

Multi-Entry Trapped Key-Operated Safety Interlock Switch

SS6/SSD6 SERIES

DESCRIPTION

SUNS SS/SSD6191 trapped key safety interlock switch is designed for holding a door or gate closed while a hazard still exists. This is particularly important where there is momentum in the machine. In other words, even when the machine is signaled to stop, parts of the machine are still moving. This could pose an injury risk if the access gate or door is not held closed.

FEATURES

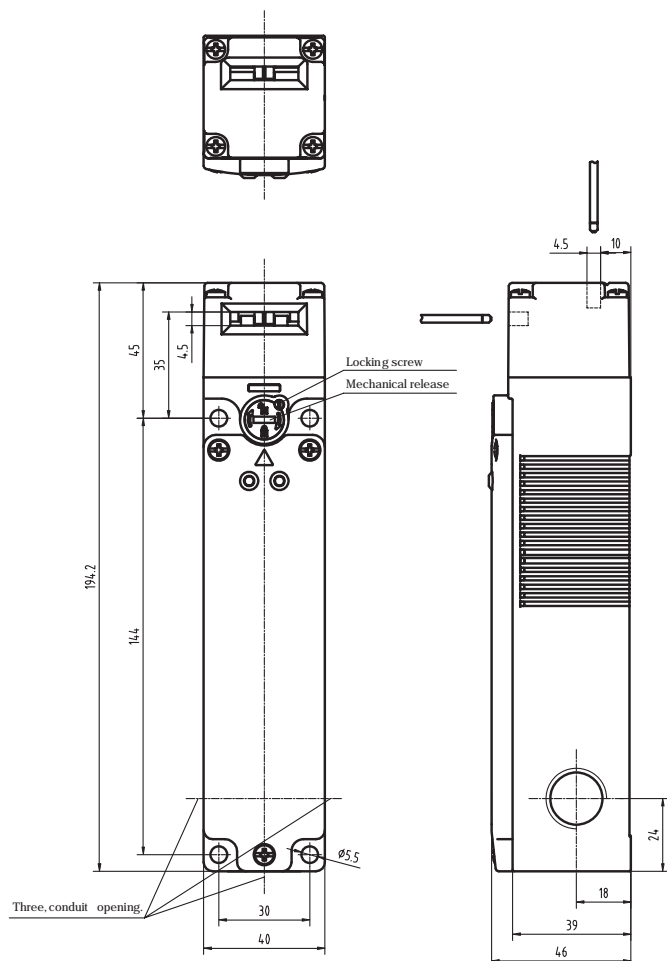
- Robust zinc die cast head assembly with glass fiber reinforced plastic or zinc die cast body
- Three solenoids voltages: 24Vac/dc, 120Vac and 240Vac
- Power-to-lock or power-to-unlock types for key trap (2500N holding force)
- Flexible switching arrangement
- 24 V, 110 Vac, and 230 Vac coil voltages
- Override mechanism in cover
- Head may be rotated into 4 different positions
- Three conduit openings (knock-out style)
- Switch position provides status
- Choice of different contact blocks
- Indicators for switch and solenoid status (optional)
- Positive Opening of NC contacts
- Cable entry available: M20, and 1/2"NPT
- Approval: CE, cULus

BENEFITS

- Product may be applied to most applications worldwide
- Tough, cost-effective, double-insulated enclosure
- Choice of key trapping methodology
- Four contacts that can be arranged in any configuration
- Multiple voltages provide for every geography
- Has a method to open door (in case of power loss, etc.)
- One part number may be used for multiple applications
- Flexible wiring options
- Can diagnose status of gate/door (gate/door closed and locked, gate/door closed and unlocked, gate/door open)

POTENTIAL APPLICATIONS

- Woodworking machinery
- Printing/paper finishing equipment
- Plastic molding equipment
- Packaging machinery
- Bailing
- Pumping equipment
- Semiconductor manufacturing equipment
- Packaging wrapping
- Specialty equipment
- Machine tool
- Robot cell



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SPECIFICATIONS

Designation and Utilization Category		Rated Operational Current Ie (A) at Rated Operational Voltage Ue (V)					
		24Vdc	125Vdc	250Vdc	120Vac	240Vac	600Vac
AC15	A600	-	-	-	6A	3A	1.2A
DC13	Q300	4A	0.55A	0.27A	-	-	-

Rated thermal current (Ith)	5 A
Sealing	SSD6191 IP65; NEMA 1, 4, 12, 13 SS6191 IP67; NEMA 1, 4, 6, 12, 13
Rated impulse withstand (Uimp)	2500 V
Pollution degree	3 (macro-environment, installation environment)
Rated insulation voltage (Ui)	600 V
Operating temperature range	-25 °C to 50 °C [-13 °F to 122 °F]
Storage temperature range	-40 °C to 85 °C [-40 °F to 185 °F]
Short-circuit protective device (type/maximum rating)	Class J fuse (10 A/600 Vac)
Expected mechanical life	1,000,000 operations
Conditional short-circuit current	1000 A
Solenoid operating voltage and power	24 Vac: +10 %, -15 %, 4 W 230 Vac: +10 %, -15 %, 9 W 110 Vac: +10 %, -15 %, 8 W 24 Vdc: +10 %, -20 %, 7 W

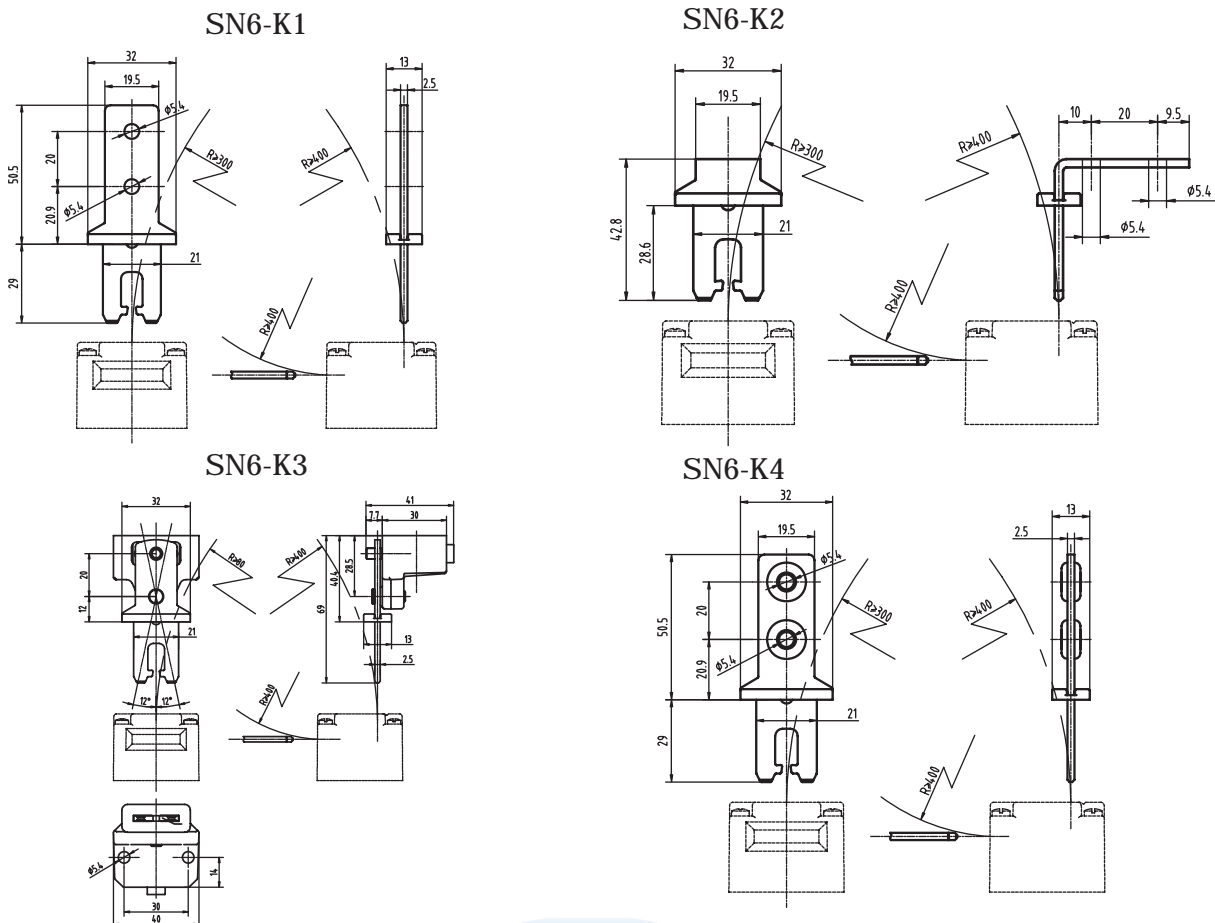
Complies with:

Low Voltage Directive 73/23/EEC, as amended by directive 93/68/EEC.

Machinery Directive 98/37/EEC only as the directives relate to the components being used in a safety function.

IEC/EN60947-5-1.

Choice of Actuating Keys



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Selection Guide:

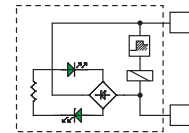
SS61	-	91	-	SL13	-	U	-	C	-	L1	-	A	-	F
Body Style		Contact Configuration (see below)		Locking Type		Solenoid Voltage and Power		LED Indicators		Conduits		Head Orientation		
SS61: Metal body				U: Power to unlock		24: 20-26Vac 20-28Vdc		L1: see below		A: 1/2"NPT		F: Front		
SSD61: Plastic Body				N: Power to lock		120: 100-120VAC		L2: see below		C: M20		B: Back		
						240: 200-240VAC						L: Left		
												R: Right		

CIRCUIT AND TRAVEL DIAGRAMS

Contact block Code	Key inserted & Locked	Key inserted & Unlocked	Key Removed
SL13A 2NC/1NO (1NC)*			
SL13B 2NC (1NC/1NO)*			
SL13C 3NC (1NO)*			
SL22A 2NC/1NO (1NO)*			
SL04A 2NC (2NC)*			
SL04B 3NC (1NC)*			

* Door monitor contacts

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.



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).

