

# Emergency Stop Switches Operating Instructions



Type ESL-SS-WR  
(Stainless Steel)

Mirror Polished Finish  
Water Resistant Sloped profile

IP69K



**IMPORTANT NOTE:**

**Read and understand these instructions before installing, operating, or maintaining this equipment.**

The product is designed to be a component of a customised safety orientated control system. It is the responsibility of the user to ensure the correct overall functionality of its systems and machines. IDEM its subsidiaries and affiliates, are not in a position to guarantee all of the characteristics of a given system or product not designed by IDEM.

**Application:**

Emergency Stop Switches are mounted on machines and sections of plant conveyors that cannot be protected by guards. In combination with any dual channel safety monitoring controllers these switches can be used as emergency stop devices and monitored for up to Category 4/PLe to ISO13849-1.

**Operation:**

All Emergency Stop Switches conform to European Standard EN ISO 13850 and IEC 60947-5-5. They have a positive mechanical linkage between the switch contacts and the E-Stop Button. The switches are mechanically latched and can then only be returned to the operational condition by twisting the button as required by EN ISO 13850 and IEC 60947-5-5.

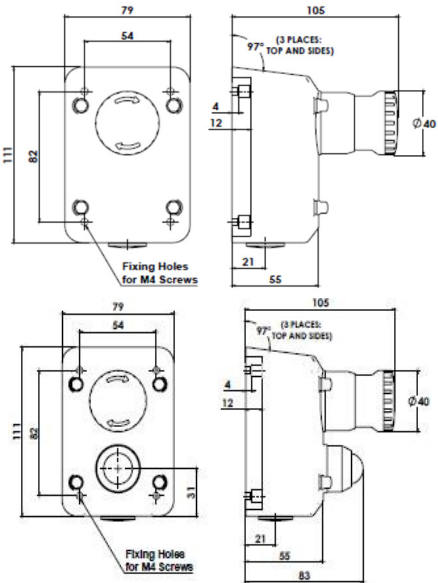
**Installation Guide:**

1. Installation of all switches must be in accordance with a risk assessment for the individual application and in accordance with local wiring regulations and EN60204-1. Installation must only be carried out by competent personnel and in accordance with these instructions.
2. M4 mounting bolts must be used to fix the switches. Tightening torque for mounting bolts to ensure reliable fixing is 4 Nm. Tightening torque for the lid screws, conduit entry plugs and cable glands must be 1.5 Nm to ensure IP seal. Only use the correct size gland for the conduit entry and cable outside diameter.
3. Check operation of all switches and the control circuits by activating the switch (depress the Red Button) and resetting each switch by twisting the Red Button. Ensure each time that the switches latch off and require manual resetting.

**Maintenance:**

- Every Month: Check correct operation of the control circuits and latching mechanism. Inspect for damage to the E Stop button or casing. Replace any switch displaying damage.
- Every 6 Months: Isolate power and remove cover. Check screw terminal tightness and check for signs of moisture ingress. Never attempt to repair any switch.

**Dimensions: (mm)**



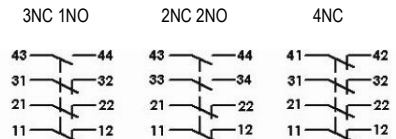
**Standards:**

Case Material	IEC 60947-5-5	UL508	EN ISO 13850
Safety Contact type	Stainless Steel	316	
Contact Material	IEC 60947-5-1	Double break	Type Zb
Termination	Silver		
Rating	Clamp up to	2.5 sq. mm	conductors
Operational Rating	Utilisation Category :	AC15	
Thermal Current (Ith)	AC15	A300	240V. 3A /120V 6A. ac
Rated Insulation Voltage (Ui)	10A.		
Withstand Voltage (Uimp)	500V.		
Short Circuit Overload Protection	2500V.		
Operating Temperature	Fuse Externally	10A. (FF)	
Enclosure Protection	-25C / 80C.		
	IIP69K	Stainless Steel	(NEMA 6)

**Safety Classification and Reliability Data:**

Mechanical Reliability B10d	1.5 x 10 <sup>6</sup> operations at 100mA load
ISO 13849-1	up to PLe depending upon system architecture
EN 62061	up to SIL3 depending upon system architecture
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days
	MTTFd 214 years

NC - Machine able to run



**INFORMATION WITH REGARD TO UL508:**

Type 1 Enclosure  
Contact Blocks A300 230V/3A 120V/6A  
Wire range: 16AWG – 12AWG Stranded Copper Conductors  
Terminal Torque 7lb/in (0.8Nm)  
LED (if fitted): Class 2 supply 24V.dc  
Conduit connection:  
NPT 1/2", or M20 which require the mounting of adapter hubs (Metric to NPT, minimum Type 1).

**Accessories:**



Rear rubber seal.



Stainless Steel Spacer Kit + Seal.

4 x 20mm spacers for standoff mounting (M4 clearance holes)

Stainless Steel Back plate

Rear rubber seal

For flush mounting to flat surface (M4 clearance holes)

**LED Wiring examples (if fitted):**

Black (or Terminal 2) is 0V (or Neutral for 110V and 230V ac versions).  
When power is applied to the Red wire (or Terminal 1), the LED will illuminate Red.  
When power is applied to the Green wire (or Terminal 3), the LED will illuminate Green.

**2 colours  
Recommended Colour Usage:**

LED Red- Stopped  
LED Green – Run



Terminal 1 (Red)  
Terminal 3 (Green)

Terminal 2 (Black)