



# KLIXON® | F Series (FDLA, FDLM, FDLS, FDLT)

## 35 to 150 Amp Surface-Mount Thermal Circuit Breaker

### FEATURES

- 30VDC, 35 to 150 Amps
- Weatherproof, ignition protected, trip-free design
- Stronger housing material for increased robustness
- Ability to accommodate heavy gauge wire lugs across terminal studs
- SAE J1625 surface vehicles circuit breaker standards
- SAE J1171 marine circuit breaker standards
- Meets 5000 amps @ 12VDC for interrupt capacity per ABYC E-11, DC electrical systems of boats

### DESCRIPTION

The KLIXON® F series thermal breakers are designed for surface mount applications and are available with automatic trip, manual reset, trip indication, and a switchable option in a single device. The internal components are enclosed in a vibration resistant, weatherproof, robust casing to provide protection in the harshest environments found in heavy truck, off-road, marine and construction applications. The F series thermal breakers are designed to combine trip-free protection with fast response time. Terminal studs are available in 1/4" or a larger 3/8" option to allow higher torque connections and provide wider spacing for heavy gauge wire lugs.

### ORDERING INFORMATION

**FDL X - X - X**

Configuration

A = Auto

M = Manual

S = Manual Reset / Switch

T = Trip Lever

Amp Rating\*

(35, 40, 45, 50, 60, 70, 80, 90, 100, 105, 120, 135, 150)

Terminals\*

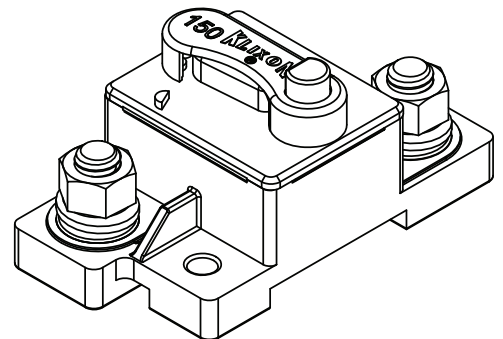
1 = 1/4-28 UNF-2A

2 = 3/8-16 UNC-2A

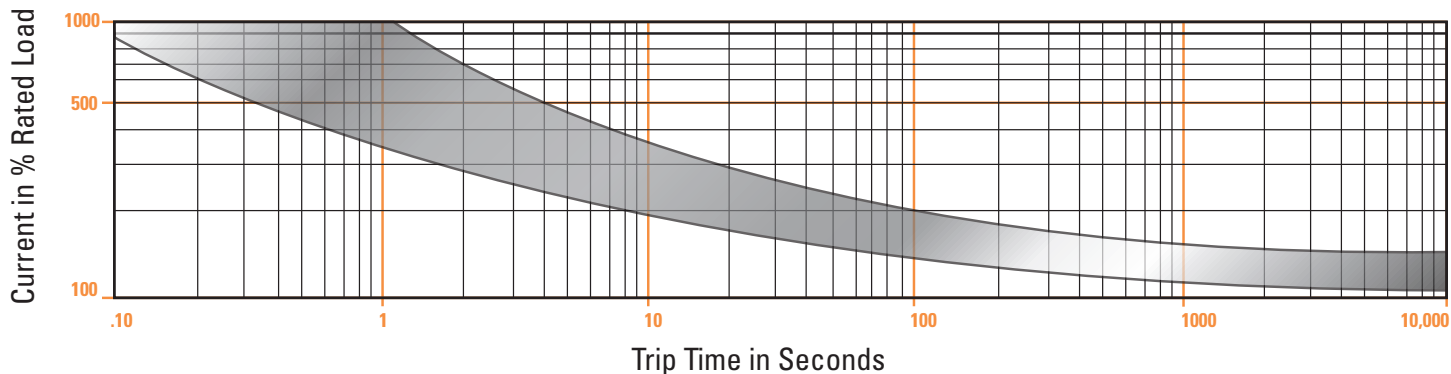
\* Other non-standard options available, consult factory

### PERFORMANCE CHARACTERISTICS

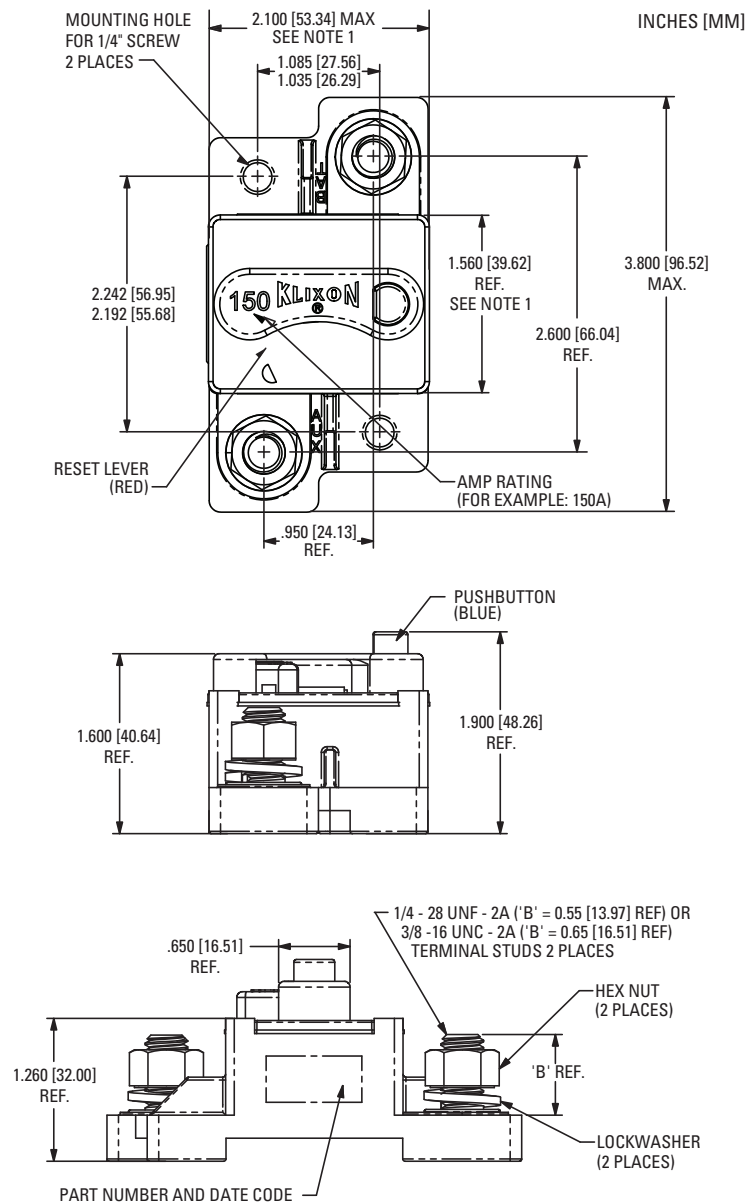
Calibration : 200% rated current, 77°F (25°C)	35 to 150 Amps : 8 to 100 seconds
Ultimate Trip At 77°F (25°C)	Must hold 100%, Must trip 135%
Endurance	Per SAE J1625
Interrupt Current Capacity	Per SAE J1625 and ABYC E-11
Mechanical Vibration	Per SAE J1455, 4G's 10-2K Hz
Voltage Breakdown	Per SAE J1625 500VAC
Salt Spray	Per SAE J1455, 96 hours
Weight	153 grams max



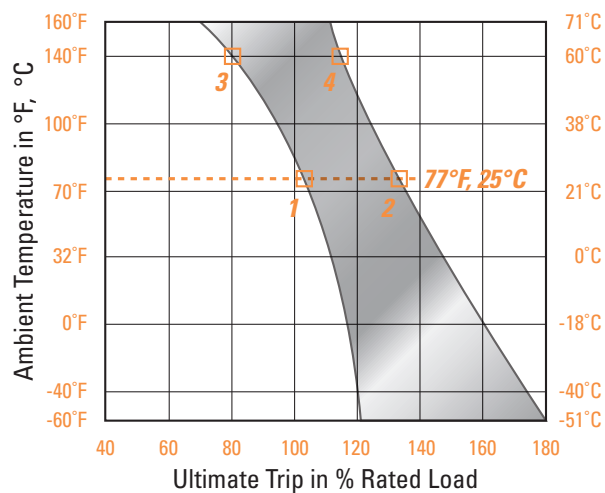
### TRIP CURVE - Approximate Time, Current Characteristics At 77°F (25°C)



### DIMENSIONS - FDLs



### DERATING CURVE



Performance characteristics are based on room temperature (77°F, 25°C). Consult Derating curve for ambient temperatures significantly 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).

#### Notes:

1. Dimension does not include sealing gasket.