

# 3TC SERIES

15–35 Amp, Single–Phase, Miniature Ambient Compensated

## Introduction

Klixon® single–phase TC devices are the smallest, lightest, high performance aircraft circuit breakers available today. They represent the state-of-the-art protection of today’s aerospace power systems. Their light weight and small size make them especially well suited for aircraft, avionics and electronic systems.



The Klixon® trademark has set the standard for aerospace circuit breakers. For a small, light weight configuration, the TC series offers the endurance and reliability required by exacting military specifications, and are available in standard current ratings from 15 through 35 amperes. The 3TC is available in 15 to 35 amps.

## Features

- Miniature size
- Light weight
- Trip–free design
- Options include: longer push button, high vibration, random vibration, metric mounting thread, metric terminal thread, dust boot (part #14500-1 fits 15/32 bushing, part #14500-5 fits 7/16 bushing), terminal hardware
- AS58091 qualified
- Current rating: 15 to 35 amps
- Coordinated ratings
- High vibration resistance (option)
- High interrupting capacity
- Typical use: Where ambient temperature exceeds the 160°F (71°C) maximum of non–ambient compensated thermal circuit breakers

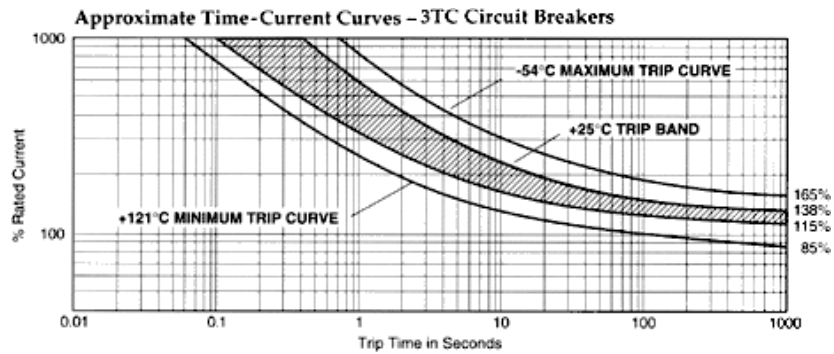
## PERFORMANCE CHARACTERISTICS

<b>Vibrations</b>	10G minimum, 50–500 Hz (other vibration levels available)
<b>Mechanical Shock</b>	50G
<b>Acceleration</b>	10G
<b>Weight</b>	36 gram maximum (3TC14)
<b>Interrupt Current</b>	15–35 amps: 6,000 amps at 28 VDC 15–35: 2,000 amps at 120 VAC, 400 Hz 25 amps: 1,800 amps at 120 VAC, 400 Hz
<b>Endurance</b>	2,500 cycles: 120 VAC, 400 Hz inductive 5,000 cycles: 120 VAC, 400 Hz resistive 2,500 cycles: 30 VDC inductive 5,000 cycles: 30 VDC resistive 10,000 cycles: Mechanical, no load

## MECHANICAL SPECIFICATIONS

Output Termination					
Temp.	Minimum Ultimate Trip	Maximum Ultimate Trip	Trip Time (in seconds)		
			200%	500%	1000%
25°C	115%	138%	4–20	0.40–1.70	0.10–0.40
-54°C	115%	165%	6–35	0.55–3.00	0.15–0.70
121°C	85%	145%	2–15	0.25–1.00	0.06–0.25

## TRIP CURVE



## VOLTAGE DROP

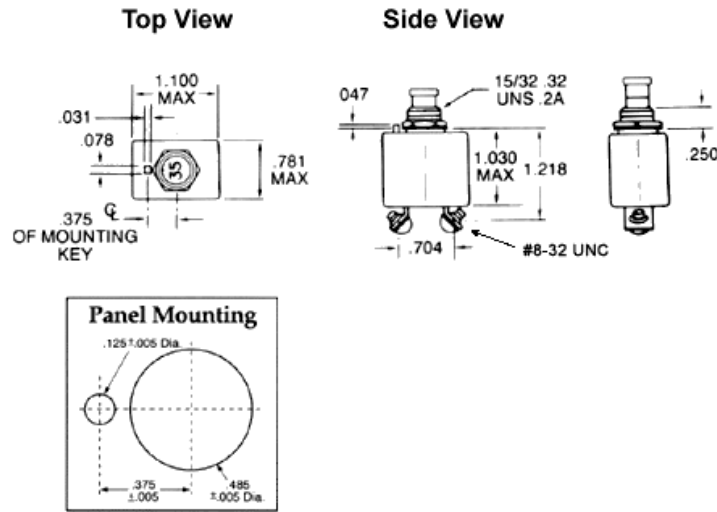
Amp Rating	Max. Voltage Drop*
15	0.25
20	0.25
25	0.25
30	0.25
35	0.25

\*Maximum voltage drop at nominal rated current.



## DIMENSIONS

Dimensions in mm [Inch]



## ORDERING OPTIONS

Example : 3TC2-15

### Family

3TC2  
3TC14  
3TC27

3TC2 - 15

### Amp Rating

15 = 15 amp  
20 = 20 amp  
25 = 25 amp  
30 = 30 amp  
35 = 35 amp

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