



# KLIXON® | 2TC2, 2TC27 & 2TC63 SERIES

## 1 to 35 Amps, Single Pole Aircraft Circuit Breakers

### FEATURES

- Ambient Compensated
- 1 to 35 amps, 120VAC, 28VDC
- Miniature size, lightweight
- Trip-free, coordinated ratings
- High vibration resistance and interrupt capacity
- SAE AS58091
- All U.S., China and most European aircraft OEM's qualifications

### ADDITIONAL OPTIONS

- Longer push buttons
- High or random vibration\*
- Metric mounting or terminal thread
- Dust boot ‡
- Terminal barriers, hardware
- Variable frequency
- Variable voltage
- 15/32 bushing terminals in-line

### DESCRIPTION

The Klixon® single-pole 2TC devices are the smallest, lightest aircraft circuit breakers available today. They represent “state-of-the-art” protection for today’s aerospace power systems. Their lightweight and small size make them especially well suited for aircraft, avionics, electrical systems, communication systems and defense vehicles (land and air).

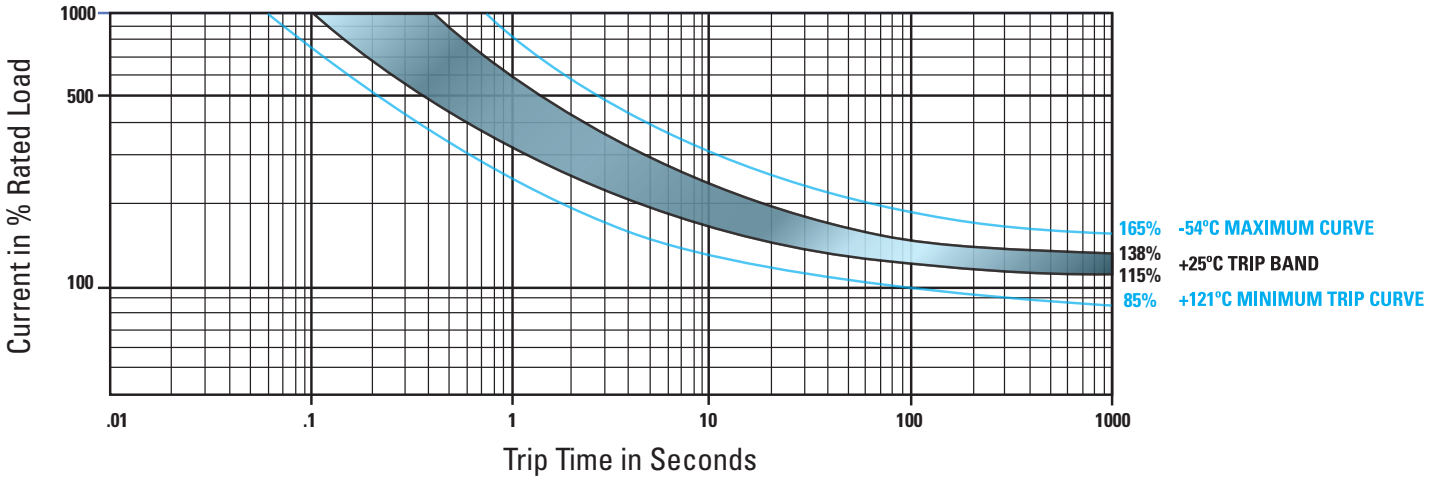
The Klixon® trademark has historically set the standard for aerospace circuit breakers. Despite the small size, the TC series offers the endurance and reliability offered by exacting military and commercial applications.

PERFORMANCE CHARACTERISTICS	
Interrupt Current Capacity	1-20 amps : 6,000 amps @ 28 VDC 25-35 amps : 1,625 amps @ 28 VDC 1-15 amps : 2,500 amps @ 120 VAC, 400 Hz 20 amps : 2,000 amps @ 120 VAC, 400 Hz 25-35 amps : 1,800 amps @ 120 VAC, 400 Hz
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance**	Exceeds 50G's
Insulation Resistance	100 MΩ min @500VDC
Endurance	<i>120VAC 400Hz</i> 2,500 cycles inductive 5,000 resistive load  <i>28VDC</i> 2,500 cycles inductive load 5,000 resistive load 10,000 cycles mechanical no load
Overload Cycling	Minimum 100 cycles @ 200% rated current
Acceleration	Exceeds 10G's
Weight	2TC27 - 25 gm max

ORDERING INFORMATION	
<b>2TC X - X</b>	
<b>2TC</b> Style	_____
<b>2</b> = MS3320 Standard	
<b>27</b> = MS3320L, Long Push Button	
<b>63</b> = MS3320V, High Sine Vibration	
Amp Rating <sup>§</sup>	_____
(1, 2, 2 ½, 3, 4, 5, 7 ½, 10, 15, 20, 25, 30, 35)	

‡ Part Number 14500-5 Fits 7/16 Bushing  
§ Amperage ratings of 1 to 25 amps are MS approved, 2TC63-1 non-MS approved  
\* Consult factory for 3 grams lower weight option  
\*\* Other vibration levels available, contact factory for details

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



MAX VOLTAGE DROP @ NOMINAL RATED CURRENT			
Amp Rating	Max Drop	Amp Rating	Max Drop
1	1.10	10	0.28
2	0.70	15	0.25
2.5	0.50	20	0.25
3	0.40	25	0.25
4	0.45	30	0.25
5	0.35	35	0.25
7.5	0.30	1 to 20 amps = MS approved <sup>§</sup>	

CALIBRATION					
TEMP °C / °F	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25 / +77	115%	138%	5 to 20	.5 to 2.0	.12 to .53
-54 / -65	115%	160%	7 to 40	.6 to 3.0	.16 to .8
+121 / 250	100%	138%	3 to 13	.33 to 1.1	.07 to .3

## DIMENSIONAL DRAWINGS

