



# KLIXON® | 6TC & 9TC SERIES

## 1 to 35 Amp, Three-Phase Aircraft Circuit Breakers

### FEATURES

- 28VDC or 120VAC, 1 to 35 Amps
- High vibration resistance and interrupt capacity
- Ambient temperature compensation and trip-free design
- Mil-qualifications
- European & SAE standards
- All U.S. and most European aircraft OEM's qualifications

### ADDITIONAL OPTIONS\*

- Longer push buttons
- High vibration
- Metric mounting or terminal thread
- Dust boot ‡
- Auxiliary switch ‡‡

### DESCRIPTION

The Klixon® three-phase 6TC & 9TC circuit breakers provide ambient compensated circuit protection in a lightweight, subminiature package size. The three phase design integrates each individual phase to provide overcurrent protection in the event of simultaneous or unbalanced overloads, including short circuit conditions.

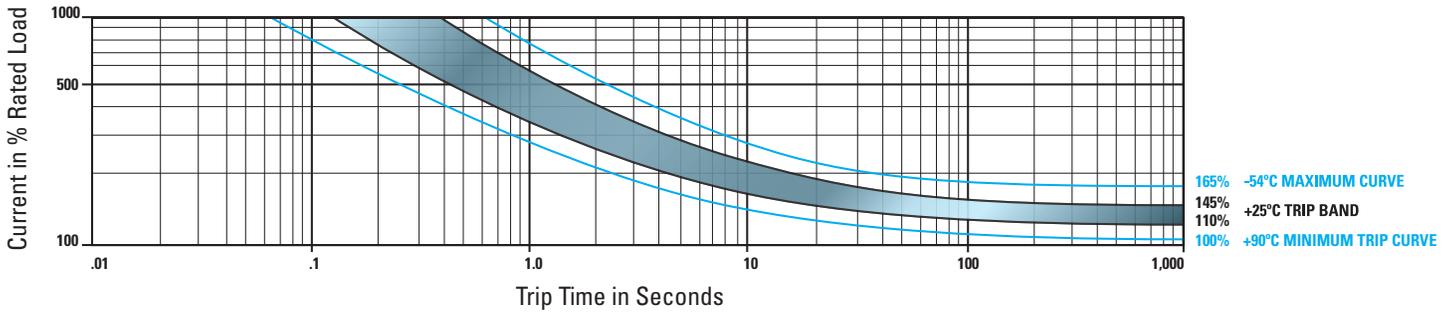
The 6TC series is compatible with the single-phase 2TC and 3TC. The 6TC is available in ratings from 2 to 20 amps, with military and various commercial approvals on most styles.

| PERFORMANCE CHARACTERISTICS                   |  |
|---|--|
| Calibration : 200% rated current, 77°F (25°C) | 6TC: 2A to 25A for 4 to 20 seconds<br>9TC: 2A to 35A for 4 to 20 seconds   |
| Ultimate Trip at 77°F (25°C)                  | Must hold : 145%<br>Must trip : 110%   |
| Endurance                                     | 2,500 cycles : 120 VAC, 400 Hz Inductive<br>5,000 cycles : 120 VAC, 400 Hz Resistive<br>5,000 cycles : Mechanical, no load |
| Interrupt Current Capacity                    | 2-20 amps : 2,000 amps @ 120 VAC, 400 Hz<br>1, 15-35 amps : 2,000 amps @ 120 VAC, 400Hz                                    |
| Vibration Resistance**                        | 10G minimum, 50 - 500 Hz   |
| Mechanical Shock Resistance                   | 50G  |
| Insulation Resistance                         | 100 MΩ min   |
| Acceleration                                  | 10G  |
| Weight  | 6TC14 - 65 gm max<br>9TC14 - 110 gm max  |

| ORDERING INFORMATION |                   |
|----------------------|-------------------|
| Sensata PN           | Qualifications PN |
| 6TC2                 | MS14154           |
| 6TC37                | MS14154L          |
| 6TC63                | MS14154V          |
| 9TC2                 | MS14153           |

\*\* Other vibration levels available, contact factory for details  
 ‡‡‡ Available on 6TC device only  
 6TC 2, 2.5, 3, 4, 5, 7.5, 10, 15, 20 military approved  
 9TC 1, 15, 20, 25, 30, 35 military approved

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



| MAX VOLTAGE DROP @ NOMINAL RATED CURRENT |                     |                          |                     | CALIBRATION : 1 TO 35 AMPS                              |              |              |                      |            |            |
|--|---------------------|--------------------------|---------------------|---|--------------|--------------|----------------------|------------|------------|
| Part Number                              | ***Max Voltage Drop | Part Number              | ***Max Voltage Drop | TEMP °C   | MIN ULT TRIP | MAX ULT TRIP | Trip Time in Seconds |            |            |
|  |                     |                          |                     |   |              |              | 200%                 | 500%       | 1000%      |
| 6TC14-2                                  | 0.70                | 6TC14-20                 | 0.176               | +25   | 110%         | 145%         | 4 to 20              | .4 to 2.0  | .10 to .53 |
| 6TC14-2½                                 | 0.50                | 6TC14-25, 30, 35         | 0.20                | -54   | 110%         | 165%         | 6 to 40              | .55 to 3.5 | .15 to .80 |
| 6TC14-3                                  | 0.40                |                          |                     | +71   | 100%         | 145%         | 3 to 20              | .33 to 1.7 | .08 to .40 |
| 6TC14-4                                  | 0.37                |                          |                     |   |              |              |                      |            |            |
| 6TC14-5                                  | 0.35                |                          |                     |   |              |              |                      |            |            |
| 6TC14-7½                                 | 0.182               | 9TC14-1                  | 1.1                 | *** Maximum voltage drop at 100%, nominal rated current |              |              |                      |            |            |
| 6TC14-10                                 | 0.176               | 9TC14-15, 20, 25, 30, 35 | 0.25                |   |              |              |                      |            |            |
| 6TC14-15                                 | 0.176               |                          |                     |   |              |              |                      |            |            |

## DIMENSIONAL DRAWINGS - 6TC14

