

Key Interlock Switches DIN Models

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The Cutler-Hammer® E48 DIN-Style Safety Key Interlock Limit Switch by Eaton's electrical business 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.

Ratings and Approvals

- UL Listed
- TUV
- IEC 947-5-1
- EN60947-5-1
- NEMA A600 (UL/CSA Pilot Duty)
- Direct Opening N.C. contacts per EN60947-5-1 ⊕
- Double insulation □

CE

Cost-Effective Protection for Operators of Moving Machinery



Product Features

- Head mechanism is designed to be difficult to defeat with common tools
- Three actuating key styles for mounting flexibility
- Choose from 1N.O.-1N.C. or 2N.C. DPDB contacts
- 1/2 – 14 NPT conduit entrance
- Four unique head mounting positions
- Dual entry points for actuating key — top or side
- Tough plastic construction

For Customer Service in the U.S. call **1-877-ETN CARE (386-2273)**,
in Canada call **1-800-268-3578**.
For Application Assistance in the U.S. and Canada
call **1-800-426-9184**.

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Model Selection — Key Interlock Switches

Circuit	Contacts	Contact Operation	Legend	Catalog Number
			■ Closed □ Open	
1N.O.-1N.C. DPDB slow action				E48P4K1
2N.C. DPDB slow action				E48P4K0

NOTE: N.O. and N.C. contacts are defined with the key fully engaged in the switch.

■ Stocked product, typical order quantities guaranteed in stock.

Model Selection — Actuating Keys (must be ordered separately)

	Minimum Key Insertion Radius	Catalog Number
Adjustable (Self-Aligning) 	7.8 inches (200 mm)	E48KL07
Vertical 	7.8 inches (200 mm)	E48KL08
Horizontal 	7.8 inches (200 mm)	E48KL09

■ Stocked product, typical order quantities guaranteed in stock.

Specifications

Description	Specification
Ambient Temperature	Operation and Storage: -22° to 158°F (-30° to 70°C) minimum temperature is based upon absence of freezing water or moisture
Enclosure Ratings	NEMA 4, IP65 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 grams (0.17 lb)
Housing Material	Synthetic resin
Vibration Resistance	10G in both vertical and horizontal axis (from 10 to 500 Hz) conforming to IEC 68-2-27
Shock Resistance	30G 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: 10A fuse (type gl or gG) (IEC 269)
Rated Insulation Voltage	400V (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 inch minimum (28 mm)
Pretravel	0.24 ± 0.10 inches minimum (6 ± 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

Rated Voltage	Current			Maximum VA	
	Thermal Continuous	Make	Break	Make	Break
120V AC	10A	60A	6.0A	7200 VA	720 VA
240V AC	10A	30A	3.0A	7200 VA	720 VA
480V AC	10A	15A	1.5A	7200 VA	720 VA
600V AC	10A	12A	1.2A	7200 VA	720 VA

