

# 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

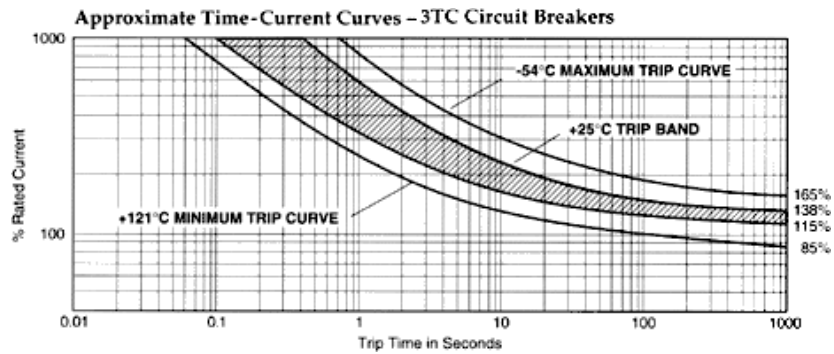
## PERFORMANCE CHARACTERISTICS

<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

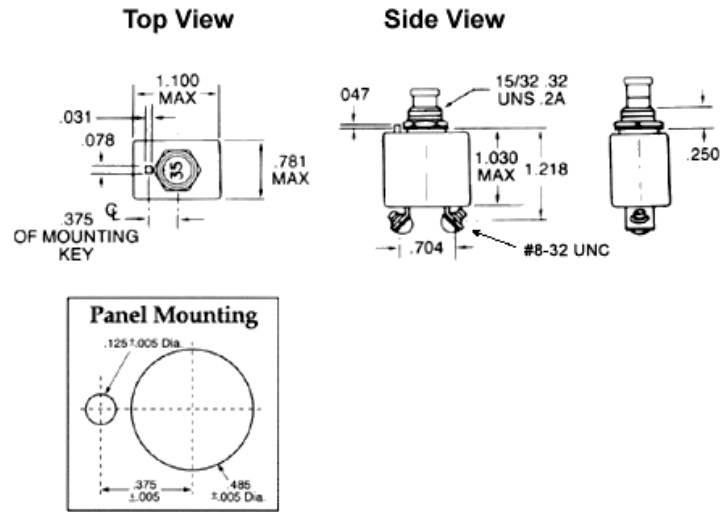
Amp Rating	Max. Voltage Drop*
15	0.25
20	0.25
25	0.25
30	0.25
35	0.25

\*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

## CONTACT US

### AUTHORIZED DISTRIBUTORS

#### Americas

Flame Enterprises  
 Contact Name:  
 Bob Correa, Director of Product Management  
 Direct Phone: +1 (240) 236-9802  
 E-mail: bcorrea@flamecorp.com  
 info@flamecorp.com | Web  
 Tel: 1-800-854-2255 or 1-818-700-2905  
 Fax: 1-818-407-5080

Peerless Electronics  
 Contact Name:  
 Steve Gunther, National Sales Manager  
 Direct Phone: +1 (516) 594-3509  
 E-mail: sgunther@peerlesselectronics.com  
 nysales@peerlesselectronics.com | Web  
 Tel: 1-800-285-2121  
 Fax: 1-800-222-8096

#### Europe, Middle East & Africa

Flame Enterprises  
 Contact Name:  
 Bob Correa, Director of Product Management  
 Direct Phone: +1 (240) 236-9802  
 E-mail: bcorrea@flamecorp.com  
 info@flamecorp.com | Web  
 Tel: 1-800-854-2255 or 1-818-700-2905  
 Fax: 1-818-407-5080

### AUTHORIZED SALES REPRESENTATIVES

Country	Representative	Contact	e-mail	Phone
Brazil	Sonnensys Technologies	Maury Sampaio	maury.sampaio@sonnensys.com	+55 12 99768 1100
Austria	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Belgium	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Czech Republic	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Denmark	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Estonia	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Finland	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
France	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Germany	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Greece	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Israel	Admati	Dori Shifman	dori@admati.com	972 (0)50 331 4700
Italy	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Latvia	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Lithuania	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Luxembourg	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Netherlands	TBD			
Norway	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Poland	Radiotechnika	Tomasz Póltoraczyk	tpoltoraczyk@radiotechnika.com.pl	48 7132 70 765
Portugal	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Slovakia	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Spain	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Sweden	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Switzerland	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Turkey	Eltronik	Ergun Kosem	ergun@eltronik.com	90 312 440 7815
UK	Charcroft	Julie Protheroe	julie.protheroe@charcroft.com	01591 612240
Australia	AeroDefense	Trent Ralph	trent@aerodefence.com.au	+61 7 5503 0552
China	Pomic Ltd.	James Cai	James.cai@pomicltd.com	+1 (360) 915-7806
China (ACCBs only)	Shanghai Jin Feng Electronics & Inst Co	Wang Min-Gang	yonghuqian@vip.sina.com	+86-21-62712648
India	Hical Technologies	VB Venkatesh	venkatesh.vb@hical.com	+91 98450-12341
Indonesia	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
Japan	Intertek Industries	Masa Ikeda	masai@intertekindustries.com	+1 (310) 309-9661
Korea	Aero Sensors Corp.	Jonathan Jo	jangcho@aerosensors.co.kr	+82 2 557 5355
Malaysia	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
New Zealand	AeroDefense	Trent Ralph	trent@aerodefence.com.au	+61 7 5503 0552
Singapore	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
Taiwan	Sensata Technologies	Bob Jacques	bjacques@sensata.com	+1 (805) 716-0586

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.

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 DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at [www.sensata.com](http://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.