# **Series L9 UL-489**Miniature <u>Circuit Breakers</u>





# **Broad product range & flexibility**

The L9 Miniature Circuit Breakers provide a variety of product configurations by offering current ranges of 0.5A to 63A with voltage ranges of 240V AC and 480Y/277V AC. The Series L9 DIN Rail-mounted circuit breakers are similar in width and current range to circuit breakers with the added benefit of providing UL Listed and CSA Listed branch circuit protection circuit breaker for US/Canada applications.

Also available for control circuit applications are add-on auxiliary and signal contacts plus shunt trip modules to provide modern control circuit applications. A lock-off attachment is available for applications requiring that feature.

# Safety features provide enhanced protection

The series L9 Miniature Circuit Breakers feature finger-safe IP20 from the front of the circuit breaker to guard against accidental contact with live parts. To aid troubleshooting, a color-coded indicator provides positive visual indication of the device status (green for OFF, red for ON and isolation function). The Series L9 also incorporate a trip free mechanism, ensuring that the device operation cannot be defeated by holding the operator in the ON position.

Sprecher + Schuh's Series L9 products are thermal-magnetic (inverse time) circuit breakers offering the benefits of a modern circuit breaker design in a compact size. The L9 is used mainly in control circuit applications where branch circuit approved circuit breakers are required. Because of its range of protection (from 0.5 to 63A) many customers may use this product for protection of load devices where fuses or other supplementary protector devices previously were used in the U.S. and Canada. Protection of PLC I/O, solenoids, power supplies and control transformers along with providing the listed branch circuit protection is available in one device.

- IP20 protection for Accidental Contact
- Color-coded handle for status indicators
- Trip free mechanism
- Global approvals for worldwide acceptance
- Switching Duty (SWD) Rating from 0.5 to 20A
- 1-, 2-, and 3-pole configurations

# **Easy installation**

The Series L9 Miniature Circuit Breakers mount on a standard 35mm DIN-rail. Wire terminals accept multiple conductors. In addition, power to the circuit breakers can be fed from the line or load side.





Dual box lug line & load side terminals accept #18...#4 (1.0...25mm2) wire standard

Amp rating and trip curve characteristic clearly marked

Installs on standard 35mm DIN-rail



Guarded No.2 posidrive terminal screws with finger-safe protection

Current limiting and interrupting capacity rated up to 10kA at 480Y/277V AC

Trip-free mechanism and color code trip indicator

## Magnetic trip elements

- offering C and D trip curves to provide short circuit protection
- bimetallic elements protect against overcurrents.

# **Description**

- Rated 0.5...63A at 240VAC
- Rated 0.5...40A Curve C at 480Y/277V AC
- Rated 0.5...35A Curve D at 480Y/277V AC
- Rated 415V AC/48V DC 0.5...40A for IEC applications
- Rated 0.5...40A 48V DC 1-pole
- Rated 0.5...40A 96V DC 2-pole

# Global approvals for worldwide acceptance

- UL489 Listed E197878
- CSA 22.2 No. 5.1 approved
- Meets IEC 60 947-2
- HACR rated (heating and air conditioning)
- Switching Duty (SWD) rating from 0.5 to 20A
- VDE Certified

# **Continuous Current Rating**

The L9 circuit breakers are rated in RMS amperes at 40°C (104°F) ambient temperature per the UL 489 (CSA 22.2 No. 5.1) standard. This temperature is generally used as the average temperature within an industrial enclosure. If a circuit breaker is applied in a temperature that exceeds 40°C (104°F) ambient, then the circuit breaker should be derated. For IEC 60 947-2 standard, the products carry an ambient rating of 30° C. Follow standard IEC application considerations for temperature rating in different ambient temperatures.

Standard current ratings are: 0.5A, 1A, 1.5A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 10A, 15A, 16A, 20A, 25A, 30A, 32A, 35A, 40A, 50A, 60A, and 63A.

### **Accessories**

### **Bus bar**

- UL recognized bus bars and feeder terminals are available for group connection of circuit breakers
- 1-, 2-and 3-pole
- Terminal lugs, power feeds and protective covers available



## **Auxiliary & Signal Contacts**

· Mount on right side



## **Shunt Trip**

- Remotely trip device
- · Installs on right side



## **Lockout Toggle Mounts**

- Fits securely over switch toggle
- Prevents unauthorized access
- 1-pole & multi-pole





For more information, or to contact your Sprecher + Schuh representative, visit www.sprecherschuh.com

