# SUNS<sup>®</sup> International, LLC

## MULTI-ENTRY TRAPPED KEY-OPERATED SAFETY INTERLOCK SWITCH SS6391 SERIES

#### **Features**

- Robust zinc die cast head assembly and housing
- Multiple solenoids voltages: 12VDC, 24VDC, 48VDC 120VAC and 240VAC
- Key holding force of 2,500N minimum
- Emergency release in case of danger
- Flexible switching arrangement with up to 6 sets of contact
- Can be installed front and back
- Multi-direction head
- Positive opening of NC contacts
- Safety category: PLe/4 equivalent

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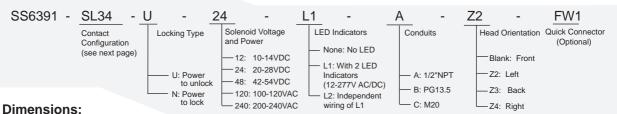
#### **Specifications**

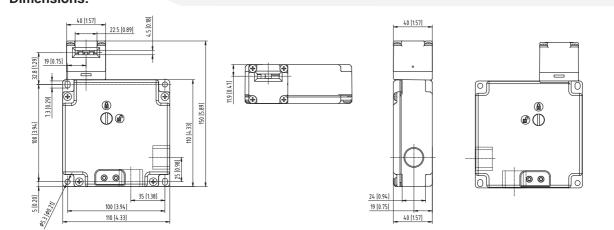
Operating Speed	0.05mm-1m/sec			
Rated Current/Voltage	10A/600V AC (EN60947-5-1) AC15 A300 / DC13 Q300			
Holding Force	2,500N min.			
Contact Resistance	200 mΩ max.			
Service Life	Mechanically 1,000,000 (operations) Electrically 150,000 (operations)			
Operating Temperature	-25~+85°C (-13~185°F)			
Protection against electric shock	Class II (double insulation)			
Pollution degree	3			
Vibration Resistance	10 to 55 Hz,35 mm single amplitude			
Shock Resistance	80m/s <sup>2</sup> min.			
Dielectric Strength	1500VAC for 1 minute between terminals 2500VAC for 1 minute between terminals and non-current carrying parts			
Degree of Protection	IP 68			
Safety Category	PLe/4 equivalent			
Mechanical Reliability B10d	2,500,000 ops			
MTTFd	356 years (8 cycles per hour/24hours per day)			
Solenoid Coil Characteristic	12VDC: +10%, -15%, 4W 24VDC: +10%, -15%, 4W 48VDC: +10%, -15%, 4W 120VAC: +10%, -15%, 8W 240VAC: +10%, -20%, 9W			

#### **Electrical Ratings**

IEC 60947-5-1 / EN 90947-5-1								
Designation & Utilization Category	Rated operational current le (A) at rated operational voltage Ue					VA rating Make Break		
AC15 A300	120V 6A	240V 3A	380V 1.9A	480V 1.5A	600V 1.2A	7200	720	
DC13 Q300	125VDC 250VDC 0.55 0.27					69	69	

#### **Selection Guide:**





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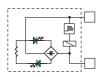
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#### CIRCUIT AND TRAVEL DIAGRAMS

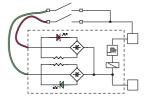
	Key Inserted &Locked		Key Inserted &Unlocked		Key Removed	
Contact Block Code						
SL14 1NC/1NO (2NC/2NO)*	<ul> <li>→ 21 → 22</li> <li>13 → 14</li> </ul>	* ° 41 ° 42 31 ° ° 32 • 23 ° 24 13 ° ° 14	21 <b>0 0</b> 22 13 <b>6 0</b> 14	* 0 41 0 42 31 0 0 32 23 0 0 24 13 0 0 14	21 <b>• •</b> 22 13 <b>• •</b> 14	* 41 0 42 33 0 34 21 0 22 13 0 14
SL16 1NC/1NO (3NC/1NO)*	• 21 • 22 13 • 14	* • • 41 • 42 33 • • 34 • 21 • 22 • 11 • • 12	21 <b>0 0</b> 22 13 <b>0 0</b> 14	* 0 41 40 42 33 0 0 34 21 40 22 11 40 12	21 <b>0 0</b> 22 13 <b>0 0</b> 14	* 41 00 42 33 00 34 21 0 022 11 0 12
SL34 2NC/2NO (2NC/2NO)*	<ul> <li>→ 41 → 42</li> <li>→ 41 → 42</li> <li>→ 32</li> <li>→ 23 → 24</li> <li>→ 14</li> </ul>	* 9 41 42 31 • • 32 23 42 23 42 13 • • 14	41 <b>•••</b> 42 33 <b>•••</b> 34 21 <b>•••</b> 222 13 <b>•••</b> 14	* • • 42 31 • • 32 23 • • 24 13 • • 14	41 • • • 42 33 • • 34 21 • • • 22 13 • • 14	* 41 • • • 42 33 • • 34 21 • • 22 13 • • 14
SL36 3NC/1NO (3NC/1NO)*	<ul> <li>→ 41 • 42</li> <li>→ 33 • • 34</li> <li>→ 21 • 22</li> <li>→ 11 • 12</li> </ul>	* ° 41 42 33 ° ° 34 • 21 42 21 42 22 • 11 42 12	41 • • • 42 33 • • 34 21 • • 22 11 • • 12	* 0 41 0 42 33 0 0 34 21 0 22 11 0 0 12	41 0 42 33 0 34 21 0 22 11 0 12	* 41 • • 42 33 • • 34 21 • • 22 11 • • 12

LED option L1: Two green LEDs are switched ON directly by the solenoid power supply (24 V AC/DC versions only). Wiring is not necessary.

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LED option L2: Two LED connection wires are available, one green and one red. Through suitable connections to the contact block, it is possible to control the different states of the switch (24 V AC/DC versions only).



### \* Door monitor contacts



