Compact Prewired Switches

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Compact Prewired Switches

Product Description

The E47 Compact Prewired Limit Switch by Eaton's electrical sector is designed to be a versatile, slim device for hard to fit applications where sealing integrity is required. The rugged die cast aluminum alloy housing, cable connection and switch mechanism are encapsulated for protection against extreme temperature (–10° to 70°C [14° to 158°F]), contaminants, moisture, shock and vibration. This factory wired (3m) device has NEMA® enclosure ratings of 4, 6 and 13, making it suitable for applications such as machine tool, food processing and packaging.

Features

- Rugged aluminum alloy die cast housing
- Sealed construction with enclosure ratings of NEMA 4, 6 and 13
- Prewired with 3m of 18 AWG, AWM 2517, 300V cable, or micro-connector version also available
- Stackable ridge for ganged operation

Standards and Certifications

- cULus (cable versions only)
- UL (cable versions only)
- NEMA 4, 6 and 13
- IEC IP67, IP69K
- RoHS

c UL us Listed   UL   RoHS COMPLIANT

⚠ **DANGER**

THIS SENSOR IS NOT A SAFETY DEVICE AND IS NOT INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safety-related use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.

For the most current information on this product, visit our Web site: www.eaton.com

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.

Compact Prewired Switches, continued

Actuator Type	Operating Force (Maximum)	Reset Force (Minimum)	Over-Travel (Maximum)	Pre-Travel	Movement Differential (Maximum)	Operating Position	Standard Version Catalog Number	Connector Version Catalog Number
Roller Lever	**Roller Lever**							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	**E47BCC15**	**E47BCC15P4**
Wobble Stick	**Wobble Stick**							
	5.3 oz (150g)	—	—	15° max.	—	—	**E47BCC20**	**E47BCC20P4**
Rod Lever	**Rod Lever**							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	—	**E47BCC21P4**
Adjustable Level Arm	**Adjustable Level Arm**							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	**E47BCC22**	**E47BCC22P4**

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Technical Data and Specifications

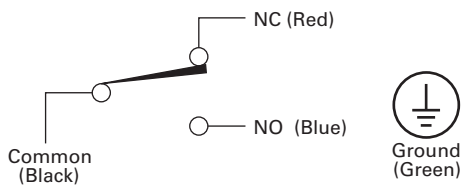### Compact Prewired Switches

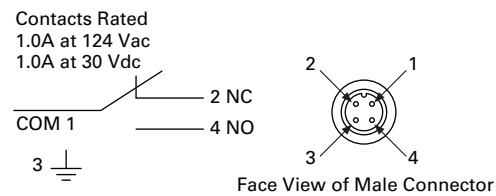| Description	Specification
Contacts	1-SPDT (Form C)
Mechanical life	10,000,000 operations
Electrical life	200,000 operations, 30 operation/min. at rated load
Operating speed	30 operations per minute maximum
Operating temperature range	−10° to 70°C (14° to 158°F)
Storage temperature range	−10° to 70°C (14° to 158°F)
Humidity	95% maximum non-condensing
Vibration	Malfunction durability, 10 to 55 Hz 1.5 mm double amplitude
Shock	Malfunction durability, approximately 50G
Enclosure ratings	NEMA 4, 6 and 13; IEC IP67

Maximum Ampere Ratings [1]

Rated Voltage	Non-Inductive Load (A) Resistive Load		Inductive Load (A) Inductive Load		Motor Load		Inrush Current (A)	
	NC	NO	NC	NO	NC	NO	NC	NO
125 Vac	5	5	3	3	2.5	1.3	20 max.	10 max.
250 Vac	5	5	2	2	1.5	0.8		
8 Vdc	5	5	5	4	1.5	1.5		
14 Vdc	5	5	4	4	1.5	1.5		
30 Vdc	4	4	3	3	1.5	1.5		
125 Vdc	0.4	0.4	0.4	0.4	0.05	0.05		
250 Vdc	0.2	0.2	0.2	0.2	0.03	0.03		

Wiring Diagram

Compact Prewired Switches

NC (Red)

NO (Blue)

Common (Black)

Ground (Green)

Micro-Connector Switches

Contacts Rated
1.0A at 124 Vac
1.0A at 30 Vdc

2 NC

COM 1

4 NO

3

2 1

3 4

Face View of Male Connector

Note

[1] Inductive load ratings are tested at a power factor 0.4 min. for AC power and a time constant of 7 ms max. for DC power. Inrush current for motor load is six times the steady state current.

Dimensions

Approximate Dimensions in mm [in]

E47BCC05

E47BCC11

E47BCC06

E47BCC12

E47BCC07

E47BCC13

E47BCC08

E47BCC15