## KLixo $\mid$ | F Series (FDLA, FDLM, FDLS, FDIT) 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 breaker series 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 $1 / 4^{\prime \prime}$ or a larger $3 / 8^{\prime \prime}$ option to allow higher torque connections and provide wider spacing for heavy gauge wire lugs.

## ORDERING INFORMATION



* Other non-standard option available, consult factory


## PERFORMANGE CHARACTERISTICS

| Calibration : $200 \%$ rated current, <br> $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ | 35 to 150 Amps : 8 to 100 seconds |
| ---: | :--- |
| Ultimate Trip At $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ | 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 (with $3 / 8^{\prime \prime}$ terminal studs) | 153 grams max |



TRIP CURVE - Approximate Time, Current Characteristics At $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$


DIMENSIONS - FDLS


## DERATING CURVE



Performance characteristics are based on room temperature $\left(77^{\circ} \mathrm{F}, 25^{\circ} \mathrm{C}\right)$. Consult Derating curve for ambient temperatures significantly higher or lower than standard room temperature.

Example: At $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ the device is calibrated to hold at $100 \%$ of rated current (1) and trip at $135 \%$ of rated current (2). At $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$, 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.
