# **Sensata** Technologies

# 6TC SERIES

2 to 25 Amp, 3–Phase, Miniature, Ambient Compensated

### Introduction

Klixon<sup>®</sup> single-phase TC devices are the smallest, lightest, high performance aircraft circuit breakers available today. They represent the state-ofthe-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.



### Features

- Miniature size
- Light weight
- Trip–free design
- AS58091 qualified
- Current rating: 2 to 25 amps
- High vibration resistance
- High interrupting capacity
- Protective terminal barriers between each phase
- Vibration pads improve mounting stability
- One phase trips all
- Options include: longer push buttons, dust boot (part #14500-1 fits 15/32 bushing, part #14500-5 fits 7/16 bushing)
- Typical use: Military and commercial aircraft



### PERFORMANCE CHARACTERISTICS

Vibrations	10G minimum, 50–500 Hz (other vibration levels available)			
Mechanical Shock	50G			
Acceleration	10G			
Weight	65 gram maximum (6TC14)			
Interrupt Current	2–25 amps: 2,000 amps at 120 VAC, 400 Hz			
Endurance	2,500 cycles: 120 VAC, 400 Hz inductive 5,000 cycles: 120 VAC, 400 Hz resistive 5,000 cycles: Mechanical, no load			
Ambient Temperature Compensation	mperature Compensation -54°C to 121°C Especially suited for applications where ambient temperature exceeds the 71°C (160°F) maximum of non–ambient compensated thermal circuit breakers. However, care should be taken to understand a specification limits at elevated ambient temperatures.			





European	European Standards Most European Aircraft OEMs		
Mil–spec	MS 14154 (our 6TC2 device) MS 14154L (our 6TC37 device) MS 14154V (our 6TC63 device)		
USA	All U.S. Aircraft OEMs		



## CALIBRATION CHART

6TC14 depicted For a Standard Device

Temp.	Minimum Ultimate Trip	Maximum Ultimate Trip	Trip Time (in seconds)		
			<b>200</b> %	500%	1000%
25°C	110%	145%	4-20	0.40-2.00	0.10-0.53
-54°C	110%	165%	6-40	0.55-3.50	0.15-0.80
71°C	100%	145%	3-20	0.33-1.70	0.08-0.40
For others, places contacting. Single, places maximum ultimate trip voluce apply with other two places corning 1000/, of retad oursent					

For others, please contact us. Single-phase maximum ultimate trip values apply with other two phases carrying 100% of rated current.



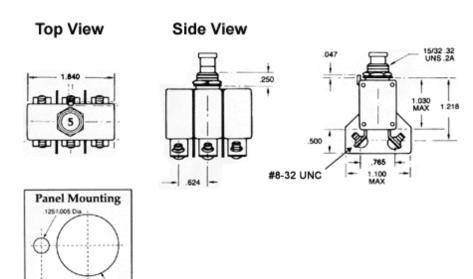
Amp Rating	Max. Voltage Drop*
2	0.70
21/2	0.50
3	0.40
4	0.37
5	0.35
7½	0.192
10	0.176
15	0.176
20	0.176

\*Maximum voltage drop at nominal rated current.



Page 2





#### Revised 2/7/18

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

.375 ±.005

1,005 Die

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA SHEETS OR USE TO SENSATA DATA SHEETS.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

#### **CONTACT US**

#### Americas

508-236-2551 electrical-protection-sales@ sensata.com

Europe, Middle East & Africa +31743578156 info-sse@list.sensata.com

Asia Pacific

sales.isasia@list.sensata.com China +86 (21) 2306 1500 Japan +81 (45) 277 7117 Korea +82 (31) 601 2004 India +91 (80) 67920890 Rest of Asia +886 (2) 27602006 ext 2808