MULTI-ENTRY TRAPPED KEY-OPERATED SAFETY INTERLOCK SWITCH SS6292/SSD6292 SERIES

Features

- Robust zinc die cast head assembly with glass fiber reinforced plastic body or zinc die cast body
- Solenoids voltage: 24VDC
- Key holding force of 1,300N minimum
- Flexible switching arrangement with up to 6 sets of contact
- Multi-direction mounting
- Positive opening of NC contacts
- Safety category: PLe/4 equivalent



Operating Speed	0.05mm-1m/sec		
Rated Current/Voltage	10A/600V AC (EN60947-5-1) AC15 A300 / DC13 Q300		
Holding Force	1,300N min.		
Contact Resistance	200 mΩ max.		
Service Life	Mechanically 1,000,000 (operations) Electrically 150,000 (operations)		
Operating Temperature	-10~+55°C (14~131°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 ² min.		
Dielectric Strength	1500VAC for 1 minute between terminals 2500VAC for 1 minute between terminals and non-current carrying parts		
Degree of Protection	IP 67 NEMA Types 4X		
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	24V: +10%, -15%, 4W		

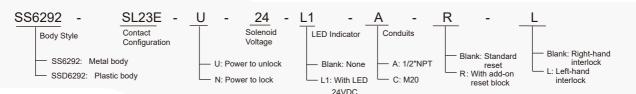
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Electrical Ratings

Specifications

IEC 60947-5-1 / EN 90947-5-1							
Designation & Utilization Category		Rated operational current le (A) at rated operational voltage Ue				VA ra Make	0
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:



Contact Configuration

Contact	Door Open/Closed		Travel Diagram			
Block Code Detection Contact		Key Inserted	Key Inserted Solenoid Power On/off	Key Extracted	Traver Diagram	
SL22A	1NC/1NO+1NC/1NO	Lock Monitor Door Detection $42 - 41 12 - \bigcirc 11$ 64 -63 34 33	Lock Monitor Door Detection 42 - 41 12 - 11 64 63 34 33	Lock Monitor Door Detection 42 - 41 + 12 - 11 64 - 63 + 34 - 33	✓ Lock position	
SL13B	1NC/1NO+2NC	Lock Monitor Door Detection $42 \xrightarrow{41} 12 \xrightarrow{\bigcirc} 11$ $62 \xrightarrow{61} 34 \xrightarrow{33}$	Lock Monitor Door Detection 42 - 41 12 - 9 $62 61 34 33$	Lock Monitor Door Detection $\begin{array}{cccc} 42 & 41 & 12 & \bigoplus 11 \\ & & & & & \\ 62 & & & & & & \\ & & & & & & & \\ & & & & &$	✓ Lock position	
SL13C	2NC+1NC/1NO	Lock Monitor Door Detection $42 41 12 \ominus 11$ 64 63 32 31	Lock Monitor Door Detection $42 \qquad 41 \qquad 12 \qquad \bigcirc 11$ $64 \qquad 63 \qquad 32 \qquad 31$	Lock Monitor Door Detection $\begin{array}{c} 42 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 41 \\ - 4$	V Lock position 42-11 32-31 64-63 Key Insertion Key Insertion	

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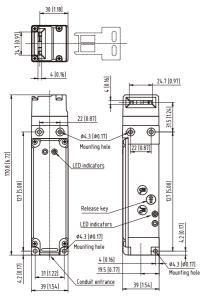
Contact Block Code	Door Open/Closed Detection Contact	Key Inserted	Contact Form Key Inserted Solenoid Power On/off	Key Extracted	Travel Diagram
SL04D	2NC+2NO	Lock Monitor Door Detection $42 \xrightarrow{41} 12 \xrightarrow{6} 11$ $62 \xrightarrow{61} 32 \xrightarrow{31}$		Lock Monitor Door Detection $42 - 41 12 \oplus 11$ 62 - 61 32 - 31	Lock position 42-11 32-31 62-61 Key Insertion Key Extraction
SL22S	1NC/1NO+1NC/1NO	Lock Monitor Door Detection 42 - 41 64 - 63 22 - 21 33	Lock Monitor Door Detection 42 41 92 21 64 63 34 33	Lock Monitor Door Detection $42 - 41$ $\begin{array}{c} \bigcirc \\ 22 - 21 \\ 64 \\ 63 \\ 34 \\ 34 \\ 33 \\ \end{array}$	
SL13T	1NC/1NO+2NC	Lock Monitor Door Detection $42 \xrightarrow{41}$ $62 \xrightarrow{61}$ $42 \xrightarrow{9}$ $22 \xrightarrow{9}$ $33 \xrightarrow{1}$ 33	Lock Monitor Door Detection 42 41 22 21 21 23 33	Lock Monitor Door Detection $42 - 41$ $\begin{array}{c} \bigcirc \\ 2\overline{2} - \overline{1} \\ 62 - 61 \end{array} 2 2\overline{2} - 21 \\ 34 - 33 \end{array}$	
SL13U	2NC+1NC/1NO	Lock Monitor Door Detection 42 - 41 42 - 63 22 - 21 64 - 63 32 - 31	Lock Monitor Door Detection 42 - 41 $64 - 63$ $22 + \bigcirc$ 21 32 - 31	Lock Monitor Door Detection 42 - 41 64 - 63 - 32 - 31	✓ Lock position ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
SL04V	2NC+2NC	Lock Monitor Door Detection $42 \rightarrow 41$ $22 \rightarrow 62$ $62 \qquad 61$ $32 \qquad 31$	Lock Monitor Door Detection 42 - 41 62 - 61 22 + 92 32 31	Lock Monitor Door Detection 42 - 41 62 - 61 22 - 921 31	✓ Lock position
SL23E	2NC/1NO+1NC/1NO	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & - & 41 & 12 & \bigcirc 11 \\ & & & & 22 & \bigcirc 21 \\ 64 & - & 63 & 34 & & 33 \end{array}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Lock Monitor Door Detection $\begin{array}{c} 42 \\ - \\ 41 \\ 22 \\ - \\ 64 \\ 63 \\ 34 \\ 33 \\ \end{array} \begin{array}{c} 11 \\ - \\ 22 \\ - \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\$	Lock position 42-11 22-21 34-33 64-63 Key Insertion Key Extraction
SL14F	2NC/1NO+2NC	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & \underline{} & \underline{12} & \underline{\bigcirc} & \underline{11} \\ & \underline{} & \underline{} & \underline{22} & \underline{\bigcirc} & \underline{21} \\ & \underline{} & \underline{61} & \underline{34} & \underline{33} \end{array}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Lock Monitor Door Detection $\begin{array}{cccc} 42 & \underline{41} & 12 & \bigoplus & 11 \\ & & & & & & & \\ & & & & & & & & \\ & & & & $	V Lock position 42-11 22-21 34-33 62-61 Key Insertion Key Extraction
SL14G	3NC+1NC/1NO	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 \underline{} \underline{} \underline{} \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} \underline{} \underline{} 21 \\ \underline{} \underline{} \underline{} \underline{} \underline{} 3 \\ \underline{} \underline{} \underline{} \underline{} 3 \\ \underline{} \underline{} \underline{} 3 \\ \underline{} \underline{} 3 \\ \underline{} \underline{} \underline{} 3 \\ \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 21 \\ \underline{} \underline{} \underline{} 3 \\ \underline{} \underline{} 2 \\ \underline{} \underline{} 3 \\ \underline{} \underline{} 3 \\ \underline{} \underline{} 1 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 11 \\ \underline{} \underline{} \underline{} \underline{} 1 \\ \underline{ 1 \\ \underline{} 1 \\ \underline{} 1 \\ \underline{} 1 \\ $	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & \bigcirc & 11 \\ \hline & & 22 & \bigcirc & 21 \\ \hline & & 63 & 32 & 31 \end{array}$	Lock Monitor Door Detection $\begin{array}{cccc} 42 & 41 & 12 & \oplus & 11 \\ & & & & & & & \\ & & & & & & & & \\ & & & & $	✓ Lock position
SL05H	3NC+2NC	$\begin{array}{c c} \mbox{Lock Monitor} & \mbox{Door Detection} \\ \hline 42 \ \underline{} \ 41 \ 12 \ \underline{} \ \ominus 11 \\ \underline{} \ \underline{}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & \oplus & 11 \\ \hline & & & 22 & \oplus & 21 \\ \hline & & & & 62 & 61 & 32 & 31 \end{array}$	
SL24N	2NC/1NO+2NC/1NO	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & + & 41 & 12 & \oplus & 11 \\ 52 & + & 51 & 22 & \oplus & 21 \\ 64 & & 63 & 34 & & 33 \end{array}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & 11 \\ 52 & 51 & 22 & 21 \\ 64 & 63 & 34 & 33 \end{array}$	
SL15P	2NC/1NO+3NC	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ 42 & 41 & 12 & \oplus & 11 \\ 52 & 51 & 22 & \oplus & 21 \\ 62 & 61 & 34 & 33 \end{array}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & \ominus 11 \\ 52 & 51 & 22 & \ominus 21 \\ 62 & 61 & 34 & 33 \end{array}$	Lock position 42-11 52-21 34-33 62-61 Key Insertion Key Extraction
SL15Q	3NC+2NC/1NO	$\begin{array}{c c} \mbox{Lock Monitor} & \mbox{Door Detection} \\ \hline 42 & \underline{+} & 11 & \underline{2} & \underline{\ominus} & 11 \\ 52 & \underline{-} & \underline{51} & \underline{22} & \underline{\ominus} & 21 \\ 64 & 63 & 32 & 31 \\ \hline \end{array}$	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & \bigcirc & 11 \\ 52 & 51 & 22 & \bigcirc & 21 \\ 64 & 63 & 32 & 31 \end{array}$	Lock Monitor Door Detection $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	42-11 52-21 32-31 64-63 Key Insertion Key Extraction
SL06R	3NC+3NC	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & - & 41 & 12 & - & 11 \\ 52 & - & 51 & 22 & - & 21 \\ 62 & 61 & 32 & 31 \\ \end{array}$	Lock Monitor Door Detection $\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} \text{Lock Monitor} & \text{Door Detection} \\ \hline 42 & 41 & 12 & \ominus \\ 52 & 51 & 22 & \ominus \\ 62 & 61 & 32 & 31 \\ \end{array}$	✓ Lock position 42-11 52-21 32-31 62-61 Key Insertion Key Insertion

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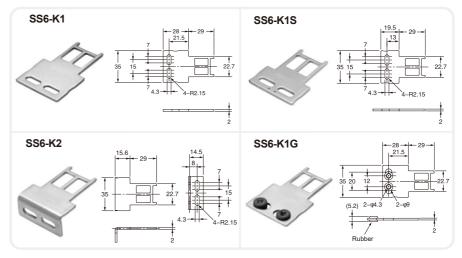
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Dimensions



Choice of Actuating Keys



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