

7851 AND 7854 SERIES

15 TO 30 AMP PRECISION THERMAL CIRCUIT BREAKER

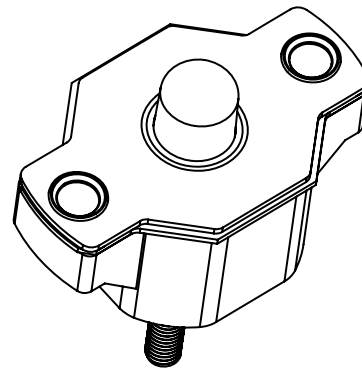
Introduction

The 7851 and 7854 series thermal breakers were designed to protect wiring and meet the harshest environmental requirements. The 7851 and 7854 series closed construction circuit breakers are weatherproof sealed for protection against moisture, dust, grease, fuel vapors and other harsh environments. The 7851 and 7854 series breakers are compact, lightweight and designed to interrupt short circuits or overloads, and combine trip-free protection with fast response time. Typical applications are protection of wire cable of accessory circuits, equipment and battery protection in construction and off-road equipment, marine, recreational vehicles (RV's), mining, agricultural equipment and electric (hybrid) vehicles.



Features

- 30VDC or 120VAC, 12.5 to 60 Amps
- Sealed assemblies, manual and automatic reset options
- Ignition protected SAE J1171
- Weatherproof SAE J553
- UL Recognized E36869



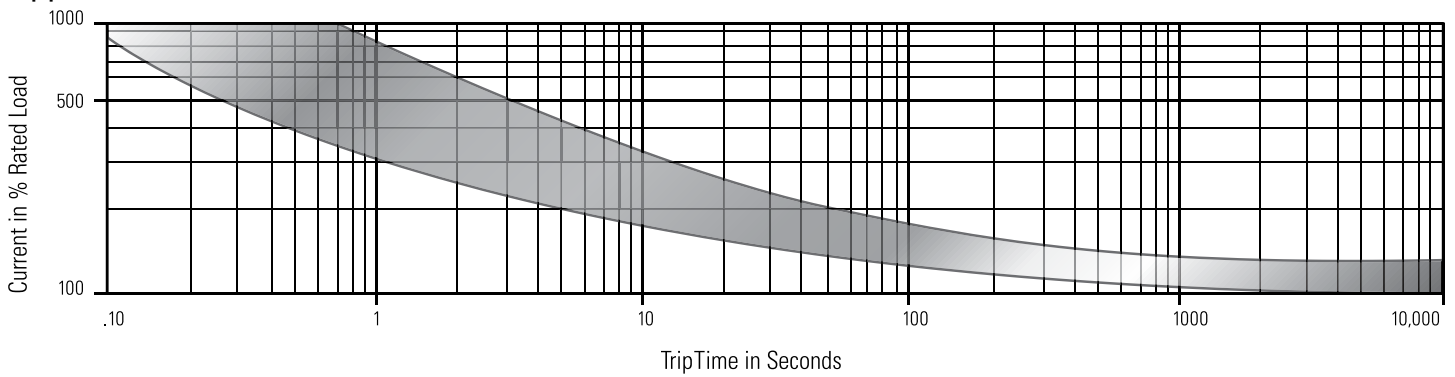
SPECIFICATIONS

Calibration : 200% rated current, 77°F (25°C)	12.5 to 60 amps : 5 to 55 seconds
Ultimate Trip At 77°F (25°C)	Must hold 100%, Must trip 135%
Endurance	Per SAE J553
Interrupt Current Capacity	Per SAE J553 and ABYC E-11
Vibration	10G MIL-STD-202 Method 204, Condition A
Mechanical Shock	MIL-STD-202 Method 101D
Dielectric Strength	MIL-STD-202 Method 301, 1500VAC min
Insulation Resistance	MIL-STD-202 Method 302, Condition B, 100MΩ min
Weight	7851 : 54 grams max 7854 : 49 grams max



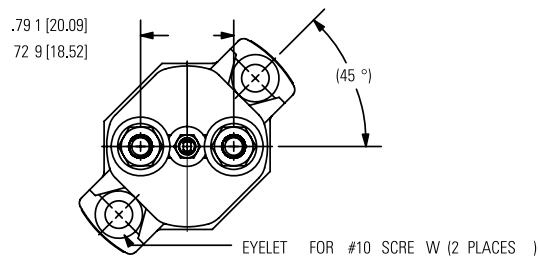
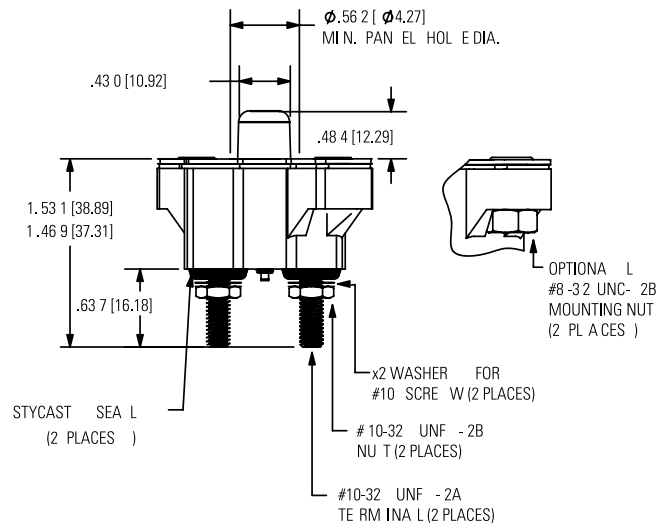
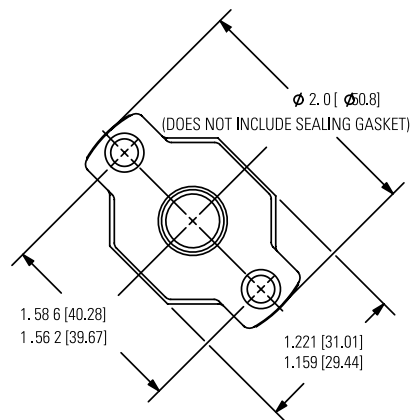
TRIP CURVE

Approximate Time, Current Characteristics At 77°F (25°C)



DIMENSIONS

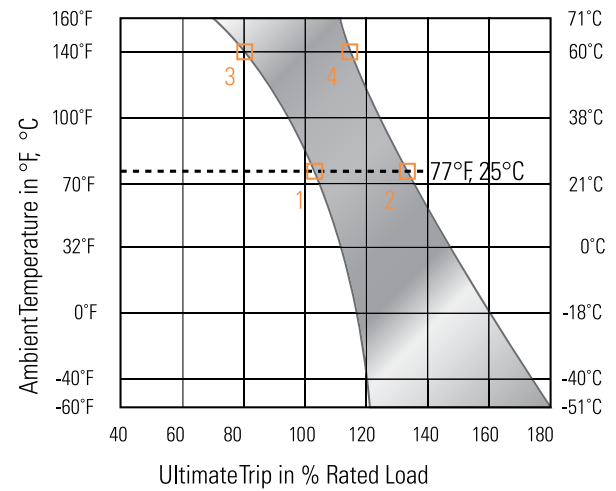
All dimensions are in inches [mm]





DERATING CURVE

Performance characteristics are based on room temperature 77°F, 25°C). Consult Derating curve for ambient temperatures ignificantly higher or lower than standard room temperature.
Example: At 77°F (25°C) the device is calibrated to hold at 100% of rated current (1) and trip at 135% of rated current (2). At 140°F (60°C), the same device will hold at approximately 78% of rated current (3), and trip at approximately 115% of rated current (4).



ORDERING OPTIONS

Example : 7851-15-12.5-

Configuration

7851: Manual, sealed
7854: Auto, sealed

Stud Length (approx)

15 25
20 30

Amp Rating

12.5 17.5 25 35 50
15 20 30 40 60

Mounting Nuts

: leave blank for none
!: optional mounting nuts