



5TC SERIES

20 to 50 Amp, Single-Phase, 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 single-phase 5TC breaker rating is coordinated so it will trip before another circuit breaker, twice its rating, in the event of a fault of up to 600 amps let through current. This results in improved overall equipment performance, since only the smallest faulted circuit is interrupted, while larger circuits remain operational.



Features

- Miniature size
- Light weight
- Single-phase
- Ambient compensated
- Trip-free design
- Current rating: 20 to 70 amps
- Coordinated ratings
- High vibration resistance
- High interrupting capacity
- Options include: standard or auxiliary switch configuration, terminal barriers
- Typical use: Aircraft, avionics and electronic systems



PERFORMANCE CHARACTERISTICS

Vibrations	10G minimum, 80–500 Hz (other vibration levels available)	
Mechanical Shock	50G	
Acceleration	10G	
Weight	Standard device: 53 grams (no hardware), 58 grams (hardware) Auxiliary device: 55 grams (no hardware), 59 grams (hardware)	
Interrupt Current	20–50 amps: 4000 amps at 28 VDC 20–50 amps: 2000 amps at 115 VAC, 400 Hz	
Endurance	2,500 cycles: 115 VAC, 400 Hz inductive 2,500 cycles: 28 VDC inductive	2,500 cycles: 28 VDC resistive 5,000 cycles: Mechanical, no load

QUALIFICATIONS

ASNE	ASNE0732-005 (our 5TC65 auxiliary device)
NSA	NSA93121 (our 5TC50 standard device)

CALIBRATION CHART

For a Standard Device

Temp.	Minimum Ultimate Trip	Maximum Ultimate Trip	Trip Time (in seconds)		
			200%	500%	1000%
23°C	110%	145%	2–18	0.15–2.5	0.045–0.6
-54°C	110%	165%	70 seconds max.	0.15–2.5	0.045–0.6
70°C	105%	145%	1.5 seconds min.	0.15–2.5	0.045–0.6
125°C	90%	145%	1.5 seconds min.	0.15–2.5	0.045–0.6

The most typical device is 3–35 amps. For others, please contact us.

VOLTAGE DROP

Amp Rating	Max. Voltage Drop*
20	0.15
25	0.15
35	0.15
50	0.15

*Maximum voltage drop at nominal rated current.

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