voltage L3 | s    |     |     |
| 18040   | uint   | RD    | UTC timestamp: max. value, 61. harmonic voltage L3 | s    |     |     |
| 18042   | uint   | RD    | UTC timestamp: max. value, 62. harmonic voltage L3 | s    |     |     |
| 18044   | uint   | RD    | UTC timestamp: max. value, 63. harmonic voltage L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18046   | uint   | RD    | UTC timestamp: max. value, 64. harmonic voltage L3 | s    |     |     |
| 18048   | uint   | RD    | UTC timestamp: max. value, 65. harmonic voltage L3 | s    |     |     |
| 18050   | uint   | RD    | UTC timestamp: max. value, 41. harmonic current L1 | s    |     |     |
| 18052   | uint   | RD    | UTC timestamp: max. value, 42. harmonic current L1 | s    |     |     |
| 18054   | uint   | RD    | UTC timestamp: max. value, 43. harmonic current L1 | s    |     |     |
| 18056   | uint   | RD    | UTC timestamp: max. value, 44. harmonic current L1 | s    |     |     |
| 18058   | uint   | RD    | UTC timestamp: max. value, 45. harmonic current L1 | s    |     |     |
| 18060   | uint   | RD    | UTC timestamp: max. value, 46. harmonic current L1 | s    |     |     |
| 18062   | uint   | RD    | UTC timestamp: max. value, 47. harmonic current L1 | s    |     |     |
| 18064   | uint   | RD    | UTC timestamp: max. value, 48. harmonic current L1 | s    |     |     |
| 18066   | uint   | RD    | UTC timestamp: max. value, 49. harmonic current L1 | s    |     |     |
| 18068   | uint   | RD    | UTC timestamp: max. value, 50. harmonic current L1 | s    |     |     |
| 18070   | uint   | RD    | UTC timestamp: max. value, 51. harmonic current L1 | s    |     |     |
| 18072   | uint   | RD    | UTC timestamp: max. value, 52. harmonic current L1 | s    |     |     |
| 18074   | uint   | RD    | UTC timestamp: max. value, 53. harmonic current L1 | s    |     |     |
| 18076   | uint   | RD    | UTC timestamp: max. value, 54. harmonic current L1 | s    |     |     |
| 18078   | uint   | RD    | UTC timestamp: max. value, 55. harmonic current L1 | s    |     |     |
| 18080   | uint   | RD    | UTC timestamp: max. value, 56. harmonic current L1 | s    |     |     |
| 18082   | uint   | RD    | UTC timestamp: max. value, 57. harmonic current L1 | s    |     |     |
| 18084   | uint   | RD    | UTC timestamp: max. value, 58. harmonic current L1 | s    |     |     |
| 18086   | uint   | RD    | UTC timestamp: max. value, 59. harmonic current L1 | s    |     |     |
| 18088   | uint   | RD    | UTC timestamp: max. value, 60. harmonic current L1 | s    |     |     |
| 18090   | uint   | RD    | UTC timestamp: max. value, 61. harmonic current L1 | s    |     |     |
| 18092   | uint   | RD    | UTC timestamp: max. value, 62. harmonic current L1 | s    |     |     |
| 18094   | uint   | RD    | UTC timestamp: max. value, 63. harmonic current L1 | s    |     |     |
| 18096   | uint   | RD    | UTC timestamp: max. value, 64. harmonic current L1 | s    |     |     |
| 18098   | uint   | RD    | UTC timestamp: max. value, 65. harmonic current L1 | s    |     |     |
| 18100   | uint   | RD    | UTC timestamp: max. value, 41. harmonic current L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18102   | uint   | RD    | UTC timestamp: max. value, 42. harmonic current L2 | s    |     |     |
| 18104   | uint   | RD    | UTC timestamp: max. value, 43. harmonic current L2 | s    |     |     |
| 18106   | uint   | RD    | UTC timestamp: max. value, 44. harmonic current L2 | s    |     |     |
| 18108   | uint   | RD    | UTC timestamp: max. value, 45. harmonic current L2 | s    |     |     |
| 18110   | uint   | RD    | UTC timestamp: max. value, 46. harmonic current L2 | s    |     |     |
| 18112   | uint   | RD    | UTC timestamp: max. value, 47. harmonic current L2 | s    |     |     |
| 18114   | uint   | RD    | UTC timestamp: max. value, 48. harmonic current L2 | s    |     |     |
| 18116   | uint   | RD    | UTC timestamp: max. value, 49. harmonic current L2 | s    |     |     |
| 18118   | uint   | RD    | UTC timestamp: max. value, 50. harmonic current L2 | s    |     |     |
| 18120   | uint   | RD    | UTC timestamp: max. value, 51. harmonic current L2 | s    |     |     |
| 18122   | uint   | RD    | UTC timestamp: max. value, 52. harmonic current L2 | s    |     |     |
| 18124   | uint   | RD    | UTC timestamp: max. value, 53. harmonic current L2 | s    |     |     |
| 18126   | uint   | RD    | UTC timestamp: max. value, 54. harmonic current L2 | s    |     |     |
| 18128   | uint   | RD    | UTC timestamp: max. value, 55. harmonic current L2 | s    |     |     |
| 18130   | uint   | RD    | UTC timestamp: max. value, 56. harmonic current L2 | s    |     |     |
| 18132   | uint   | RD    | UTC timestamp: max. value, 57. harmonic current L2 | s    |     |     |
| 18134   | uint   | RD    | UTC timestamp: max. value, 58. harmonic current L2 | s    |     |     |
| 18136   | uint   | RD    | UTC timestamp: max. value, 59. harmonic current L2 | s    |     |     |
| 18138   | uint   | RD    | UTC timestamp: max. value, 60. harmonic current L2 | s    |     |     |
| 18140   | uint   | RD    | UTC timestamp: max. value, 61. harmonic current L2 | s    |     |     |
| 18142   | uint   | RD    | UTC timestamp: max. value, 62. harmonic current L2 | s    |     |     |
| 18144   | uint   | RD    | UTC timestamp: max. value, 63. harmonic current L2 | s    |     |     |
| 18146   | uint   | RD    | UTC timestamp: max. value, 64. harmonic current L2 | s    |     |     |
| 18148   | uint   | RD    | UTC timestamp: max. value, 65. harmonic current L2 | s    |     |     |
| 18150   | uint   | RD    | UTC timestamp: max. value, 41. harmonic current L3 | s    |     |     |
| 18152   | uint   | RD    | UTC timestamp: max. value, 42. harmonic current L3 | s    |     |     |
| 18154   | uint   | RD    | UTC timestamp: max. value, 43. harmonic current L3 | s    |     |     |
| 18156   | uint   | RD    | UTC timestamp: max. value, 44. harmonic current L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18158   | uint   | RD    | UTC timestamp: max. value, 45. harmonic current L3 | s    |     |     |
| 18160   | uint   | RD    | UTC timestamp: max. value, 46. harmonic current L3 | s    |     |     |
| 18162   | uint   | RD    | UTC timestamp: max. value, 47. harmonic current L3 | s    |     |     |
| 18164   | uint   | RD    | UTC timestamp: max. value, 48. harmonic current L3 | s    |     |     |
| 18166   | uint   | RD    | UTC timestamp: max. value, 49. harmonic current L3 | s    |     |     |
| 18168   | uint   | RD    | UTC timestamp: max. value, 50. harmonic current L3 | s    |     |     |
| 18170   | uint   | RD    | UTC timestamp: max. value, 51. harmonic current L3 | s    |     |     |
| 18172   | uint   | RD    | UTC timestamp: max. value, 52. harmonic current L3 | s    |     |     |
| 18174   | uint   | RD    | UTC timestamp: max. value, 53. harmonic current L3 | s    |     |     |
| 18176   | uint   | RD    | UTC timestamp: max. value, 54. harmonic current L3 | s    |     |     |
| 18178   | uint   | RD    | UTC timestamp: max. value, 55. harmonic current L3 | s    |     |     |
| 18180   | uint   | RD    | UTC timestamp: max. value, 56. harmonic current L3 | s    |     |     |
| 18182   | uint   | RD    | UTC timestamp: max. value, 57. harmonic current L3 | s    |     |     |
| 18184   | uint   | RD    | UTC timestamp: max. value, 58. harmonic current L3 | s    |     |     |
| 18186   | uint   | RD    | UTC timestamp: max. value, 59. harmonic current L3 | s    |     |     |
| 18188   | uint   | RD    | UTC timestamp: max. value, 60. harmonic current L3 | s    |     |     |
| 18190   | uint   | RD    | UTC timestamp: max. value, 61. harmonic current L3 | s    |     |     |
| 18192   | uint   | RD    | UTC timestamp: max. value, 62. harmonic current L3 | s    |     |     |
| 18194   | uint   | RD    | UTC timestamp: max. value, 63. harmonic current L3 | s    |     |     |
| 18196   | uint   | RD    | UTC timestamp: max. value, 64. harmonic current L3 | s    |     |     |
| 18198   | uint   | RD    | UTC timestamp: max. value, 65. harmonic current L3 | s    |     |     |

### Minimum values, extended fourier analysis

|       |       |    |                                     |   |  |  |
|-------|-------|----|-------------------------------------|---|--|--|
| 18200 | float | RD | Min. value, 41. harmonic voltage L1 | V |  |  |
| 18202 | float | RD | Min. value, 42. harmonic voltage L1 | V |  |  |
| 18204 | float | RD | Min. value, 43. harmonic voltage L1 | V |  |  |
| 18206 | float | RD | Min. value, 44. harmonic voltage L1 | V |  |  |
| 18208 | float | RD | Min. value, 45. harmonic voltage L1 | V |  |  |
| 18210 | float | RD | Min. value, 46. harmonic voltage L1 | V |  |  |
| 18212 | float | RD | Min. value, 47. harmonic voltage L1 | V |  |  |
| 18214 | float | RD | Min. value, 48. harmonic voltage L1 | V |  |  |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 18216   | float  | RD    | Min. value, 49. harmonic voltage L1 | V    |     |     |
| 18218   | float  | RD    | Min. value, 50. harmonic voltage L1 | V    |     |     |
| 18220   | float  | RD    | Min. value, 51. harmonic voltage L1 | V    |     |     |
| 18222   | float  | RD    | Min. value, 52. harmonic voltage L1 | V    |     |     |
| 18224   | float  | RD    | Min. value, 53. harmonic voltage L1 | V    |     |     |
| 18226   | float  | RD    | Min. value, 54. harmonic voltage L1 | V    |     |     |
| 18228   | float  | RD    | Min. value, 55. harmonic voltage L1 | V    |     |     |
| 18230   | float  | RD    | Min. value, 56. harmonic voltage L1 | V    |     |     |
| 18232   | float  | RD    | Min. value, 57. harmonic voltage L1 | V    |     |     |
| 18234   | float  | RD    | Min. value, 58. harmonic voltage L1 | V    |     |     |
| 18236   | float  | RD    | Min. value, 59. harmonic voltage L1 | V    |     |     |
| 18238   | float  | RD    | Min. value, 60. harmonic voltage L1 | V    |     |     |
| 18240   | float  | RD    | Min. value, 61. harmonic voltage L1 | V    |     |     |
| 18242   | float  | RD    | Min. value, 62. harmonic voltage L1 | V    |     |     |
| 18244   | float  | RD    | Min. value, 63. harmonic voltage L1 | V    |     |     |
| 18246   | float  | RD    | Min. value, 64. harmonic voltage L1 | V    |     |     |
| 18248   | float  | RD    | Min. value, 65. harmonic voltage L1 | V    |     |     |
| 18250   | float  | RD    | Min. value, 41. harmonic voltage L2 | V    |     |     |
| 18252   | float  | RD    | Min. value, 42. harmonic voltage L2 | V    |     |     |
| 18254   | float  | RD    | Min. value, 43. harmonic voltage L2 | V    |     |     |
| 18256   | float  | RD    | Min. value, 44. harmonic voltage L2 | V    |     |     |
| 18258   | float  | RD    | Min. value, 45. harmonic voltage L2 | V    |     |     |
| 18260   | float  | RD    | Min. value, 46. harmonic voltage L2 | V    |     |     |
| 18262   | float  | RD    | Min. value, 47. harmonic voltage L2 | V    |     |     |
| 18264   | float  | RD    | Min. value, 48. harmonic voltage L2 | V    |     |     |
| 18266   | float  | RD    | Min. value, 49. harmonic voltage L2 | V    |     |     |
| 18268   | float  | RD    | Min. value, 50. harmonic voltage L2 | V    |     |     |
| 18270   | float  | RD    | Min. value, 51. harmonic voltage L2 | V    |     |     |
| 18272   | float  | RD    | Min. value, 52. harmonic voltage L2 | V    |     |     |
| 18274   | float  | RD    | Min. value, 53. harmonic voltage L2 | V    |     |     |
| 18276   | float  | RD    | Min. value, 54. harmonic voltage L2 | V    |     |     |
| 18278   | float  | RD    | Min. value, 55. harmonic voltage L2 | V    |     |     |
| 18280   | float  | RD    | Min. value, 56. harmonic voltage L2 | V    |     |     |
| 18282   | float  | RD    | Min. value, 57. harmonic voltage L2 | V    |     |     |
| 18284   | float  | RD    | Min. value, 58. harmonic voltage L2 | V    |     |     |
| 18286   | float  | RD    | Min. value, 59. harmonic voltage L2 | V    |     |     |
| 18288   | float  | RD    | Min. value, 60. harmonic voltage L2 | V    |     |     |
| 18290   | float  | RD    | Min. value, 61. harmonic voltage L2 | V    |     |     |
| 18292   | float  | RD    | Min. value, 62. harmonic voltage L2 | V    |     |     |
| 18294   | float  | RD    | Min. value, 63. harmonic voltage L2 | V    |     |     |
| 18296   | float  | RD    | Min. value, 64. harmonic voltage L2 | V    |     |     |
| 18298   | float  | RD    | Min. value, 65. harmonic voltage L2 | V    |     |     |
| 18300   | float  | RD    | Min. value, 41. harmonic voltage L3 | V    |     |     |
| 18302   | float  | RD    | Min. value, 42. harmonic voltage L3 | V    |     |     |
| 18304   | float  | RD    | Min. value, 43. harmonic voltage L3 | V    |     |     |
| 18306   | float  | RD    | Min. value, 44. harmonic voltage L3 | V    |     |     |
| 18308   | float  | RD    | Min. value, 45. harmonic voltage L3 | V    |     |     |
| 18310   | float  | RD    | Min. value, 46. harmonic voltage L3 | V    |     |     |
| 18312   | float  | RD    | Min. value, 47. harmonic voltage L3 | V    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 18314   | float  | RD    | Min. value, 48. harmonic voltage L3 | V    |     |     |
| 18316   | float  | RD    | Min. value, 49. harmonic voltage L3 | V    |     |     |
| 18318   | float  | RD    | Min. value, 50. harmonic voltage L3 | V    |     |     |
| 18320   | float  | RD    | Min. value, 51. harmonic voltage L3 | V    |     |     |
| 18322   | float  | RD    | Min. value, 52. harmonic voltage L3 | V    |     |     |
| 18324   | float  | RD    | Min. value, 53. harmonic voltage L3 | V    |     |     |
| 18326   | float  | RD    | Min. value, 54. harmonic voltage L3 | V    |     |     |
| 18328   | float  | RD    | Min. value, 55. harmonic voltage L3 | V    |     |     |
| 18330   | float  | RD    | Min. value, 56. harmonic voltage L3 | V    |     |     |
| 18332   | float  | RD    | Min. value, 57. harmonic voltage L3 | V    |     |     |
| 18334   | float  | RD    | Min. value, 58. harmonic voltage L3 | V    |     |     |
| 18336   | float  | RD    | Min. value, 59. harmonic voltage L3 | V    |     |     |
| 18338   | float  | RD    | Min. value, 60. harmonic voltage L3 | V    |     |     |
| 18340   | float  | RD    | Min. value, 61. harmonic voltage L3 | V    |     |     |
| 18342   | float  | RD    | Min. value, 62. harmonic voltage L3 | V    |     |     |
| 18344   | float  | RD    | Min. value, 63. harmonic voltage L3 | V    |     |     |
| 18346   | float  | RD    | Min. value, 64. harmonic voltage L3 | V    |     |     |
| 18348   | float  | RD    | Min. value, 65. harmonic voltage L3 | V    |     |     |

### Minimum values, timestamp, extended fourier analysis

|       |      |    |  |   |  |  |
|-------|------|----|--|---|--|--|
| 18350 | uint | RD | UTC timestamp: min. value, 41. harmonic voltage L1 | s |  |  |
| 18352 | uint | RD | UTC timestamp: min. value, 42. harmonic voltage L1 | s |  |  |
| 18354 | uint | RD | UTC timestamp: min. value, 43. harmonic voltage L1 | s |  |  |
| 18356 | uint | RD | UTC timestamp: min. value, 44. harmonic voltage L1 | s |  |  |
| 18358 | uint | RD | UTC timestamp: min. value, 45. harmonic voltage L1 | s |  |  |
| 18360 | uint | RD | UTC timestamp: min. value, 46. harmonic voltage L1 | s |  |  |
| 18362 | uint | RD | UTC timestamp: min. value, 47. harmonic voltage L1 | s |  |  |
| 18364 | uint | RD | UTC timestamp: min. value, 48. harmonic voltage L1 | s |  |  |
| 18366 | uint | RD | UTC timestamp: min. value, 49. harmonic voltage L1 | s |  |  |
| 18368 | uint | RD | UTC timestamp: min. value, 50. harmonic voltage L1 | s |  |  |
| 18370 | uint | RD | UTC timestamp: min. value, 51. harmonic voltage L1 | s |  |  |
| 18372 | uint | RD | UTC timestamp: min. value, 52. harmonic voltage L1 | s |  |  |
| 18374 | uint | RD | UTC timestamp: min. value, 53. harmonic voltage L1 | s |  |  |
| 18376 | uint | RD | UTC timestamp: min. value, 54. harmonic voltage L1 | s |  |  |
| 18378 | uint | RD | UTC timestamp: min. value, 55. harmonic voltage L1 | s |  |  |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18380   | uint   | RD    | UTC timestamp: min. value, 56. harmonic voltage L1 | s    |     |     |
| 18382   | uint   | RD    | UTC timestamp: min. value, 57. harmonic voltage L1 | s    |     |     |
| 18384   | uint   | RD    | UTC timestamp: min. value, 58. harmonic voltage L1 | s    |     |     |
| 18386   | uint   | RD    | UTC timestamp: min. value, 59. harmonic voltage L1 | s    |     |     |
| 18388   | uint   | RD    | UTC timestamp: min. value, 60. harmonic voltage L1 | s    |     |     |
| 18390   | uint   | RD    | UTC timestamp: min. value, 61. harmonic voltage L1 | s    |     |     |
| 18392   | uint   | RD    | UTC timestamp: min. value, 62. harmonic voltage L1 | s    |     |     |
| 18394   | uint   | RD    | UTC timestamp: min. value, 63. harmonic voltage L1 | s    |     |     |
| 18396   | uint   | RD    | UTC timestamp: min. value, 64. harmonic voltage L1 | s    |     |     |
| 18398   | uint   | RD    | UTC timestamp: min. value, 65. harmonic voltage L1 | s    |     |     |
| 18400   | uint   | RD    | UTC timestamp: min. value, 41. harmonic voltage L2 | s    |     |     |
| 18402   | uint   | RD    | UTC timestamp: min. value, 42. harmonic voltage L2 | s    |     |     |
| 18404   | uint   | RD    | UTC timestamp: min. value, 43. harmonic voltage L2 | s    |     |     |
| 18406   | uint   | RD    | UTC timestamp: min. value, 44. harmonic voltage L2 | s    |     |     |
| 18408   | uint   | RD    | UTC timestamp: min. value, 45. harmonic voltage L2 | s    |     |     |
| 18410   | uint   | RD    | UTC timestamp: min. value, 46. harmonic voltage L2 | s    |     |     |
| 18412   | uint   | RD    | UTC timestamp: min. value, 47. harmonic voltage L2 | s    |     |     |
| 18414   | uint   | RD    | UTC timestamp: min. value, 48. harmonic voltage L2 | s    |     |     |
| 18416   | uint   | RD    | UTC timestamp: min. value, 49. harmonic voltage L2 | s    |     |     |
| 18418   | uint   | RD    | UTC timestamp: min. value, 50. harmonic voltage L2 | s    |     |     |
| 18420   | uint   | RD    | UTC timestamp: min. value, 51. harmonic voltage L2 | s    |     |     |
| 18422   | uint   | RD    | UTC timestamp: min. value, 52. harmonic voltage L2 | s    |     |     |
| 18424   | uint   | RD    | UTC timestamp: min. value, 53. harmonic voltage L2 | s    |     |     |
| 18426   | uint   | RD    | UTC timestamp: min. value, 54. harmonic voltage L2 | s    |     |     |
| 18428   | uint   | RD    | UTC timestamp: min. value, 55. harmonic voltage L2 | s    |     |     |
| 18430   | uint   | RD    | UTC timestamp: min. value, 56. harmonic voltage L2 | s    |     |     |
| 18432   | uint   | RD    | UTC timestamp: min. value, 57. harmonic voltage L2 | s    |     |     |
| 18434   | uint   | RD    | UTC timestamp: min. value, 58. harmonic voltage L2 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18436   | uint   | RD    | UTC timestamp: min. value, 59. harmonic voltage L2 | s    |     |     |
| 18438   | uint   | RD    | UTC timestamp: min. value, 60. harmonic voltage L2 | s    |     |     |
| 18440   | uint   | RD    | UTC timestamp: min. value, 61. harmonic voltage L2 | s    |     |     |
| 18442   | uint   | RD    | UTC timestamp: min. value, 62. harmonic voltage L2 | s    |     |     |
| 18444   | uint   | RD    | UTC timestamp: min. value, 63. harmonic voltage L2 | s    |     |     |
| 18446   | uint   | RD    | UTC timestamp: min. value, 64. harmonic voltage L2 | s    |     |     |
| 18448   | uint   | RD    | UTC timestamp: min. value, 65. harmonic voltage L2 | s    |     |     |
| 18450   | uint   | RD    | UTC timestamp: min. value, 41. harmonic voltage L3 | s    |     |     |
| 18452   | uint   | RD    | UTC timestamp: min. value, 42. harmonic voltage L3 | s    |     |     |
| 18454   | uint   | RD    | UTC timestamp: min. value, 43. harmonic voltage L3 | s    |     |     |
| 18456   | uint   | RD    | UTC timestamp: min. value, 44. harmonic voltage L3 | s    |     |     |
| 18458   | uint   | RD    | UTC timestamp: min. value, 45. harmonic voltage L3 | s    |     |     |
| 18460   | uint   | RD    | UTC timestamp: min. value, 46. harmonic voltage L3 | s    |     |     |
| 18462   | uint   | RD    | UTC timestamp: min. value, 47. harmonic voltage L3 | s    |     |     |
| 18464   | uint   | RD    | UTC timestamp: min. value, 48. harmonic voltage L3 | s    |     |     |
| 18466   | uint   | RD    | UTC timestamp: min. value, 49. harmonic voltage L3 | s    |     |     |
| 18468   | uint   | RD    | UTC timestamp: min. value, 50. harmonic voltage L3 | s    |     |     |
| 18470   | uint   | RD    | UTC timestamp: min. value, 51. harmonic voltage L3 | s    |     |     |
| 18472   | uint   | RD    | UTC timestamp: min. value, 52. harmonic voltage L3 | s    |     |     |
| 18474   | uint   | RD    | UTC timestamp: min. value, 53. harmonic voltage L3 | s    |     |     |
| 18476   | uint   | RD    | UTC timestamp: min. value, 54. harmonic voltage L3 | s    |     |     |
| 18478   | uint   | RD    | UTC timestamp: min. value, 55. harmonic voltage L3 | s    |     |     |
| 18480   | uint   | RD    | UTC timestamp: min. value, 56. harmonic voltage L3 | s    |     |     |
| 18482   | uint   | RD    | UTC timestamp: min. value, 57. harmonic voltage L3 | s    |     |     |
| 18484   | uint   | RD    | UTC timestamp: min. value, 58. harmonic voltage L3 | s    |     |     |
| 18486   | uint   | RD    | UTC timestamp: min. value, 59. harmonic voltage L3 | s    |     |     |
| 18488   | uint   | RD    | UTC timestamp: min. value, 60. harmonic voltage L3 | s    |     |     |
| 18490   | uint   | RD    | UTC timestamp: min. value, 61. harmonic voltage L3 | s    |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 18492   | uint   | RD    | UTC timestamp: min. value, 62. harmonic voltage L3 | s    |     |     |
| 18494   | uint   | RD    | UTC timestamp: min. value, 63. harmonic voltage L3 | s    |     |     |
| 18496   | uint   | RD    | UTC timestamp: min. value, 64. harmonic voltage L3 | s    |     |     |
| 18498   | uint   | RD    | UTC timestamp: min. value, 65. harmonic voltage L3 | s    |     |     |

### Moving mean values, extended fourier analysis

|       |       |    |                                     |   |  |  |
|-------|-------|----|-------------------------------------|---|--|--|
| 17300 | float | RD | Mean value: 41. harmonic voltage L1 | V |  |  |
| 17302 | float | RD | Mean value: 42. harmonic voltage L1 | V |  |  |
| 17304 | float | RD | Max. value: 43. harmonic voltage L1 | V |  |  |
| 17306 | float | RD | Max. value: 44. harmonic voltage L1 | V |  |  |
| 17308 | float | RD | Max. value: 45. harmonic voltage L1 | V |  |  |
| 17310 | float | RD | Max. value: 46. harmonic voltage L1 | V |  |  |
| 17312 | float | RD | Max. value: 47. harmonic voltage L1 | V |  |  |
| 17314 | float | RD | Max. value: 48. harmonic voltage L1 | V |  |  |
| 17316 | float | RD | Max. value: 49. harmonic voltage L1 | V |  |  |
| 17318 | float | RD | Max. value: 50. harmonic voltage L1 | V |  |  |
| 17320 | float | RD | Max. value: 51. harmonic voltage L1 | V |  |  |
| 17322 | float | RD | Max. value: 52. harmonic voltage L1 | V |  |  |
| 17324 | float | RD | Max. value: 53. harmonic voltage L1 | V |  |  |
| 17326 | float | RD | Max. value: 54. harmonic voltage L1 | V |  |  |
| 17328 | float | RD | Max. value: 55. harmonic voltage L1 | V |  |  |
| 17330 | float | RD | Max. value: 56. harmonic voltage L1 | V |  |  |
| 17332 | float | RD | Max. value: 57. harmonic voltage L1 | V |  |  |
| 17334 | float | RD | Max. value: 58. harmonic voltage L1 | V |  |  |
| 17336 | float | RD | Max. value: 59. harmonic voltage L1 | V |  |  |
| 17338 | float | RD | Max. value: 60. harmonic voltage L1 | V |  |  |
| 17340 | float | RD | Max. value: 61. harmonic voltage L1 | V |  |  |
| 17342 | float | RD | Max. value: 62. harmonic voltage L1 | V |  |  |
| 17344 | float | RD | Max. value: 63. harmonic voltage L1 | V |  |  |
| 17346 | float | RD | Max. value: 64. harmonic voltage L1 | V |  |  |
| 17348 | float | RD | Max. value: 65. harmonic voltage L1 | V |  |  |
| 17350 | float | RD | Mean value: 41. harmonic voltage L2 | V |  |  |
| 17352 | float | RD | Mean value: 42. harmonic voltage L2 | V |  |  |
| 17354 | float | RD | Mean value: 43. harmonic voltage L2 | V |  |  |
| 17356 | float | RD | Mean value: 44. harmonic voltage L2 | V |  |  |
| 17358 | float | RD | Mean value: 45. harmonic voltage L2 | V |  |  |
| 17360 | float | RD | Mean value: 46. harmonic voltage L2 | V |  |  |
| 17362 | float | RD | Mean value: 47. harmonic voltage L2 | V |  |  |
| 17364 | float | RD | Mean value: 48. harmonic voltage L2 | V |  |  |
| 17366 | float | RD | Mean value: 49. harmonic voltage L2 | V |  |  |
| 17368 | float | RD | Mean value: 50. harmonic voltage L2 | V |  |  |
| 17370 | float | RD | Mean value: 51. harmonic voltage L2 | V |  |  |
| 17372 | float | RD | Mean value: 52. harmonic voltage L2 | V |  |  |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17374   | float  | RD    | Mean value: 53. harmonic voltage L2 | V    |     |     |
| 17376   | float  | RD    | Mean value: 54. harmonic voltage L2 | V    |     |     |
| 17378   | float  | RD    | Mean value: 55. harmonic voltage L2 | V    |     |     |
| 17380   | float  | RD    | Mean value: 56. harmonic voltage L2 | V    |     |     |
| 17382   | float  | RD    | Mean value: 57. harmonic voltage L2 | V    |     |     |
| 17384   | float  | RD    | Mean value: 58. harmonic voltage L2 | V    |     |     |
| 17386   | float  | RD    | Mean value: 59. harmonic voltage L2 | V    |     |     |
| 17388   | float  | RD    | Mean value: 60. harmonic voltage L2 | V    |     |     |
| 17390   | float  | RD    | Mean value: 61. harmonic voltage L2 | V    |     |     |
| 17392   | float  | RD    | Mean value: 62. harmonic voltage L2 | V    |     |     |
| 17394   | float  | RD    | Mean value: 63. harmonic voltage L2 | V    |     |     |
| 17396   | float  | RD    | Mean value: 64. harmonic voltage L2 | V    |     |     |
| 17398   | float  | RD    | Mean value: 65. harmonic voltage L2 | V    |     |     |
| 17400   | float  | RD    | Mean value: 41. harmonic voltage L3 | V    |     |     |
| 17402   | float  | RD    | Mean value: 42. harmonic voltage L3 | V    |     |     |
| 17404   | float  | RD    | Mean value: 43. harmonic voltage L3 | V    |     |     |
| 17406   | float  | RD    | Mean value: 44. harmonic voltage L3 | V    |     |     |
| 17408   | float  | RD    | Mean value: 45. harmonic voltage L3 | V    |     |     |
| 17410   | float  | RD    | Mean value: 46. harmonic voltage L3 | V    |     |     |
| 17412   | float  | RD    | Mean value: 47. harmonic voltage L3 | V    |     |     |
| 17414   | float  | RD    | Mean value: 48. harmonic voltage L3 | V    |     |     |
| 17416   | float  | RD    | Mean value: 49. harmonic voltage L3 | V    |     |     |
| 17418   | float  | RD    | Mean value: 50. harmonic voltage L3 | V    |     |     |
| 17420   | float  | RD    | Mean value: 51. harmonic voltage L3 | V    |     |     |
| 17422   | float  | RD    | Mean value: 52. harmonic voltage L3 | V    |     |     |
| 17424   | float  | RD    | Mean value: 53. harmonic voltage L3 | V    |     |     |
| 17426   | float  | RD    | Mean value: 54. harmonic voltage L3 | V    |     |     |
| 17428   | float  | RD    | Mean value: 55. harmonic voltage L3 | V    |     |     |
| 17430   | float  | RD    | Mean value: 56. harmonic voltage L3 | V    |     |     |
| 17432   | float  | RD    | Mean value: 57. harmonic voltage L3 | V    |     |     |
| 17434   | float  | RD    | Mean value: 58. harmonic voltage L3 | V    |     |     |
| 17436   | float  | RD    | Mean value: 59. harmonic voltage L3 | V    |     |     |
| 17438   | float  | RD    | Mean value: 60. harmonic voltage L3 | V    |     |     |
| 17440   | float  | RD    | Mean value: 61. harmonic voltage L3 | V    |     |     |
| 17442   | float  | RD    | Mean value: 62. harmonic voltage L3 | V    |     |     |
| 17444   | float  | RD    | Mean value: 63. harmonic voltage L3 | V    |     |     |
| 17446   | float  | RD    | Mean value: 64. harmonic voltage L3 | V    |     |     |
| 17448   | float  | RD    | Mean value: 65. harmonic voltage L3 | V    |     |     |
| 17450   | float  | RD    | Mean value: 41. harmonic current L1 | A    |     |     |
| 17452   | float  | RD    | Mean value: 42. harmonic current L1 | A    |     |     |
| 17454   | float  | RD    | Mean value: 43. harmonic current L1 | A    |     |     |
| 17456   | float  | RD    | Mean value: 44. harmonic current L1 | A    |     |     |
| 17458   | float  | RD    | Mean value: 45. harmonic current L1 | A    |     |     |
| 17460   | float  | RD    | Mean value: 46. harmonic current L1 | A    |     |     |
| 17462   | float  | RD    | Mean value: 47. harmonic current L1 | A    |     |     |
| 17464   | float  | RD    | Mean value: 48. harmonic current L1 | A    |     |     |
| 17466   | float  | RD    | Mean value: 49. harmonic current L1 | A    |     |     |
| 17468   | float  | RD    | Mean value: 50. harmonic current L1 | A    |     |     |
| 17470   | float  | RD    | Mean value: 51. harmonic current L1 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17472   | float  | RD    | Mean value: 52. harmonic current L1 | A    |     |     |
| 17474   | float  | RD    | Mean value: 53. harmonic current L1 | A    |     |     |
| 17476   | float  | RD    | Mean value: 54. harmonic current L1 | A    |     |     |
| 17478   | float  | RD    | Mean value: 55. harmonic current L1 | A    |     |     |
| 17480   | float  | RD    | Mean value: 56. harmonic current L1 | A    |     |     |
| 17482   | float  | RD    | Mean value: 57. harmonic current L1 | A    |     |     |
| 17484   | float  | RD    | Mean value: 58. harmonic current L1 | A    |     |     |
| 17486   | float  | RD    | Mean value: 59. harmonic current L1 | A    |     |     |
| 17488   | float  | RD    | Mean value: 60. harmonic current L1 | A    |     |     |
| 17490   | float  | RD    | Mean value: 61. harmonic current L1 | A    |     |     |
| 17492   | float  | RD    | Mean value: 62. harmonic current L1 | A    |     |     |
| 17494   | float  | RD    | Mean value: 63. harmonic current L1 | A    |     |     |
| 17496   | float  | RD    | Mean value: 64. harmonic current L1 | A    |     |     |
| 17498   | float  | RD    | Mean value: 65. harmonic current L1 | A    |     |     |
| 17500   | float  | RD    | Mean value: 41. harmonic current L2 | A    |     |     |
| 17502   | float  | RD    | Mean value: 42. harmonic current L2 | A    |     |     |
| 17504   | float  | RD    | Mean value: 43. harmonic current L2 | A    |     |     |
| 17506   | float  | RD    | Mean value: 44. harmonic current L2 | A    |     |     |
| 17508   | float  | RD    | Mean value: 45. harmonic current L2 | A    |     |     |
| 17510   | float  | RD    | Mean value: 46. harmonic current L2 | A    |     |     |
| 17512   | float  | RD    | Mean value: 47. harmonic current L2 | A    |     |     |
| 17514   | float  | RD    | Mean value: 48. harmonic current L2 | A    |     |     |
| 17516   | float  | RD    | Mean value: 49. harmonic current L2 | A    |     |     |
| 17518   | float  | RD    | Mean value: 50. harmonic current L2 | A    |     |     |
| 17520   | float  | RD    | Mean value: 51. harmonic current L2 | A    |     |     |
| 17522   | float  | RD    | Mean value: 52. harmonic current L2 | A    |     |     |
| 17524   | float  | RD    | Mean value: 53. harmonic current L2 | A    |     |     |
| 17526   | float  | RD    | Mean value: 54. harmonic current L2 | A    |     |     |
| 17528   | float  | RD    | Mean value: 55. harmonic current L2 | A    |     |     |
| 17530   | float  | RD    | Mean value: 56. harmonic current L2 | A    |     |     |
| 17532   | float  | RD    | Mean value: 57. harmonic current L2 | A    |     |     |
| 17534   | float  | RD    | Mean value: 58. harmonic current L2 | A    |     |     |
| 17536   | float  | RD    | Mean value: 59. harmonic current L2 | A    |     |     |
| 17538   | float  | RD    | Mean value: 60. harmonic current L2 | A    |     |     |
| 17540   | float  | RD    | Mean value: 61. harmonic current L2 | A    |     |     |
| 17542   | float  | RD    | Mean value: 62. harmonic current L2 | A    |     |     |
| 17544   | float  | RD    | Mean value: 63. harmonic current L2 | A    |     |     |
| 17546   | float  | RD    | Mean value: 64. harmonic current L2 | A    |     |     |
| 17548   | float  | RD    | Mean value: 65. harmonic current L2 | A    |     |     |
| 17550   | float  | RD    | Mean value: 41. harmonic current L3 | A    |     |     |
| 17552   | float  | RD    | Mean value: 42. harmonic current L3 | A    |     |     |
| 17554   | float  | RD    | Mean value: 43. harmonic current L3 | A    |     |     |
| 17556   | float  | RD    | Mean value: 44. harmonic current L3 | A    |     |     |
| 17558   | float  | RD    | Mean value: 45. harmonic current L3 | A    |     |     |
| 17560   | float  | RD    | Mean value: 46. harmonic current L3 | A    |     |     |
| 17562   | float  | RD    | Mean value: 47. harmonic current L3 | A    |     |     |
| 17564   | float  | RD    | Mean value: 48. harmonic current L3 | A    |     |     |
| 17566   | float  | RD    | Mean value: 49. harmonic current L3 | A    |     |     |
| 17568   | float  | RD    | Mean value: 50. harmonic current L3 | A    |     |     |

| Address | Format | RD/WR | Note                                | Unit | Min | Max |
|---------|--------|-------|-------------------------------------|------|-----|-----|
| 17570   | float  | RD    | Mean value: 51. harmonic current L3 | A    |     |     |
| 17572   | float  | RD    | Mean value: 52. harmonic current L3 | A    |     |     |
| 17574   | float  | RD    | Mean value: 53. harmonic current L3 | A    |     |     |
| 17576   | float  | RD    | Mean value: 54. harmonic current L3 | A    |     |     |
| 17578   | float  | RD    | Mean value: 55. harmonic current L3 | A    |     |     |
| 17580   | float  | RD    | Mean value: 56. harmonic current L3 | A    |     |     |
| 17582   | float  | RD    | Mean value: 57. harmonic current L3 | A    |     |     |
| 17584   | float  | RD    | Mean value: 58. harmonic current L3 | A    |     |     |
| 17586   | float  | RD    | Mean value: 59. harmonic current L3 | A    |     |     |
| 17588   | float  | RD    | Mean value: 60. harmonic current L3 | A    |     |     |
| 17590   | float  | RD    | Mean value: 61. harmonic current L3 | A    |     |     |
| 17592   | float  | RD    | Mean value: 62. harmonic current L3 | A    |     |     |
| 17594   | float  | RD    | Mean value: 63. harmonic current L3 | A    |     |     |
| 17596   | float  | RD    | Mean value: 64. harmonic current L3 | A    |     |     |
| 17598   | float  | RD    | Mean value: 65. harmonic current L3 | A    |     |     |

### Other parameters

|       |        |       |   |   |   |       |
|-------|--------|-------|---|---|---|-------|
| 8     | char   | RD/WR | Reset Min/Max values, 1 = Reset   |   |   |       |
| 9     | char   | RD/WR | Reset Energy values, 1 = Reset  |   |   |       |
| 100   | uint   | RD/WR | UTC timestamp for time synchronisation via Modbus (RS485)   |   |   |       |
| 911   | uint   | RD    | Serial number   |   |   |       |
| 20004 | ushort | RD    | Firmware version of the device. Example: ',355'<br>means version 3.55   |   |   |       |
| 20012 | uint   | RD/WR | Production number   |   |   |       |
| 20016 | uint   | RD/WR | Article number  |   |   |       |
| 20047 | ushort | RD/WR | Device type ID: UMG 96-PA=19,<br>UMG 96-PA-MID+=30,<br>UMG 96-PQ-L=32,<br>UMG 96-PQ-L (IT)=34,<br>UMG 96-PQ-L-LP=38 |   | 0 | 65535 |
| 25000 | string | RD/WR | freely programmable device name. Up to 127 characters   |   |   |       |
| 25128 | string | RD/WR | Device description. Up to 239 characters  |   |   |       |
| 31498 | ushort | RD/WR | clock synchronisation validation Interval in hours, set to zero to deactivate                                       | h | 0 | 168   |
| 31499 | ushort | RD    | Validate time synchronization, 0 = valid  |   |   |       |
| 31500 | ushort | RD/WR | EN60870 Time structure, Millisecond   |   |   |       |
| 31501 | ushort | RD/WR | EN60870 Time structure, Minutes & Hour  |   |   |       |
| 31502 | ushort | RD/WR | EN60870 Time structure, Day, Weekday & Month  |   |   |       |
| 31503 | ushort | RD/WR | EN60870 Time structure, Year  |   |   |       |
| 32604 | short  | RD/WR | enable Modbus Broadcast, device will receive messages with slave address 0, 1 = enable                              |   | 0 | 1     |

| Address | Format | RD/WR | Note | Unit | Min | Max |
|---------|--------|-------|------|------|-----|-----|
|---------|--------|-------|------|------|-----|-----|

### Interharmonics - only with IEC 61000-4-30, class S

|       |       |    |                         |   |  |  |
|-------|-------|----|-------------------------|---|--|--|
| 21000 | float | RD | 1. Interharmonics I-L1  | A |  |  |
| 21002 | float | RD | 2. Interharmonics I-L1  | A |  |  |
| 21004 | float | RD | 3. Interharmonics I-L1  | A |  |  |
| 21006 | float | RD | 4. Interharmonics I-L1  | A |  |  |
| 21008 | float | RD | 5. Interharmonics I-L1  | A |  |  |
| 21010 | float | RD | 6. Interharmonics I-L1  | A |  |  |
| 21012 | float | RD | 7. Interharmonics I-L1  | A |  |  |
| 21014 | float | RD | 8. Interharmonics I-L1  | A |  |  |
| 21016 | float | RD | 9. Interharmonics I-L1  | A |  |  |
| 21018 | float | RD | 10. Interharmonics I-L1 | A |  |  |
| 21020 | float | RD | 11. Interharmonics I-L1 | A |  |  |
| 21022 | float | RD | 12. Interharmonics I-L1 | A |  |  |
| 21024 | float | RD | 13. Interharmonics I-L1 | A |  |  |
| 21026 | float | RD | 14. Interharmonics I-L1 | A |  |  |
| 21028 | float | RD | 15. Interharmonics I-L1 | A |  |  |
| 21030 | float | RD | 16. Interharmonics I-L1 | A |  |  |
| 21032 | float | RD | 17. Interharmonics I-L1 | A |  |  |
| 21034 | float | RD | 18. Interharmonics I-L1 | A |  |  |
| 21036 | float | RD | 19. Interharmonics I-L1 | A |  |  |
| 21038 | float | RD | 20. Interharmonics I-L1 | A |  |  |
| 21040 | float | RD | 21. Interharmonics I-L1 | A |  |  |
| 21042 | float | RD | 22. Interharmonics I-L1 | A |  |  |
| 21044 | float | RD | 23. Interharmonics I-L1 | A |  |  |
| 21046 | float | RD | 24. Interharmonics I-L1 | A |  |  |
| 21048 | float | RD | 25. Interharmonics I-L1 | A |  |  |
| 21050 | float | RD | 26. Interharmonics I-L1 | A |  |  |
| 21052 | float | RD | 27. Interharmonics I-L1 | A |  |  |
| 21054 | float | RD | 28. Interharmonics I-L1 | A |  |  |
| 21056 | float | RD | 29. Interharmonics I-L1 | A |  |  |
| 21058 | float | RD | 30. Interharmonics I-L1 | A |  |  |
| 21060 | float | RD | 31. Interharmonics I-L1 | A |  |  |
| 21062 | float | RD | 32. Interharmonics I-L1 | A |  |  |
| 21064 | float | RD | 33. Interharmonics I-L1 | A |  |  |
| 21066 | float | RD | 34. Interharmonics I-L1 | A |  |  |
| 21068 | float | RD | 35. Interharmonics I-L1 | A |  |  |
| 21070 | float | RD | 36. Interharmonics I-L1 | A |  |  |
| 21072 | float | RD | 37. Interharmonics I-L1 | A |  |  |
| 21074 | float | RD | 38. Interharmonics I-L1 | A |  |  |
| 21076 | float | RD | 39. Interharmonics I-L1 | A |  |  |
| 21078 | float | RD | 40. Interharmonics I-L1 | A |  |  |
| 21080 | float | RD | 41. Interharmonics I-L1 | A |  |  |
| 21082 | float | RD | 42. Interharmonics I-L1 | A |  |  |
| 21084 | float | RD | 43. Interharmonics I-L1 | A |  |  |
| 21086 | float | RD | 44. Interharmonics I-L1 | A |  |  |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21088   | float  | RD    | 45. Interharmonics I-L1 | A    |     |     |
| 21090   | float  | RD    | 46. Interharmonics I-L1 | A    |     |     |
| 21092   | float  | RD    | 47. Interharmonics I-L1 | A    |     |     |
| 21094   | float  | RD    | 48. Interharmonics I-L1 | A    |     |     |
| 21096   | float  | RD    | 49. Interharmonics I-L1 | A    |     |     |
| 21098   | float  | RD    | 50. Interharmonics I-L1 | A    |     |     |
| 21100   | float  | RD    | 51. Interharmonics I-L1 | A    |     |     |
| 21102   | float  | RD    | 52. Interharmonics I-L1 | A    |     |     |
| 21104   | float  | RD    | 53. Interharmonics I-L1 | A    |     |     |
| 21106   | float  | RD    | 54. Interharmonics I-L1 | A    |     |     |
| 21108   | float  | RD    | 55. Interharmonics I-L1 | A    |     |     |
| 21110   | float  | RD    | 56. Interharmonics I-L1 | A    |     |     |
| 21112   | float  | RD    | 57. Interharmonics I-L1 | A    |     |     |
| 21114   | float  | RD    | 58. Interharmonics I-L1 | A    |     |     |
| 21116   | float  | RD    | 59. Interharmonics I-L1 | A    |     |     |
| 21118   | float  | RD    | 60. Interharmonics I-L1 | A    |     |     |
| 21120   | float  | RD    | 61. Interharmonics I-L1 | A    |     |     |
| 21122   | float  | RD    | 62. Interharmonics I-L1 | A    |     |     |
| 21124   | float  | RD    | 63. Interharmonics I-L1 | A    |     |     |
| 21126   | float  | RD    | 64. Interharmonics I-L1 | A    |     |     |
| 21128   | float  | RD    | 65. Interharmonics I-L1 | A    |     |     |
| 21130   | float  | RD    | 1. Interharmonics U-L1  | V    |     |     |
| 21132   | float  | RD    | 2. Interharmonics U-L1  | V    |     |     |
| 21134   | float  | RD    | 3. Interharmonics U-L1  | V    |     |     |
| 21136   | float  | RD    | 4. Interharmonics U-L1  | V    |     |     |
| 21138   | float  | RD    | 5. Interharmonics U-L1  | V    |     |     |
| 21140   | float  | RD    | 6. Interharmonics U-L1  | V    |     |     |
| 21142   | float  | RD    | 7. Interharmonics U-L1  | V    |     |     |
| 21144   | float  | RD    | 8. Interharmonics U-L1  | V    |     |     |
| 21146   | float  | RD    | 9. Interharmonics U-L1  | V    |     |     |
| 21148   | float  | RD    | 10. Interharmonics U-L1 | V    |     |     |
| 21150   | float  | RD    | 11. Interharmonics U-L1 | V    |     |     |
| 21152   | float  | RD    | 12. Interharmonics U-L1 | V    |     |     |
| 21154   | float  | RD    | 13. Interharmonics U-L1 | V    |     |     |
| 21156   | float  | RD    | 14. Interharmonics U-L1 | V    |     |     |
| 21158   | float  | RD    | 15. Interharmonics U-L1 | V    |     |     |
| 21160   | float  | RD    | 16. Interharmonics U-L1 | V    |     |     |
| 21162   | float  | RD    | 17. Interharmonics U-L1 | V    |     |     |
| 21164   | float  | RD    | 18. Interharmonics U-L1 | V    |     |     |
| 21166   | float  | RD    | 19. Interharmonics U-L1 | V    |     |     |
| 21168   | float  | RD    | 20. Interharmonics U-L1 | V    |     |     |
| 21170   | float  | RD    | 21. Interharmonics U-L1 | V    |     |     |
| 21172   | float  | RD    | 22. Interharmonics U-L1 | V    |     |     |
| 21174   | float  | RD    | 23. Interharmonics U-L1 | V    |     |     |
| 21176   | float  | RD    | 24. Interharmonics U-L1 | V    |     |     |
| 21178   | float  | RD    | 25. Interharmonics U-L1 | V    |     |     |
| 21180   | float  | RD    | 26. Interharmonics U-L1 | V    |     |     |
| 21182   | float  | RD    | 27. Interharmonics U-L1 | V    |     |     |
| 21184   | float  | RD    | 28. Interharmonics U-L1 | V    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21186   | float  | RD    | 29. Interharmonics U-L1 | V    |     |     |
| 21188   | float  | RD    | 30. Interharmonics U-L1 | V    |     |     |
| 21190   | float  | RD    | 31. Interharmonics U-L1 | V    |     |     |
| 21192   | float  | RD    | 32. Interharmonics U-L1 | V    |     |     |
| 21194   | float  | RD    | 33. Interharmonics U-L1 | V    |     |     |
| 21196   | float  | RD    | 34. Interharmonics U-L1 | V    |     |     |
| 21198   | float  | RD    | 35. Interharmonics U-L1 | V    |     |     |
| 21200   | float  | RD    | 36. Interharmonics U-L1 | V    |     |     |
| 21202   | float  | RD    | 37. Interharmonics U-L1 | V    |     |     |
| 21204   | float  | RD    | 38. Interharmonics U-L1 | V    |     |     |
| 21206   | float  | RD    | 39. Interharmonics U-L1 | V    |     |     |
| 21208   | float  | RD    | 40. Interharmonics U-L1 | V    |     |     |
| 21210   | float  | RD    | 41. Interharmonics U-L1 | V    |     |     |
| 21212   | float  | RD    | 42. Interharmonics U-L1 | V    |     |     |
| 21214   | float  | RD    | 43. Interharmonics U-L1 | V    |     |     |
| 21216   | float  | RD    | 44. Interharmonics U-L1 | V    |     |     |
| 21218   | float  | RD    | 45. Interharmonics U-L1 | V    |     |     |
| 21220   | float  | RD    | 46. Interharmonics U-L1 | V    |     |     |
| 21222   | float  | RD    | 47. Interharmonics U-L1 | V    |     |     |
| 21224   | float  | RD    | 48. Interharmonics U-L1 | V    |     |     |
| 21226   | float  | RD    | 49. Interharmonics U-L1 | V    |     |     |
| 21228   | float  | RD    | 50. Interharmonics U-L1 | V    |     |     |
| 21230   | float  | RD    | 51. Interharmonics U-L1 | V    |     |     |
| 21232   | float  | RD    | 52. Interharmonics U-L1 | V    |     |     |
| 21234   | float  | RD    | 53. Interharmonics U-L1 | V    |     |     |
| 21236   | float  | RD    | 54. Interharmonics U-L1 | V    |     |     |
| 21238   | float  | RD    | 55. Interharmonics U-L1 | V    |     |     |
| 21240   | float  | RD    | 56. Interharmonics U-L1 | V    |     |     |
| 21242   | float  | RD    | 57. Interharmonics U-L1 | V    |     |     |
| 21244   | float  | RD    | 58. Interharmonics U-L1 | V    |     |     |
| 21246   | float  | RD    | 59. Interharmonics U-L1 | V    |     |     |
| 21248   | float  | RD    | 60. Interharmonics U-L1 | V    |     |     |
| 21250   | float  | RD    | 61. Interharmonics U-L1 | V    |     |     |
| 21252   | float  | RD    | 62. Interharmonics U-L1 | V    |     |     |
| 21254   | float  | RD    | 63. Interharmonics U-L1 | V    |     |     |
| 21256   | float  | RD    | 64. Interharmonics U-L1 | V    |     |     |
| 21258   | float  | RD    | 65. Interharmonics U-L1 | V    |     |     |
| 21260   | float  | RD    | 1. Interharmonics I-L2  | A    |     |     |
| 21262   | float  | RD    | 2. Interharmonics I-L2  | A    |     |     |
| 21264   | float  | RD    | 3. Interharmonics I-L2  | A    |     |     |
| 21266   | float  | RD    | 4. Interharmonics I-L2  | A    |     |     |
| 21268   | float  | RD    | 5. Interharmonics I-L2  | A    |     |     |
| 21270   | float  | RD    | 6. Interharmonics I-L2  | A    |     |     |
| 21272   | float  | RD    | 7. Interharmonics I-L2  | A    |     |     |
| 21274   | float  | RD    | 8. Interharmonics I-L2  | A    |     |     |
| 21276   | float  | RD    | 9. Interharmonics I-L2  | A    |     |     |
| 21278   | float  | RD    | 10. Interharmonics I-L2 | A    |     |     |
| 21280   | float  | RD    | 11. Interharmonics I-L2 | A    |     |     |
| 21282   | float  | RD    | 12. Interharmonics I-L2 | A    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21284   | float  | RD    | 13. Interharmonics I-L2 | A    |     |     |
| 21286   | float  | RD    | 14. Interharmonics I-L2 | A    |     |     |
| 21288   | float  | RD    | 15. Interharmonics I-L2 | A    |     |     |
| 21290   | float  | RD    | 16. Interharmonics I-L2 | A    |     |     |
| 21292   | float  | RD    | 17. Interharmonics I-L2 | A    |     |     |
| 21294   | float  | RD    | 18. Interharmonics I-L2 | A    |     |     |
| 21296   | float  | RD    | 19. Interharmonics I-L2 | A    |     |     |
| 21298   | float  | RD    | 20. Interharmonics I-L2 | A    |     |     |
| 21300   | float  | RD    | 21. Interharmonics I-L2 | A    |     |     |
| 21302   | float  | RD    | 22. Interharmonics I-L2 | A    |     |     |
| 21304   | float  | RD    | 23. Interharmonics I-L2 | A    |     |     |
| 21306   | float  | RD    | 24. Interharmonics I-L2 | A    |     |     |
| 21308   | float  | RD    | 25. Interharmonics I-L2 | A    |     |     |
| 21310   | float  | RD    | 26. Interharmonics I-L2 | A    |     |     |
| 21312   | float  | RD    | 27. Interharmonics I-L2 | A    |     |     |
| 21314   | float  | RD    | 28. Interharmonics I-L2 | A    |     |     |
| 21316   | float  | RD    | 29. Interharmonics I-L2 | A    |     |     |
| 21318   | float  | RD    | 30. Interharmonics I-L2 | A    |     |     |
| 21320   | float  | RD    | 31. Interharmonics I-L2 | A    |     |     |
| 21322   | float  | RD    | 32. Interharmonics I-L2 | A    |     |     |
| 21324   | float  | RD    | 33. Interharmonics I-L2 | A    |     |     |
| 21326   | float  | RD    | 34. Interharmonics I-L2 | A    |     |     |
| 21328   | float  | RD    | 35. Interharmonics I-L2 | A    |     |     |
| 21330   | float  | RD    | 36. Interharmonics I-L2 | A    |     |     |
| 21332   | float  | RD    | 37. Interharmonics I-L2 | A    |     |     |
| 21334   | float  | RD    | 38. Interharmonics I-L2 | A    |     |     |
| 21336   | float  | RD    | 39. Interharmonics I-L2 | A    |     |     |
| 21338   | float  | RD    | 40. Interharmonics I-L2 | A    |     |     |
| 21340   | float  | RD    | 41. Interharmonics I-L2 | A    |     |     |
| 21342   | float  | RD    | 42. Interharmonics I-L2 | A    |     |     |
| 21344   | float  | RD    | 43. Interharmonics I-L2 | A    |     |     |
| 21346   | float  | RD    | 44. Interharmonics I-L2 | A    |     |     |
| 21348   | float  | RD    | 45. Interharmonics I-L2 | A    |     |     |
| 21350   | float  | RD    | 46. Interharmonics I-L2 | A    |     |     |
| 21352   | float  | RD    | 47. Interharmonics I-L2 | A    |     |     |
| 21354   | float  | RD    | 48. Interharmonics I-L2 | A    |     |     |
| 21356   | float  | RD    | 49. Interharmonics I-L2 | A    |     |     |
| 21358   | float  | RD    | 50. Interharmonics I-L2 | A    |     |     |
| 21360   | float  | RD    | 51. Interharmonics I-L2 | A    |     |     |
| 21362   | float  | RD    | 52. Interharmonics I-L2 | A    |     |     |
| 21364   | float  | RD    | 53. Interharmonics I-L2 | A    |     |     |
| 21366   | float  | RD    | 54. Interharmonics I-L2 | A    |     |     |
| 21368   | float  | RD    | 55. Interharmonics I-L2 | A    |     |     |
| 21370   | float  | RD    | 56. Interharmonics I-L2 | A    |     |     |
| 21372   | float  | RD    | 57. Interharmonics I-L2 | A    |     |     |
| 21374   | float  | RD    | 58. Interharmonics I-L2 | A    |     |     |
| 21376   | float  | RD    | 59. Interharmonics I-L2 | A    |     |     |
| 21378   | float  | RD    | 60. Interharmonics I-L2 | A    |     |     |
| 21380   | float  | RD    | 61. Interharmonics I-L2 | A    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21382   | float  | RD    | 62. Interharmonics I-L2 | A    |     |     |
| 21384   | float  | RD    | 63. Interharmonics I-L2 | A    |     |     |
| 21386   | float  | RD    | 64. Interharmonics I-L2 | A    |     |     |
| 21388   | float  | RD    | 65. Interharmonics I-L2 | A    |     |     |
| 21390   | float  | RD    | 1. Interharmonics U-L2  | V    |     |     |
| 21392   | float  | RD    | 2. Interharmonics U-L2  | V    |     |     |
| 21394   | float  | RD    | 3. Interharmonics U-L2  | V    |     |     |
| 21396   | float  | RD    | 4. Interharmonics U-L2  | V    |     |     |
| 21398   | float  | RD    | 5. Interharmonics U-L2  | V    |     |     |
| 21400   | float  | RD    | 6. Interharmonics U-L2  | V    |     |     |
| 21402   | float  | RD    | 7. Interharmonics U-L2  | V    |     |     |
| 21404   | float  | RD    | 8. Interharmonics U-L2  | V    |     |     |
| 21406   | float  | RD    | 9. Interharmonics U-L2  | V    |     |     |
| 21408   | float  | RD    | 10. Interharmonics U-L2 | V    |     |     |
| 21410   | float  | RD    | 11. Interharmonics U-L2 | V    |     |     |
| 21412   | float  | RD    | 12. Interharmonics U-L2 | V    |     |     |
| 21414   | float  | RD    | 13. Interharmonics U-L2 | V    |     |     |
| 21416   | float  | RD    | 14. Interharmonics U-L2 | V    |     |     |
| 21418   | float  | RD    | 15. Interharmonics U-L2 | V    |     |     |
| 21420   | float  | RD    | 16. Interharmonics U-L2 | V    |     |     |
| 21422   | float  | RD    | 17. Interharmonics U-L2 | V    |     |     |
| 21424   | float  | RD    | 18. Interharmonics U-L2 | V    |     |     |
| 21426   | float  | RD    | 19. Interharmonics U-L2 | V    |     |     |
| 21428   | float  | RD    | 20. Interharmonics U-L2 | V    |     |     |
| 21430   | float  | RD    | 21. Interharmonics U-L2 | V    |     |     |
| 21432   | float  | RD    | 22. Interharmonics U-L2 | V    |     |     |
| 21434   | float  | RD    | 23. Interharmonics U-L2 | V    |     |     |
| 21436   | float  | RD    | 24. Interharmonics U-L2 | V    |     |     |
| 21438   | float  | RD    | 25. Interharmonics U-L2 | V    |     |     |
| 21440   | float  | RD    | 26. Interharmonics U-L2 | V    |     |     |
| 21442   | float  | RD    | 27. Interharmonics U-L2 | V    |     |     |
| 21444   | float  | RD    | 28. Interharmonics U-L2 | V    |     |     |
| 21446   | float  | RD    | 29. Interharmonics U-L2 | V    |     |     |
| 21448   | float  | RD    | 30. Interharmonics U-L2 | V    |     |     |
| 21450   | float  | RD    | 31. Interharmonics U-L2 | V    |     |     |
| 21452   | float  | RD    | 32. Interharmonics U-L2 | V    |     |     |
| 21454   | float  | RD    | 33. Interharmonics U-L2 | V    |     |     |
| 21456   | float  | RD    | 34. Interharmonics U-L2 | V    |     |     |
| 21458   | float  | RD    | 35. Interharmonics U-L2 | V    |     |     |
| 21460   | float  | RD    | 36. Interharmonics U-L2 | V    |     |     |
| 21462   | float  | RD    | 37. Interharmonics U-L2 | V    |     |     |
| 21464   | float  | RD    | 38. Interharmonics U-L2 | V    |     |     |
| 21466   | float  | RD    | 39. Interharmonics U-L2 | V    |     |     |
| 21468   | float  | RD    | 40. Interharmonics U-L2 | V    |     |     |
| 21470   | float  | RD    | 41. Interharmonics U-L2 | V    |     |     |
| 21472   | float  | RD    | 42. Interharmonics U-L2 | V    |     |     |
| 21474   | float  | RD    | 43. Interharmonics U-L2 | V    |     |     |
| 21476   | float  | RD    | 44. Interharmonics U-L2 | V    |     |     |
| 21478   | float  | RD    | 45. Interharmonics U-L2 | V    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21480   | float  | RD    | 46. Interharmonics U-L2 | V    |     |     |
| 21482   | float  | RD    | 47. Interharmonics U-L2 | V    |     |     |
| 21484   | float  | RD    | 48. Interharmonics U-L2 | V    |     |     |
| 21486   | float  | RD    | 49. Interharmonics U-L2 | V    |     |     |
| 21488   | float  | RD    | 50. Interharmonics U-L2 | V    |     |     |
| 21490   | float  | RD    | 51. Interharmonics U-L2 | V    |     |     |
| 21492   | float  | RD    | 52. Interharmonics U-L2 | V    |     |     |
| 21494   | float  | RD    | 53. Interharmonics U-L2 | V    |     |     |
| 21496   | float  | RD    | 54. Interharmonics U-L2 | V    |     |     |
| 21498   | float  | RD    | 55. Interharmonics U-L2 | V    |     |     |
| 21500   | float  | RD    | 56. Interharmonics U-L2 | V    |     |     |
| 21502   | float  | RD    | 57. Interharmonics U-L2 | V    |     |     |
| 21504   | float  | RD    | 58. Interharmonics U-L2 | V    |     |     |
| 21506   | float  | RD    | 59. Interharmonics U-L2 | V    |     |     |
| 21508   | float  | RD    | 60. Interharmonics U-L2 | V    |     |     |
| 21510   | float  | RD    | 61. Interharmonics U-L2 | V    |     |     |
| 21512   | float  | RD    | 62. Interharmonics U-L2 | V    |     |     |
| 21514   | float  | RD    | 63. Interharmonics U-L2 | V    |     |     |
| 21516   | float  | RD    | 64. Interharmonics U-L2 | V    |     |     |
| 21518   | float  | RD    | 65. Interharmonics U-L2 | V    |     |     |
| 21520   | float  | RD    | 1. Interharmonics I-L3  | A    |     |     |
| 21522   | float  | RD    | 2. Interharmonics I-L3  | A    |     |     |
| 21524   | float  | RD    | 3. Interharmonics I-L3  | A    |     |     |
| 21526   | float  | RD    | 4. Interharmonics I-L3  | A    |     |     |
| 21528   | float  | RD    | 5. Interharmonics I-L3  | A    |     |     |
| 21530   | float  | RD    | 6. Interharmonics I-L3  | A    |     |     |
| 21532   | float  | RD    | 7. Interharmonics I-L3  | A    |     |     |
| 21534   | float  | RD    | 8. Interharmonics I-L3  | A    |     |     |
| 21536   | float  | RD    | 9. Interharmonics I-L3  | A    |     |     |
| 21538   | float  | RD    | 10. Interharmonics I-L3 | A    |     |     |
| 21540   | float  | RD    | 11. Interharmonics I-L3 | A    |     |     |
| 21542   | float  | RD    | 12. Interharmonics I-L3 | A    |     |     |
| 21544   | float  | RD    | 13. Interharmonics I-L3 | A    |     |     |
| 21546   | float  | RD    | 14. Interharmonics I-L3 | A    |     |     |
| 21548   | float  | RD    | 15. Interharmonics I-L3 | A    |     |     |
| 21550   | float  | RD    | 16. Interharmonics I-L3 | A    |     |     |
| 21552   | float  | RD    | 17. Interharmonics I-L3 | A    |     |     |
| 21554   | float  | RD    | 18. Interharmonics I-L3 | A    |     |     |
| 21556   | float  | RD    | 19. Interharmonics I-L3 | A    |     |     |
| 21558   | float  | RD    | 20. Interharmonics I-L3 | A    |     |     |
| 21560   | float  | RD    | 21. Interharmonics I-L3 | A    |     |     |
| 21562   | float  | RD    | 22. Interharmonics I-L3 | A    |     |     |
| 21564   | float  | RD    | 23. Interharmonics I-L3 | A    |     |     |
| 21566   | float  | RD    | 24. Interharmonics I-L3 | A    |     |     |
| 21568   | float  | RD    | 25. Interharmonics I-L3 | A    |     |     |
| 21570   | float  | RD    | 26. Interharmonics I-L3 | A    |     |     |
| 21572   | float  | RD    | 27. Interharmonics I-L3 | A    |     |     |
| 21574   | float  | RD    | 28. Interharmonics I-L3 | A    |     |     |
| 21576   | float  | RD    | 29. Interharmonics I-L3 | A    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21578   | float  | RD    | 30. Interharmonics I-L3 | A    |     |     |
| 21580   | float  | RD    | 31. Interharmonics I-L3 | A    |     |     |
| 21582   | float  | RD    | 32. Interharmonics I-L3 | A    |     |     |
| 21584   | float  | RD    | 33. Interharmonics I-L3 | A    |     |     |
| 21586   | float  | RD    | 34. Interharmonics I-L3 | A    |     |     |
| 21588   | float  | RD    | 35. Interharmonics I-L3 | A    |     |     |
| 21590   | float  | RD    | 36. Interharmonics I-L3 | A    |     |     |
| 21592   | float  | RD    | 37. Interharmonics I-L3 | A    |     |     |
| 21594   | float  | RD    | 38. Interharmonics I-L3 | A    |     |     |
| 21596   | float  | RD    | 39. Interharmonics I-L3 | A    |     |     |
| 21598   | float  | RD    | 40. Interharmonics I-L3 | A    |     |     |
| 21600   | float  | RD    | 41. Interharmonics I-L3 | A    |     |     |
| 21602   | float  | RD    | 42. Interharmonics I-L3 | A    |     |     |
| 21604   | float  | RD    | 43. Interharmonics I-L3 | A    |     |     |
| 21606   | float  | RD    | 44. Interharmonics I-L3 | A    |     |     |
| 21608   | float  | RD    | 45. Interharmonics I-L3 | A    |     |     |
| 21610   | float  | RD    | 46. Interharmonics I-L3 | A    |     |     |
| 21612   | float  | RD    | 47. Interharmonics I-L3 | A    |     |     |
| 21614   | float  | RD    | 48. Interharmonics I-L3 | A    |     |     |
| 21616   | float  | RD    | 49. Interharmonics I-L3 | A    |     |     |
| 21618   | float  | RD    | 50. Interharmonics I-L3 | A    |     |     |
| 21620   | float  | RD    | 51. Interharmonics I-L3 | A    |     |     |
| 21622   | float  | RD    | 52. Interharmonics I-L3 | A    |     |     |
| 21624   | float  | RD    | 53. Interharmonics I-L3 | A    |     |     |
| 21626   | float  | RD    | 54. Interharmonics I-L3 | A    |     |     |
| 21628   | float  | RD    | 55. Interharmonics I-L3 | A    |     |     |
| 21630   | float  | RD    | 56. Interharmonics I-L3 | A    |     |     |
| 21632   | float  | RD    | 57. Interharmonics I-L3 | A    |     |     |
| 21634   | float  | RD    | 58. Interharmonics I-L3 | A    |     |     |
| 21636   | float  | RD    | 59. Interharmonics I-L3 | A    |     |     |
| 21638   | float  | RD    | 60. Interharmonics I-L3 | A    |     |     |
| 21640   | float  | RD    | 61. Interharmonics I-L3 | A    |     |     |
| 21642   | float  | RD    | 62. Interharmonics I-L3 | A    |     |     |
| 21644   | float  | RD    | 63. Interharmonics I-L3 | A    |     |     |
| 21646   | float  | RD    | 64. Interharmonics I-L3 | A    |     |     |
| 21648   | float  | RD    | 65. Interharmonics I-L3 | A    |     |     |
| 21650   | float  | RD    | 1. Interharmonics U-L3  | V    |     |     |
| 21652   | float  | RD    | 2. Interharmonics U-L3  | V    |     |     |
| 21654   | float  | RD    | 3. Interharmonics U-L3  | V    |     |     |
| 21656   | float  | RD    | 4. Interharmonics U-L3  | V    |     |     |
| 21658   | float  | RD    | 5. Interharmonics U-L3  | V    |     |     |
| 21660   | float  | RD    | 6. Interharmonics U-L3  | V    |     |     |
| 21662   | float  | RD    | 7. Interharmonics U-L3  | V    |     |     |
| 21664   | float  | RD    | 8. Interharmonics U-L3  | V    |     |     |
| 21666   | float  | RD    | 9. Interharmonics U-L3  | V    |     |     |
| 21668   | float  | RD    | 10. Interharmonics U-L3 | V    |     |     |
| 21670   | float  | RD    | 11. Interharmonics U-L3 | V    |     |     |
| 21672   | float  | RD    | 12. Interharmonics U-L3 | V    |     |     |
| 21674   | float  | RD    | 13. Interharmonics U-L3 | V    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21676   | float  | RD    | 14. Interharmonics U-L3 | V    |     |     |
| 21678   | float  | RD    | 15. Interharmonics U-L3 | V    |     |     |
| 21680   | float  | RD    | 16. Interharmonics U-L3 | V    |     |     |
| 21682   | float  | RD    | 17. Interharmonics U-L3 | V    |     |     |
| 21684   | float  | RD    | 18. Interharmonics U-L3 | V    |     |     |
| 21686   | float  | RD    | 19. Interharmonics U-L3 | V    |     |     |
| 21688   | float  | RD    | 20. Interharmonics U-L3 | V    |     |     |
| 21690   | float  | RD    | 21. Interharmonics U-L3 | V    |     |     |
| 21692   | float  | RD    | 22. Interharmonics U-L3 | V    |     |     |
| 21694   | float  | RD    | 23. Interharmonics U-L3 | V    |     |     |
| 21696   | float  | RD    | 24. Interharmonics U-L3 | V    |     |     |
| 21698   | float  | RD    | 25. Interharmonics U-L3 | V    |     |     |
| 21700   | float  | RD    | 26. Interharmonics U-L3 | V    |     |     |
| 21702   | float  | RD    | 27. Interharmonics U-L3 | V    |     |     |
| 21704   | float  | RD    | 28. Interharmonics U-L3 | V    |     |     |
| 21706   | float  | RD    | 29. Interharmonics U-L3 | V    |     |     |
| 21708   | float  | RD    | 30. Interharmonics U-L3 | V    |     |     |
| 21710   | float  | RD    | 31. Interharmonics U-L3 | V    |     |     |
| 21712   | float  | RD    | 32. Interharmonics U-L3 | V    |     |     |
| 21714   | float  | RD    | 33. Interharmonics U-L3 | V    |     |     |
| 21716   | float  | RD    | 34. Interharmonics U-L3 | V    |     |     |
| 21718   | float  | RD    | 35. Interharmonics U-L3 | V    |     |     |
| 21720   | float  | RD    | 36. Interharmonics U-L3 | V    |     |     |
| 21722   | float  | RD    | 37. Interharmonics U-L3 | V    |     |     |
| 21724   | float  | RD    | 38. Interharmonics U-L3 | V    |     |     |
| 21726   | float  | RD    | 39. Interharmonics U-L3 | V    |     |     |
| 21728   | float  | RD    | 40. Interharmonics U-L3 | V    |     |     |
| 21730   | float  | RD    | 41. Interharmonics U-L3 | V    |     |     |
| 21732   | float  | RD    | 42. Interharmonics U-L3 | V    |     |     |
| 21734   | float  | RD    | 43. Interharmonics U-L3 | V    |     |     |
| 21736   | float  | RD    | 44. Interharmonics U-L3 | V    |     |     |
| 21738   | float  | RD    | 45. Interharmonics U-L3 | V    |     |     |
| 21740   | float  | RD    | 46. Interharmonics U-L3 | V    |     |     |
| 21742   | float  | RD    | 47. Interharmonics U-L3 | V    |     |     |
| 21744   | float  | RD    | 48. Interharmonics U-L3 | V    |     |     |
| 21746   | float  | RD    | 49. Interharmonics U-L3 | V    |     |     |
| 21748   | float  | RD    | 50. Interharmonics U-L3 | V    |     |     |
| 21750   | float  | RD    | 51. Interharmonics U-L3 | V    |     |     |
| 21752   | float  | RD    | 52. Interharmonics U-L3 | V    |     |     |
| 21754   | float  | RD    | 53. Interharmonics U-L3 | V    |     |     |
| 21756   | float  | RD    | 54. Interharmonics U-L3 | V    |     |     |
| 21758   | float  | RD    | 55. Interharmonics U-L3 | V    |     |     |
| 21760   | float  | RD    | 56. Interharmonics U-L3 | V    |     |     |
| 21762   | float  | RD    | 57. Interharmonics U-L3 | V    |     |     |
| 21764   | float  | RD    | 58. Interharmonics U-L3 | V    |     |     |
| 21766   | float  | RD    | 59. Interharmonics U-L3 | V    |     |     |
| 21768   | float  | RD    | 60. Interharmonics U-L3 | V    |     |     |
| 21770   | float  | RD    | 61. Interharmonics U-L3 | V    |     |     |
| 21772   | float  | RD    | 62. Interharmonics U-L3 | V    |     |     |

| Address | Format | RD/WR | Note                    | Unit | Min | Max |
|---------|--------|-------|-------------------------|------|-----|-----|
| 21774   | float  | RD    | 63. Interharmonics U-L3 | V    |     |     |
| 21776   | float  | RD    | 64. Interharmonics U-L3 | V    |     |     |
| 21778   | float  | RD    | 65. Interharmonics U-L3 | V    |     |     |

### Flicker meas. values - only with IEC 61000-4-30, class S

|      |       |       |   |  |   |   |
|------|-------|-------|---|--|---|---|
| 1302 | short | RD/WR | Flicker system (50/60 Hz): 0 = 230V/50Hz, 1 = 120V/50Hz, 2 = 230V/60Hz, 3 = 120V/60Hz |  | 0 | 3 |
| 1303 | float | RD    | L1 Flicker long therm (2 h)   |  |   |   |
| 1305 | float | RD    | L2 Flicker long therm (2 h)   |  |   |   |
| 1307 | float | RD    | L3 Flicker long therm (2 h)   |  |   |   |
| 1309 | float | RD    | L1 Flicker short therm (10 min)   |  |   |   |
| 1311 | float | RD    | L2 Flicker short therm (10 min)   |  |   |   |
| 1313 | float | RD    | L3 Flicker short therm (10 min)   |  |   |   |
| 1315 | float | RD    | L1 Flicker perception factor  |  |   |   |
| 1317 | float | RD    | L2 Flicker perception factor  |  |   |   |
| 1319 | float | RD    | L3 Flicker perception factor  |  |   |   |
| 1321 | uint  | RD    | UTC Starttime of Flicker short term   |  |   |   |
| 1323 | uint  | RD    | UTC Endtime of Flicker short term   |  |   |   |
| 1325 | uint  | RD    | UTC Starttime of Flicker long term  |  |   |   |
| 1327 | uint  | RD    | UTC Endtime of Flicker long term  |  |   |   |

### Other parameters - only with IEC 61000-4-30, class S

|      |       |       |  |   |   |      |
|------|-------|-------|--|---|---|------|
| 1333 | float | RD/WR | Configurable frequency in Hz (float) for ripple control  |   | 0 | 3000 |
| 1335 | float | RD    | Measured value (float): RMS of ripple control signal UL1 | V |   |      |
| 1337 | float | RD    | Measured value (float): RMS of ripple control signal UL2 | V |   |      |
| 1339 | float | RD    | Measured value (float): RMS of ripple control signal UL3 | V |   |      |

### UMG 96-PQ-L-LP extended adress lis

|       |       |       |                            |   |             |            |
|-------|-------|-------|----------------------------|---|-------------|------------|
| 20053 | float | RD/WR | Measured value, current L4 | A | -3.403 e+38 | 3.403 e+38 |
| 20063 | float | RD/WR | 1. harmonic current L4     | A |             |            |
| 20065 | float | RD/WR | 2. harmonic current L4     | A |             |            |
| 20067 | float | RD/WR | 3. harmonic current L4     | A |             |            |
| 20069 | float | RD/WR | 4. harmonic current L4     | A |             |            |
| 20071 | float | RD/WR | 5. harmonic current L4     | A |             |            |
| 20073 | float | RD/WR | 6. harmonic current L4     | A |             |            |
| 20075 | float | RD/WR | 7. harmonic current L4     | A |             |            |
| 20077 | float | RD/WR | 8. harmonic current L4     | A |             |            |
| 20079 | float | RD/WR | 9. harmonic current L4     | A |             |            |
| 20081 | float | RD/WR | 10. harmonic current L4    | A |             |            |

| Address | Format | RD/WR | Note                                  | Unit | Min | Max        |
|---------|--------|-------|---------------------------------------|------|-----|------------|
| 20083   | float  | RD/WR | 11. harmonic current L4               | A    |     |            |
| 20085   | float  | RD/WR | 12. harmonic current L4               | A    |     |            |
| 20087   | float  | RD/WR | 13. harmonic current L4               | A    |     |            |
| 20089   | float  | RD/WR | 14. harmonic current L4               | A    |     |            |
| 20091   | float  | RD/WR | 15. harmonic current L4               | A    |     |            |
| 20093   | float  | RD/WR | 16. harmonic current L4               | A    |     |            |
| 20095   | float  | RD/WR | 17. harmonic current L4               | A    |     |            |
| 20097   | float  | RD/WR | 18. harmonic current L4               | A    |     |            |
| 20099   | float  | RD/WR | 19. harmonic current L4               | A    |     |            |
| 20101   | float  | RD/WR | 20. harmonic current L4               | A    |     |            |
| 20103   | float  | RD/WR | 21. harmonic current L4               | A    |     |            |
| 20105   | float  | RD/WR | 22. harmonic current L4               | A    |     |            |
| 20107   | float  | RD/WR | 23. harmonic current L4               | A    |     |            |
| 20109   | float  | RD/WR | 24. harmonic current L4               | A    |     |            |
| 20111   | float  | RD/WR | 25. harmonic current L4               | A    |     |            |
| 20113   | float  | RD/WR | 26. harmonic current L4               | A    |     |            |
| 20115   | float  | RD/WR | 27. harmonic current L4               | A    |     |            |
| 20117   | float  | RD/WR | 28. harmonic current L4               | A    |     |            |
| 20119   | float  | RD/WR | 29. harmonic current L4               | A    |     |            |
| 20121   | float  | RD/WR | 30. harmonic current L4               | A    |     |            |
| 20123   | float  | RD/WR | 31. harmonic current L4               | A    |     |            |
| 20125   | float  | RD/WR | 32. harmonic current L4               | A    |     |            |
| 20127   | float  | RD/WR | 33. harmonic current L4               | A    |     |            |
| 20129   | float  | RD/WR | 34. harmonic current L4               | A    |     |            |
| 20131   | float  | RD/WR | 35. harmonic current L4               | A    |     |            |
| 20133   | float  | RD/WR | 36. harmonic current L4               | A    |     |            |
| 20135   | float  | RD/WR | 37. harmonic current L4               | A    |     |            |
| 20137   | float  | RD/WR | 38. harmonic current L4               | A    |     |            |
| 20139   | float  | RD/WR | 39. harmonic current L4               | A    |     |            |
| 20141   | float  | RD/WR | 40. harmonic current L4               | A    |     |            |
| 20305   | float  | RD/WR | mean value, current L4                | A    | 0   | 3.403 e+38 |
| 20315   | float  | RD/WR | min. value, current L4                | A    | 0   | 3.403 e+38 |
| 20325   | float  | RD/WR | max. value, current L4                | A    | 0   | 3.403 e+38 |
| 20335   | uint   | RD/WR | UTC timestamp, min. value, current L4 | s    |     |            |
| 20345   | uint   | RD/WR | UTC timestamp, max. value, current L4 | s    |     |            |

### RCM module: Measured values, type Float

|       |       |       |  |    |             |            |
|-------|-------|-------|--|----|-------------|------------|
| 20053 | float | RD/WR | Measured value, current L4             | A  | -3.403 e+38 | 3.403 e+38 |
| 20055 | float | RD/WR | RCM module: current RCM1 (I5)          | A  | -3.403 e+38 | 3.403 e+38 |
| 20057 | float | RD/WR | RCM module: current RCM2 (I6)          | A  | -3.403 e+38 | 3.403 e+38 |
| 20059 | float | RD/WR | RCM module: current RCM2 (I6 prop. U6) | V  | -3.403 e+38 | 3.403 e+38 |
| 20061 | float | RD/WR | RCM module: ext. temperature           | °C | -3.403 e+38 | 3.403 e+38 |
| 20303 | float | RD/WR | RCM module: DC power (P=I5*U6)         | W  | 0           | 3.403 e+38 |

| Address | Format | RD/WR | Note | Unit | Min | Max |
|---------|--------|-------|------|------|-----|-----|
|---------|--------|-------|------|------|-----|-----|

### RCM module: Moving mean values, type Float

|       |       |       |  |    |   |            |
|-------|-------|-------|--|----|---|------------|
| 20305 | float | RD/WR | mean value, current L4                             | A  | 0 | 3.403 e+38 |
| 20307 | float | RD/WR | RCM module: mean value, current RCM1 (I5)          | A  | 0 | 3.403 e+38 |
| 20309 | float | RD/WR | RCM module: mean value, current RCM2 (I6)          | A  | 0 | 3.403 e+38 |
| 20311 | float | RD/WR | RCM module: mean value, current RCM2 (I6 prop. U6) | V  | 0 | 3.403 e+38 |
| 20313 | float | RD/WR | RCM module: mean value, ext. temperature           | °C | 0 | 3.403 e+38 |

### RCM module: Minimum values, type Float

|       |       |       |  |    |   |            |
|-------|-------|-------|--|----|---|------------|
| 20315 | float | RD/WR | min. value, current L4                             | A  | 0 | 3.403 e+38 |
| 20317 | float | RD/WR | RCM module: min. value, current RCM1 (I5)          | A  | 0 | 3.403 e+38 |
| 20319 | float | RD/WR | RCM module: min. value, current RCM2 (I6)          | A  | 0 | 3.403 e+38 |
| 20321 | float | RD/WR | RCM module: min. value, current RCM2 (I6 prop. U6) | V  | 0 | 3.403 e+38 |
| 20323 | float | RD/WR | RCM module: min. value, ext. temperature           | °C | 0 | 3.403 e+38 |

### RCM module: Maximum values, type Float

|       |       |       |  |    |   |            |
|-------|-------|-------|--|----|---|------------|
| 20325 | float | RD/WR | max. value, current L4                             | A  | 0 | 3.403 e+38 |
| 20327 | float | RD/WR | RCM module: max. value, current RCM1 (I5)          | A  | 0 | 3.403 e+38 |
| 20329 | float | RD/WR | RCM module: max. value, current RCM2 (I6)          | A  | 0 | 3.403 e+38 |
| 20331 | float | RD/WR | RCM module: max. value, current RCM2 (I6 prop. U6) | V  | 0 | 3.403 e+38 |
| 20333 | float | RD/WR | RCM module: max. value, ext. temperature           | °C | 0 | 3.403 e+38 |

### RCM module: Minimum values, timestamp

|       |      |       |   |   |  |  |
|-------|------|-------|---|---|--|--|
| 20335 | uint | RD/WR | UTC timestamp, min. value, current L4                             | s |  |  |
| 20337 | uint | RD/WR | RCM module: UTC timestamp, min. value, current RCM1 (I5)          | s |  |  |
| 20339 | uint | RD/WR | RCM module: UTC timestamp, min. value, current RCM2 (I6)          | s |  |  |
| 20341 | uint | RD/WR | RCM module: UTC timestamp, min. value, current RCM2 (I6 prop. U6) | s |  |  |
| 20343 | uint | RD/WR | RCM module: UTC timestamp, min. value, ext. temperature           | s |  |  |

### RCM module: Maximum values, timestamp

|       |      |       |  |   |  |  |
|-------|------|-------|--|---|--|--|
| 20345 | uint | RD/WR | UTC timestamp, max. value, current L4                    | s |  |  |
| 20347 | uint | RD/WR | RCM module: UTC timestamp, max. value, current RCM1 (I5) | s |  |  |

| Address | Format | RD/WR | Note  | Unit | Min | Max |
|---------|--------|-------|---|------|-----|-----|
| 20349   | uint   | RD/WR | RCM module: UTC timestamp, max. value, current RCM2 (I6)          | s    |     |     |
| 20351   | uint   | RD/WR | RCM module: UTC timestamp, max. value, current RCM2 (I6 prop. U6) | s    |     |     |
| 20353   | uint   | RD/WR | RCM module: UTC timestamp, max. value, ext. temperature           | s    |     |     |

### RCM module: Energy values

|       |        |       |   |    |   |            |
|-------|--------|-------|---|----|---|------------|
| 20355 | double | RD/WR | RCM module: active energy, DC (I5 * U6) | Wh | 0 | 3.403 e+38 |
| 20359 | float  | RD/WR | RCM module: active energy, DC (I5 * U6) | Wh | 0 | 3.403 e+38 |

### RCM module: Fourier analysis, measured values, float

|       |       |       |                         |   |  |  |
|-------|-------|-------|-------------------------|---|--|--|
| 20063 | float | RD/WR | 1. harmonic current L4  | A |  |  |
| 20065 | float | RD/WR | 2. harmonic current L4  | A |  |  |
| 20067 | float | RD/WR | 3. harmonic current L4  | A |  |  |
| 20069 | float | RD/WR | 4. harmonic current L4  | A |  |  |
| 20071 | float | RD/WR | 5. harmonic current L4  | A |  |  |
| 20073 | float | RD/WR | 6. harmonic current L4  | A |  |  |
| 20075 | float | RD/WR | 7. harmonic current L4  | A |  |  |
| 20077 | float | RD/WR | 8. harmonic current L4  | A |  |  |
| 20079 | float | RD/WR | 9. harmonic current L4  | A |  |  |
| 20081 | float | RD/WR | 10. harmonic current L4 | A |  |  |
| 20083 | float | RD/WR | 11. harmonic current L4 | A |  |  |
| 20085 | float | RD/WR | 12. harmonic current L4 | A |  |  |
| 20087 | float | RD/WR | 13. harmonic current L4 | A |  |  |
| 20089 | float | RD/WR | 14. harmonic current L4 | A |  |  |
| 20091 | float | RD/WR | 15. harmonic current L4 | A |  |  |
| 20093 | float | RD/WR | 16. harmonic current L4 | A |  |  |
| 20095 | float | RD/WR | 17. harmonic current L4 | A |  |  |
| 20097 | float | RD/WR | 18. harmonic current L4 | A |  |  |
| 20099 | float | RD/WR | 19. harmonic current L4 | A |  |  |
| 20101 | float | RD/WR | 20. harmonic current L4 | A |  |  |
| 20103 | float | RD/WR | 21. harmonic current L4 | A |  |  |
| 20105 | float | RD/WR | 22. harmonic current L4 | A |  |  |
| 20107 | float | RD/WR | 23. harmonic current L4 | A |  |  |
| 20109 | float | RD/WR | 24. harmonic current L4 | A |  |  |
| 20111 | float | RD/WR | 25. harmonic current L4 | A |  |  |
| 20113 | float | RD/WR | 26. harmonic current L4 | A |  |  |
| 20115 | float | RD/WR | 27. harmonic current L4 | A |  |  |
| 20117 | float | RD/WR | 28. harmonic current L4 | A |  |  |
| 20119 | float | RD/WR | 29. harmonic current L4 | A |  |  |
| 20121 | float | RD/WR | 30. harmonic current L4 | A |  |  |
| 20123 | float | RD/WR | 31. harmonic current L4 | A |  |  |
| 20125 | float | RD/WR | 32. harmonic current L4 | A |  |  |
| 20127 | float | RD/WR | 33. harmonic current L4 | A |  |  |

| Address | Format | RD/WR | Note                                       | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 20129   | float  | RD/WR | 34. harmonic current L4                    | A    |     |     |
| 20131   | float  | RD/WR | 35. harmonic current L4                    | A    |     |     |
| 20133   | float  | RD/WR | 36. harmonic current L4                    | A    |     |     |
| 20135   | float  | RD/WR | 37. harmonic current L4                    | A    |     |     |
| 20137   | float  | RD/WR | 38. harmonic current L4                    | A    |     |     |
| 20139   | float  | RD/WR | 39. harmonic current L4                    | A    |     |     |
| 20141   | float  | RD/WR | 40. harmonic current L4                    | A    |     |     |
| 20143   | float  | RD/WR | RCM module: 1. harmonic current rcm1 (I5)  | A    |     |     |
| 20145   | float  | RD/WR | RCM module: 2. harmonic current rcm1 (I5)  | A    |     |     |
| 20147   | float  | RD/WR | RCM module: 3. harmonic current rcm1 (I5)  | A    |     |     |
| 20149   | float  | RD/WR | RCM module: 4. harmonic current rcm1 (I5)  | A    |     |     |
| 20151   | float  | RD/WR | RCM module: 5. harmonic current rcm1 (I5)  | A    |     |     |
| 20153   | float  | RD/WR | RCM module: 6. harmonic current rcm1 (I5)  | A    |     |     |
| 20155   | float  | RD/WR | RCM module: 7. harmonic current rcm1 (I5)  | A    |     |     |
| 20157   | float  | RD/WR | RCM module: 8. harmonic current rcm1 (I5)  | A    |     |     |
| 20159   | float  | RD/WR | RCM module: 9. harmonic current rcm1 (I5)  | A    |     |     |
| 20161   | float  | RD/WR | RCM module: 10. harmonic current rcm1 (I5) | A    |     |     |
| 20163   | float  | RD/WR | RCM module: 11. harmonic current rcm1 (I5) | A    |     |     |
| 20165   | float  | RD/WR | RCM module: 12. harmonic current rcm1 (I5) | A    |     |     |
| 20167   | float  | RD/WR | RCM module: 13. harmonic current rcm1 (I5) | A    |     |     |
| 20169   | float  | RD/WR | RCM module: 14. harmonic current rcm1 (I5) | A    |     |     |
| 20171   | float  | RD/WR | RCM module: 15. harmonic current rcm1 (I5) | A    |     |     |
| 20173   | float  | RD/WR | RCM module: 16. harmonic current rcm1 (I5) | A    |     |     |
| 20175   | float  | RD/WR | RCM module: 17. harmonic current rcm1 (I5) | A    |     |     |
| 20177   | float  | RD/WR | RCM module: 18. harmonic current rcm1 (I5) | A    |     |     |
| 20179   | float  | RD/WR | RCM module: 19. harmonic current rcm1 (I5) | A    |     |     |
| 20181   | float  | RD/WR | RCM module: 20. harmonic current rcm1 (I5) | A    |     |     |
| 20183   | float  | RD/WR | RCM module: 21. harmonic current rcm1 (I5) | A    |     |     |
| 20185   | float  | RD/WR | RCM module: 22. harmonic current rcm1 (I5) | A    |     |     |
| 20187   | float  | RD/WR | RCM module: 23. harmonic current rcm1 (I5) | A    |     |     |
| 20189   | float  | RD/WR | RCM module: 24. harmonic current rcm1 (I5) | A    |     |     |
| 20191   | float  | RD/WR | RCM module: 25. harmonic current rcm1 (I5) | A    |     |     |
| 20193   | float  | RD/WR | RCM module: 26. harmonic current rcm1 (I5) | A    |     |     |
| 20195   | float  | RD/WR | RCM module: 27. harmonic current rcm1 (I5) | A    |     |     |
| 20197   | float  | RD/WR | RCM module: 28. harmonic current rcm1 (I5) | A    |     |     |
| 20199   | float  | RD/WR | RCM module: 29. harmonic current rcm1 (I5) | A    |     |     |
| 20201   | float  | RD/WR | RCM module: 30. harmonic current rcm1 (I5) | A    |     |     |
| 20203   | float  | RD/WR | RCM module: 31. harmonic current rcm1 (I5) | A    |     |     |
| 20205   | float  | RD/WR | RCM module: 32. harmonic current rcm1 (I5) | A    |     |     |
| 20207   | float  | RD/WR | RCM module: 33. harmonic current rcm1 (I5) | A    |     |     |
| 20209   | float  | RD/WR | RCM module: 34. harmonic current rcm1 (I5) | A    |     |     |
| 20211   | float  | RD/WR | RCM module: 35. harmonic current rcm1 (I5) | A    |     |     |
| 20213   | float  | RD/WR | RCM module: 36. harmonic current rcm1 (I5) | A    |     |     |
| 20215   | float  | RD/WR | RCM module: 37. harmonic current rcm1 (I5) | A    |     |     |
| 20217   | float  | RD/WR | RCM module: 38. harmonic current rcm1 (I5) | A    |     |     |
| 20219   | float  | RD/WR | RCM module: 39. harmonic current rcm1 (I5) | A    |     |     |
| 20221   | float  | RD/WR | RCM module: 40. harmonic current rcm1 (I5) | A    |     |     |
| 20223   | float  | RD/WR | RCM module: 1. harmonic current rcm2 (I6)  | A    |     |     |
| 20225   | float  | RD/WR | RCM module: 2. harmonic current rcm2 (I6)  | A    |     |     |

| Address | Format | RD/WR | Note                                       | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 20227   | float  | RD/WR | RCM module: 3. harmonic current rcm2 (I6)  | A    |     |     |
| 20229   | float  | RD/WR | RCM module: 4. harmonic current rcm2 (I6)  | A    |     |     |
| 20231   | float  | RD/WR | RCM module: 5. harmonic current rcm2 (I6)  | A    |     |     |
| 20233   | float  | RD/WR | RCM module: 6. harmonic current rcm2 (I6)  | A    |     |     |
| 20235   | float  | RD/WR | RCM module: 7. harmonic current rcm2 (I6)  | A    |     |     |
| 20237   | float  | RD/WR | RCM module: 8. harmonic current rcm2 (I6)  | A    |     |     |
| 20239   | float  | RD/WR | RCM module: 9. harmonic current rcm2 (I6)  | A    |     |     |
| 20241   | float  | RD/WR | RCM module: 10. harmonic current rcm2 (I6) | A    |     |     |
| 20243   | float  | RD/WR | RCM module: 11. harmonic current rcm2 (I6) | A    |     |     |
| 20245   | float  | RD/WR | RCM module: 12. harmonic current rcm2 (I6) | A    |     |     |
| 20247   | float  | RD/WR | RCM module: 13. harmonic current rcm2 (I6) | A    |     |     |
| 20249   | float  | RD/WR | RCM module: 14. harmonic current rcm2 (I6) | A    |     |     |
| 20251   | float  | RD/WR | RCM module: 15. harmonic current rcm2 (I6) | A    |     |     |
| 20253   | float  | RD/WR | RCM module: 16. harmonic current rcm2 (I6) | A    |     |     |
| 20255   | float  | RD/WR | RCM module: 17. harmonic current rcm2 (I6) | A    |     |     |
| 20257   | float  | RD/WR | RCM module: 18. harmonic current rcm2 (I6) | A    |     |     |
| 20259   | float  | RD/WR | RCM module: 19. harmonic current rcm2 (I6) | A    |     |     |
| 20261   | float  | RD/WR | RCM module: 20. harmonic current rcm2 (I6) | A    |     |     |
| 20263   | float  | RD/WR | RCM module: 21. harmonic current rcm2 (I6) | A    |     |     |
| 20265   | float  | RD/WR | RCM module: 22. harmonic current rcm2 (I6) | A    |     |     |
| 20267   | float  | RD/WR | RCM module: 23. harmonic current rcm2 (I6) | A    |     |     |
| 20269   | float  | RD/WR | RCM module: 24. harmonic current rcm2 (I6) | A    |     |     |
| 20271   | float  | RD/WR | RCM module: 25. harmonic current rcm2 (I6) | A    |     |     |
| 20273   | float  | RD/WR | RCM module: 26. harmonic current rcm2 (I6) | A    |     |     |
| 20275   | float  | RD/WR | RCM module: 27. harmonic current rcm2 (I6) | A    |     |     |
| 20277   | float  | RD/WR | RCM module: 28. harmonic current rcm2 (I6) | A    |     |     |
| 20279   | float  | RD/WR | RCM module: 29. harmonic current rcm2 (I6) | A    |     |     |
| 20281   | float  | RD/WR | RCM module: 30. harmonic current rcm2 (I6) | A    |     |     |
| 20283   | float  | RD/WR | RCM module: 31. harmonic current rcm2 (I6) | A    |     |     |
| 20285   | float  | RD/WR | RCM module: 32. harmonic current rcm2 (I6) | A    |     |     |
| 20287   | float  | RD/WR | RCM module: 33. harmonic current rcm2 (I6) | A    |     |     |
| 20289   | float  | RD/WR | RCM module: 34. harmonic current rcm2 (I6) | A    |     |     |
| 20291   | float  | RD/WR | RCM module: 35. harmonic current rcm2 (I6) | A    |     |     |
| 20293   | float  | RD/WR | RCM module: 36. harmonic current rcm2 (I6) | A    |     |     |
| 20295   | float  | RD/WR | RCM module: 37. harmonic current rcm2 (I6) | A    |     |     |
| 20297   | float  | RD/WR | RCM module: 38. harmonic current rcm2 (I6) | A    |     |     |
| 20299   | float  | RD/WR | RCM module: 39. harmonic current rcm2 (I6) | A    |     |     |
| 20301   | float  | RD/WR | RCM module: 40. harmonic current rcm2 (I6) | A    |     |     |

### RCM module: Other parameters

|       |        |       |  |  |   |   |
|-------|--------|-------|--|--|---|---|
| 196   | ushort | RD/WR | Firmware version of the module. Example:<br>,215' means version 2.15           |  |   |   |
| 20051 | ushort | RD/WR | RCM module: RCM1 (I5): CT connection monitoring (AC only): 0=disable; 1=enable |  | 0 | 1 |
| 20052 | ushort | RD/WR | RCM module: RCM2 (I6): CT connection monitoring (AC only): 0=disable; 1=enable |  | 0 | 1 |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 20393   | ushort | RD    | RCM module: RCM1 (I5): status overcurrent, currently: 0= not available; 1= available   |      |     |     |
| 20394   | ushort | RD/WR | RCM module: RCM1 (I5): status overcurrent, previously: 0= not available; 1= available  |      |     |     |
| 20395   | ushort | RD    | RCM module: RCM1 (I5): status rcm:<br>Bit 0=1 warning currently available,<br>Bit 1=1 warning previously available,<br>Bit 2=1 alarm currently available,<br>Bit 3=1: alarm previously available,<br>Bit 4=1: CT connection break currently available,<br>Bit 5=1: CT connection break previously available,<br>Bit 6=1: overcurrent currently available,<br>Bit 7=1: overcurrent previously available         |      |     |     |
| 20396   | float  | RD    | RCM module: RCM1 (I5): current limit (in A) for alarms   |      |     |     |
| 20398   | uint   | RD    | RCM module: RCM1 (I5): alarm run time (in ms)  |      |     |     |
| 20413   | ushort | RD/WR | RCM module: RCM1 (I5): status overcurrent:<br>Bit 0=1 warning currently available,<br>Bit 1=1 warning previously available,<br>Bit 2=1 alarm currently available,<br>Bit 3=1: alarm previously available,<br>Bit 4=1: CT connection break currently available,<br>Bit 5=1: CT connection break previously available,<br>Bit 6=1: overcurrent currently available,<br>Bit 7=1: overcurrent previously available |      |     |     |
| 20414   | ushort | RD    | RCM module: RCM1 (I5): status (pre-)warning, currently: 0=no warning available; 1=warning available  |      |     |     |
| 20415   | ushort | RD/WR | RCM module: RCM1 (I5): status (pre-)warning, previously: 0=no warning available/delete alarm; 1=warning available  |      |     |     |
| 20416   | ushort | RD    | RCM module: RCM1 (I5): status alarm, currently: 0=no warning available; 1=warning available  |      |     |     |
| 20417   | ushort | RD/WR | RCM module: RCM1 (I5): status alarm, previously: 0=no warning available/delete alarm; 1=warning available  |      |     |     |
| 20418   | ushort | RD    | RCM module: RCM1 (I5): CT connections (AC only), currently: 0=error-free; 1=error  |      |     |     |
| 20419   | ushort | RD/WR | RCM module: RCM1 (I5): CT connections (AC only), previously: 0=error-free/delete error; 1=error  |      |     |     |
| 20593   | ushort | RD    | RCM module: RCM2 (I6): status overcurrent, currently: 0= not available; 1= available   |      |     |     |
| 20594   | ushort | RD/WR | RCM module: RCM2 (I6): status overcurrent, previously: 0= not available; 1= available  |      |     |     |
| 20595   | ushort | RD    | RCM module: RCM2 (I6): status:<br>Bit 0=1 warning currently available,<br>Bit 1=1 warning previously available,<br>Bit 2=1 alarm currently available,<br>Bit 3=1: alarm previously available,<br>Bit 4=1: CT connection break currently available,<br>Bit 5=1: CT connection break previously available,<br>Bit 6=1: overcurrent currently available,<br>Bit 7=1: overcurrent previously available             |      |     |     |

| Address | Format | RD/WR | Note   | Unit | Min | Max |
|---------|--------|-------|--|------|-----|-----|
| 20596   | float  | RD    | RCM module: RCM2 (I6): current limit (in A) for alarms   |      |     |     |
| 20598   | uint   | RD    | RCM module: RCM2 (I6): alarm run time (in ms)  |      |     |     |
| 20613   | ushort | RD/WR | RCM module: RCM2 (I6): status overcurrent: Bit 0=1 warning currently available, Bit 1=1 warning previously available, Bit 2=1 alarm currently available, Bit 3=1: alarm previously available, Bit 4=1: CT connection break currently available, Bit 5=1: CT connection break previously available, Bit 6=1: overcurrent currently available, Bit 7=1: overcurrent previously available |      |     |     |
| 20614   | ushort | RD    | RCM module: RCM2 (I6): status (pre-)warning, currently: 0=no alarm available; 1=alarm available  |      |     |     |
| 20615   | ushort | RD/WR | RCM module: RCM2 (I6): status (pre-)warning, previously: 0=no warning available/delete alarm; 1=warning available  |      |     |     |
| 20616   | ushort | RD    | RCM module: RCM2 (I6): status alarm, currently: 0=no alarm available; 1=alarm available  |      |     |     |
| 20617   | ushort | RD/WR | RCM module: RCM2 (I6): status alarm, previously: 0=no alarm available/delete alarm; 1=alarm available  |      |     |     |
| 20618   | ushort | RD    | RCM module: RCM2 (I6): CT connections (AC only), currently: 0=error-free; 1=error  |      |     |     |
| 20619   | ushort | RD/WR | RCM module: RCM2 (I6): CT connections (AC only), previously: 0=error-free/delete error; 1=error  |      |     |     |
| 20701   | ushort | RD    | RCM module: Warning (3 days - not synchronized) - only MID+  |      |     |     |
| 20702   | ushort | RD    | RCM module: Alarm (7 days - not synchronized) - only MID+  |      |     |     |



***Janitza***<sup>®</sup>

Janitza electronics GmbH  
Vor dem Polstück 6 | 35633 Lahnau  
Germany

Tel. +49 6441 9642-0  
info@janitza.com | www.janitza.com