

NTE Electronics R185-25A Circuit Breakers User Manual

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NTE Electronics R185-25A Circuit Breakers



Product Information

The R185 Series Circuit Breakers are Type III Manual Reset with Push-to-Trip Switch. They feature an IP67 Water Resistant, Splash, and Dust Proof Housing. These circuit breakers are single pole, thermal devices with ignition protection, meeting the SAE J1171 standard for external ignition protection of marine electrical devices. They have 1/4-28 threaded studs for surface mount installation and come with a protective stud insulator. The R185 Series Circuit Breakers are typically used in DC power systems in marine, truck, and RV applications to provide add-on protection for accessories. They are also thermal circuit breakers and hydraulic and hi-amp protectors. The R185 Series Circuit Breakers come in various current ratings from 25A to 150A. They have trip times that vary depending on the current rating and load conditions. The trip times range from hold with no trip within 30 minutes to trip within 60 seconds. These circuit breakers have electrical specifications including an interrupt rating of 3000 Amps @ 48 VDC and 2500 Amps @ 14 VDC. They have an insulation resistance of 100 megohms @ 500 VDC and a dielectric strength of 1800V for 1 minute. The mechanical characteristics of the R185 Series Circuit Breakers include termination of 1/4-28 threaded stud and surface mount mounting. They can operate in temperatures ranging from -32°C to +82°C and can be stored in temperatures ranging from -34°C to +149°C.

Product Usage Instructions

- 1. Choose the appropriate R185 Series Circuit Breaker based on the desired current rating.
- 2. Ensure that the circuit breaker is suitable for the intended application (marine, truck, or RV).
- 3. Mount the circuit breaker using the provided 1/4-28 threaded studs in a surface mount configuration.
- 4. Make sure to include the protective stud insulator during installation.
- 5. Connect the circuit breaker to the DC power system, ensuring proper polarity.
- 6. If using the circuit breaker as add-on protection for accessories, connect the accessories to the circuit breaker according to their respective wiring diagrams.
- 7. Ensure that the circuit breaker is properly reset before applying power.
- 8. In case of an overload or fault condition, the circuit breaker will trip to protect the system. Identify and rectify the cause of the trip before attempting to reset the circuit breaker.
- 9. Refer to the trip times chart in the user manual to understand the behavior of the circuit breaker under different load conditions.
- 10. During storage, keep the circuit breaker in a temperature range of -34°C to +149°C.

Note: For detailed information on installation, wiring, and troubleshooting, refer to the complete user manual provided by NTE Electronics, Inc.

Contact NTE Electronics, Inc. for any further assistance or inquiries:

Voice: (973) 748-5089 Fax: (973) 748-6224

Website: http://www.nteinc.com

This information was downloaded from Arrow.com.

R185 Series

Features

- Type III Manual Reset with Push-to-Trip Switch
- IP67 Water Resistant, Splash and Dust Proof Housing
- Single Pole, Thermal Device
- · Ignition Protected

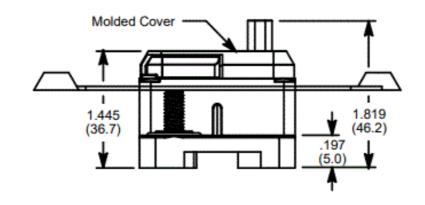
- Meets SAE J1171 External Ignition Protection of Marine Electrical Devices
- 1/4-28 Threaded Studs
- Surface Mount, Protective Stud Insulator Included
- Typically Used in DC Power Systems in Marine, Truck, and RV Applications. Add On Protection for Accessories

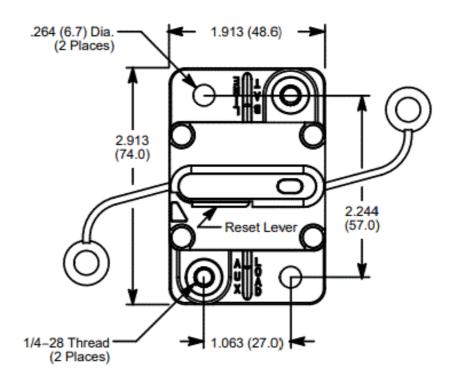


| NTE Type No. | Current Rating Amps | NTE Type No. | Current Rating Amps |
|--------------|---------------------|--------------|---------------------|
| R185–25A | 25 | R185–80A | 80 |
| R185–30A | 30 | R185–90A | 90 |
| R185–35A | 35 | R185–100A | 100 |
| R185–40A | 40 | R185–120A | 120 |
| R185–50A | 50 | R185–130A | 130 |
| R185–60A | 60 | R185–140A | 140 |
| R185–70A | 70 | R185–150A | 150 |

Trip Times

| Rated Load | Trip Times |
|------------|---------------------------------|
| 100% | Hold, No Trip within 30 Minutes |
| 135% | Trip within 30 Minutes |
| 200% | Trip within 60 Seconds |





Electrical Specifications

• Electrical Characteristics

Rating: 25A to 150A

Interrupt Rating: 3000 Amps @ 48 VDC; 2500 Amps @ 14 VDC

Insulation Resistance: 100 megohms @ 500 VDC

Dielectric Strength: 1800V, 1 minute

Mechanical Characteristics

Termination: 1/4-28 threaded stud

Mounting: Surface Mount

• Environmental Characteristics

Operating: -32 C to +82 C **Storage:** -34 C to +149 C

NTE Electronics, Inc. Voice (973) 748–5089 FAX (973) 748–6224 http://www.nteinc.com

Documents / Resources



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R185-25A, R185-25A Circuit Breakers, Circuit Breakers, Breakers, R185-30, AR185-35A, R185-40A, 185-50A, R185-60A, R185-70A, R185-80A, R185-90A, R185-100A, R185-120A, R185-130A, R185-140A, R185-150A

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