## SAFETY KEY INTERLOCK SWITCHES

# E48 Series

WARRANT

- Critical Stopping Power
- Reduces Risk to Safeguard Workplace
- Tough Plastic Construction

The E48 DIN-Style Safety Key Interlock Limit Switch is designed to be used with movable guards or covers which must be closed for operational safety. The key portion of the switch is affixed to the movable door, cover or other such guard. The switch itself is mounted to a rigid portion of the machine. When the guard is opened, the key is removed from the switch, thereby positively breaking the normally closed contacts. This interrupts the control circuit, stopping machine operation.

#### **SPECIFICATIONS**

Ambient Temperature: Operation and Storage: -30 to 70°C (-22 to 158°F) minimum temperature is based upon absence of freezing water or moisture Enclosure Ratings: NEMA 4, IP65 (indoor only) conforming to IEC 529. Care must be taken that contaminants do not enter the actuating key area as this may prevent the switch from performing to specifications

Ambient Humidity: 95% maximum, non-condensing

Weight: 76 g (0.17 lb)

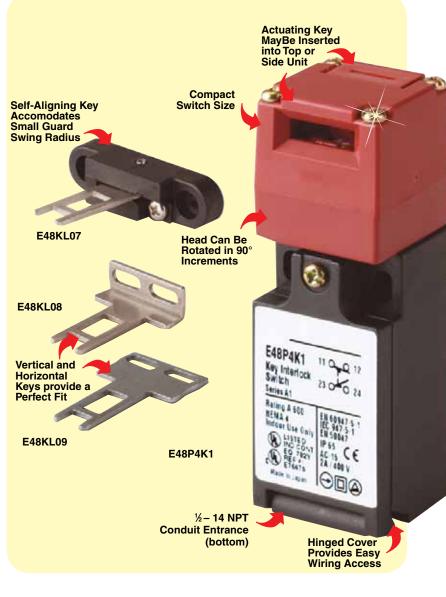
Housing Material: Synthetic resin Vibration Resistance: 10 G in both vertical and horizontal axis (from 10 to 500 Hz) conforming to IEC 68-2-27

**Shock Resistance:** 30 G in both vertical and horizontal axis conforming to IEC 68-2-27

**Mechanical Life:** 1 million operations minimum

Electrical Life: 150,000 operations minimum

Short Circuit Protection Recommended: 10 A fuse (type gl or gG) (IEC 269)



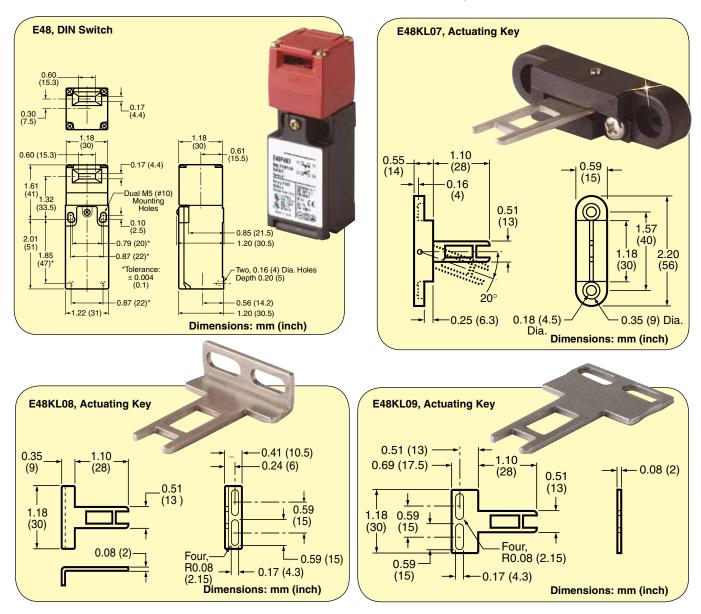
### Rated Insulation Voltage:

400 V (EN 60947-5-1) Electric Shock Protection: Insulation Class II (IEC 536) Operating Force (extraction): 14.7 N (3.30 lbf) Release Force (insertion): 29.4 N (6.60 lbf) Total Travel: 1.10" minimum (28 mm) Pretravel:  $0.24 \pm 0.10$ " minimum ( $6 \pm 3$  mm) Direct Opening Force: 58.8 N (13.2 lbf) minimum Operating Speed: 0.04 to 20 inches/ second (1 to 500 mm/second)

Operating Frequency: 30 operations/ minute maximum UL Listed: File 76675 Europe Compliance: EN 609478-5-1 Direct-opening N C contacts per EN 60947-5-1 Double insulation TUV Rheinland: Approved Contacts: 1 NO/1 NC DPDB 2 NC DPDB

#### **SPECIFICATIONS**

|               | CURRENT            |      |       | MAXIMUM VA |        |
|---------------|--------------------|------|-------|------------|--------|
| RATED VOLTAGE | THERMAL CONTINUOUS | MAKE | BREAK | MAKE       | BREAK  |
| 120 Vac       | 10 A               | 60 A | 6.0 A | 7200 VA    | 720 VA |
| 240 Vac       | 10 A               | 30 A | 3.0 A | 7200 VA    | 720 VA |
| 480 Vac       | 10 A               | 15 A | 1.5 A | 7200 VA    | 720 VA |



| To Order                 |   |
|--------------------------|---|
| MODEL NO.                | DESCRIPTION   |
| E48P4K1                  | E48 plastic DIN key interlock switch, 1 NO/1 NC DPDB slow action  |
| E48P4K0                  | E48 plastic DIN key interlock switch, 2 NC DPDB slow action       |
| ACTUATING KEYS           |   |
| E48KL07                  | Adjustable self aligning, 200 mm (7.8") min. key insertion radius |
| E48KL08                  | Vertical, 200 mm (7.8") min. key insertion radius                 |
| E48KL09                  | Horizontal, 200 mm (7.8") min. key insertion radius               |
| NOTE: NO and NC contacts | are defined with the key fully engaged in the switch.             |

**NOTE:** NO and NC contacts are defined with the key fully engaged in the swith Comes complete with operating manual. **Ordering Example: E48P4K1**, switch, **E48KL07**, actuating key.