



**Klixon<sup>®</sup>**  
**AIRCRAFT CIRCUIT BREAKERS**  
Aerospace & Defense

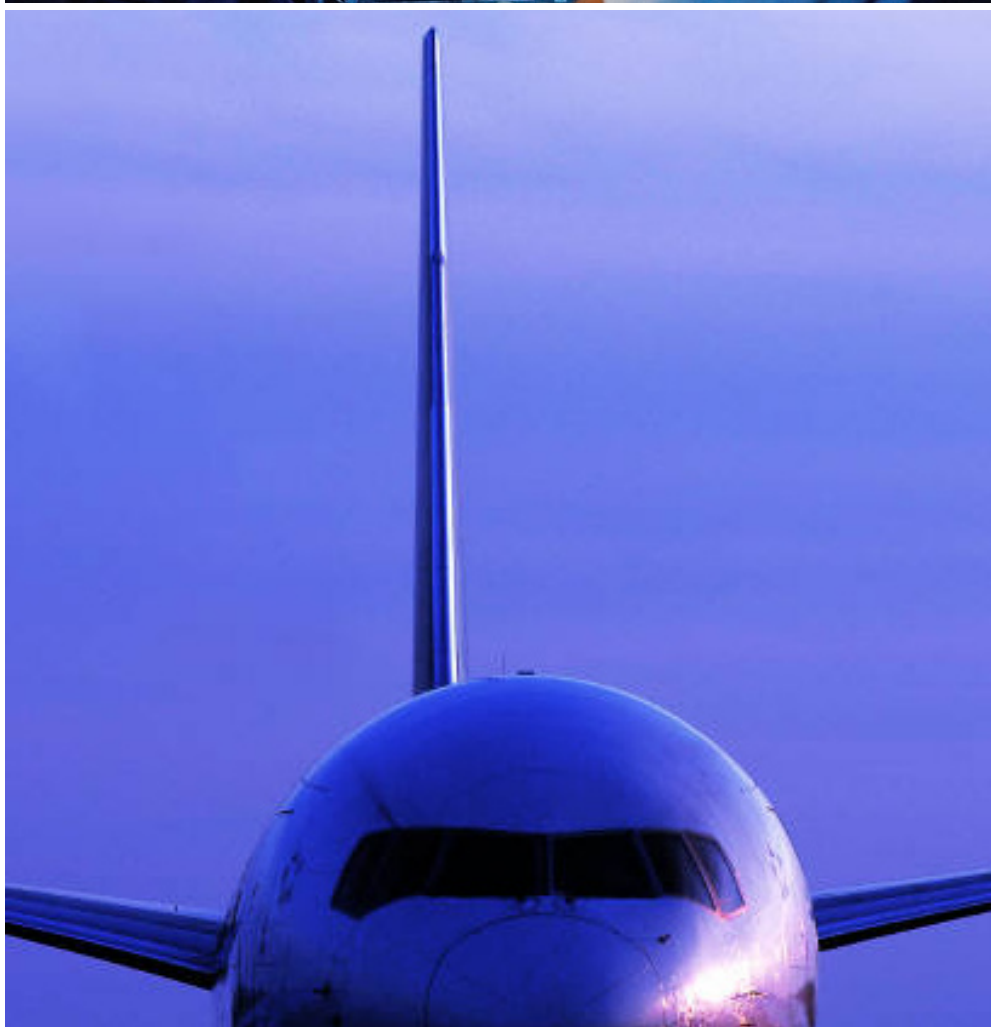
## KLIXON® Aircraft Circuit Breakers

KLIXON® aircraft circuit breakers are compact, lightweight, protective devices designed to repeatedly interrupt short circuits or extended overloads in applications which require precise, dependable operation plus high resistance to shock and vibration. To avoid nuisance tripping caused by harmless transient or momentary overloads, these circuit breakers feature an inherent thermal time-lag characteristic. This enables equipment to operate at maximum limits with complete safety.

The heart of the aircraft circuit breaker is the KLIXON® metal disc. At a predetermined overload, the heat caused by current passing through the disc causes the disc to reverse its curvature, or snap. This snapping action separates the electrical contacts and opens the circuit.

Trip curves provide the approximate time vs current characteristics based on the ambient "room" temperature of 77°F (25°C). Should your application require performance characteristics beyond the ambient "room" temperature of 77°F (25°C), derating curves provide additional data for ambient temperatures significantly higher or lower than standard room temperature.

KLIXON® aircraft circuit breakers are available in automatic reset and manual reset. Some manual reset devices offer a switchable feature whereby the contacts can be manually opened to de-energize the circuit. For the automatic reset device, the circuit stays open until the disc cools and returns to its original curvature, completing the circuit. For the trip-free manual reset device, the contacts will remain open until the device's push button is depressed to reset the device and complete the circuit.







# KLIXON®










"With over 90 years of experience in a myriad of industries and mission-critical applications, Sensata Technologies is one of the world's leading suppliers of sensing, electrical protection, control and power management solutions.

Motors, machines, equipment and vehicles in the aerospace and military industries operate safely and efficiently thanks to reliable and robust Sensata circuit protectors, switches, and sensors. Our products sense and monitor position, temperature and pressure, provide power protection and help manage challenging DC-to-AC power conversions.

From design to manufacturing and every business process in between, our people strive not just to meet standards of excellence but to set them. Serving you is mission-critical to us."

**Tom Wroe**, *Chairman of the Board and Chief Executive Officer, Sensata Technologies*

# Condensed KLIXON® Aircraft Circuit Breaker Guide

	DEVICE	APPROVAL	ACTUATING OR RESET MEANS	MANUAL	INDICATING	RATING IN AMPS	MAJOR DIMENSIONS IN INCHES APPROX. LxWxH	APPROX. WT. IN GRAMS	APPROX. 20% TIME TO TRIP (SECONDS) AT 2x RATED CURRENT
	2TC 3TC	MS 3320 MS 14105 M5809/1	Button	Yes	Yes	1 - 25 15 - 35 5 - 35 2.5 - 15 2.5 - 10	.75 x .56 x 1.2 1.10 x .75 x 1.2 1.10 x .75 x 1.49 1.21 x .75 x .56	25.0 36.0	10 10
	5TC	—	Button	Yes	Yes	20 - 50	1.65 x .77 x 1.92	53 (std) 55 (aux)	10
	6TC 9TC	MS 14154 MS 14153	Button	Yes	Yes	2 - 20 1, 15 - 35	.75 x 1.78 x 1.2 1.10 x 2.35 x 1.2	65.0 110.0	10 10
	7274 7277	MS 26574 MS 22073	Button	Yes	Yes	1/2 - 20	.75 x .562 x 2.20	28.0 32.0	10
	15TC	—	Button	Yes	Yes	20 - 50	2.1 x 1.3 x 2.15		35
	6752	MS 24571 MS 25361	Button	Yes	Yes	2.5 - 50 50 - 100 2.5 - 90	2.2 x .75 x 3.3 2.2 x .75 x 3.3 2.2 x 2.25 x 3.3	38.9	35
	7270 7271	MS 24509 MS 24510	Toggle Button	Yes	Yes	3 - 35	1.37 x .75 x 2.25 1.37 x .75 x 2.00	39.0	50 50
	20TC	—	Rocker	Yes	Yes	3 - 35	2.00 x .75 x 2.00	39.0	50
	7235 7236	—	—	—	—	7 - 400	3.63 x 1.38 x 2.33		—
	3SB Simulator	—	Button	Yes	Yes	—	.75 x .562 x 2.20	33.0	—

# Condensed KLIXON® Aircraft Circuit Breaker Guide

FAULT INTERRUPTING CAPACITY AMPS @ VOLTS & CYCLES	REMARKS	TYPICAL APPLICATIONS	DEVICE	PAGE
6000 @ 28 VDC 2500 @ 120 VAC, 400 Hz 3500 @ 120 VAC, 400 Hz (3TC7) 6000 @ 28 VDC 2000 @ 120 VAC, 400 Hz	Subminiature, ambient compensated, single pole	Aircraft power distribution, aircraft, avionics, and electrical systems	2TC 3TC	6
4000 @ 28VDC 2000 @ 115 VAC, 400 Hz	Ambient compensated, single pole, higher amp ratings	Aircraft, avionics, and electrical systems	5TC	16
2000 @ 120 VAC, 400 Hz 2000 @ 120 VAC, 400 Hz	Subminiature, ambient compensated, three pole	Aircraft power distribution	6TC 9TC	18
2000 @ 28 VDC 500 @ 125 VAC, 400 Hz	Non ambient compensated, quick acting, single pole	Aircraft power distribution, Avionics, ground support, missile systems, protection of wire, motors, solenoids, transformers	7274 7277	20
4000 @ 28 VDC 2000 @ 115 VAC, 400 Hz	Non ambient compensated, quick acting, three pole, higher amp ratings	Aircraft, avionics and electrical systems	15TC	22
6000 @ 30 VDC, 120 VAC, 400 Hz	Ambient compensated, single pole and three pole available, highest interrupting protection	Aircraft power distribution, ground support	6752	24
4000 @ 30 VDC 3500 @ 120 VAC, 400 Hz	Single pole, low profile, toggle, rocker or push button	Aircraft power distribution	7270 7271	26
2000 @ 30 VDC 1000 @ 120 VAC, 400 Hz	Single pole, panel mounted, low profile, rocker	Circuit switching & protection light aircraft, electronics, vehicles	20TC	28
—	Protection and remote sensing of overloads in single & three-phase circuits	Remote sensing of overloads in aircraft electrical systems or other applicable remote systems	7235 7236	30
—	Simulator breaker, low amperage and fast trip time	Commercial and military simulators	3SB	32

\*NOTE: For FAA/PMA approved devices, go to <http://klixon.sensata.com/>



# 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

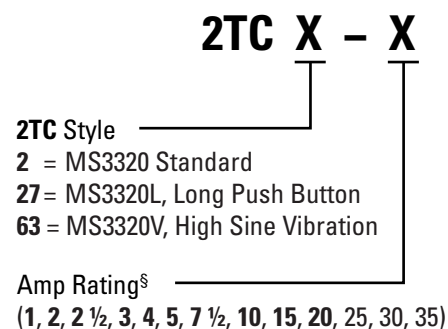
The Klixon® single-pole 2TC devices are the smallest, lightest aircraft circuit breakers available today. They represent "state-of-the-art" protection for today's aerospace power systems. Their lightweight and small size make them especially well suited for aircraft, avionics, electrical systems, communication 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	120VAC 400Hz 2,500 cycles inductive 5,000 resistive load  28VDC 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



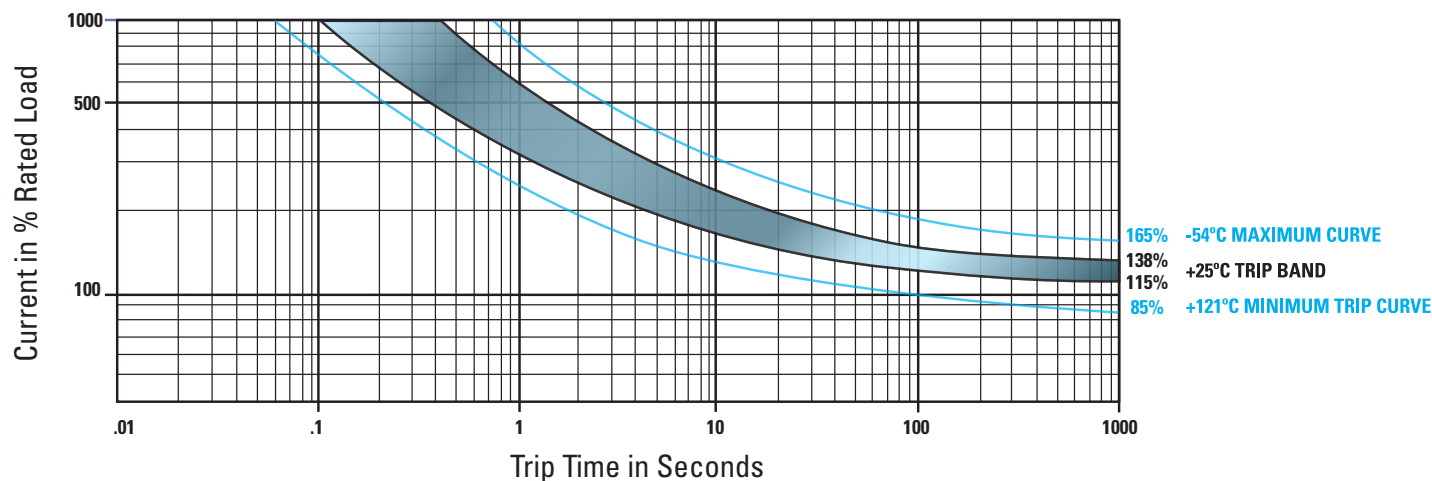
‡ Part Number 14500-5 Fits 7/16 Bushing

§ 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)



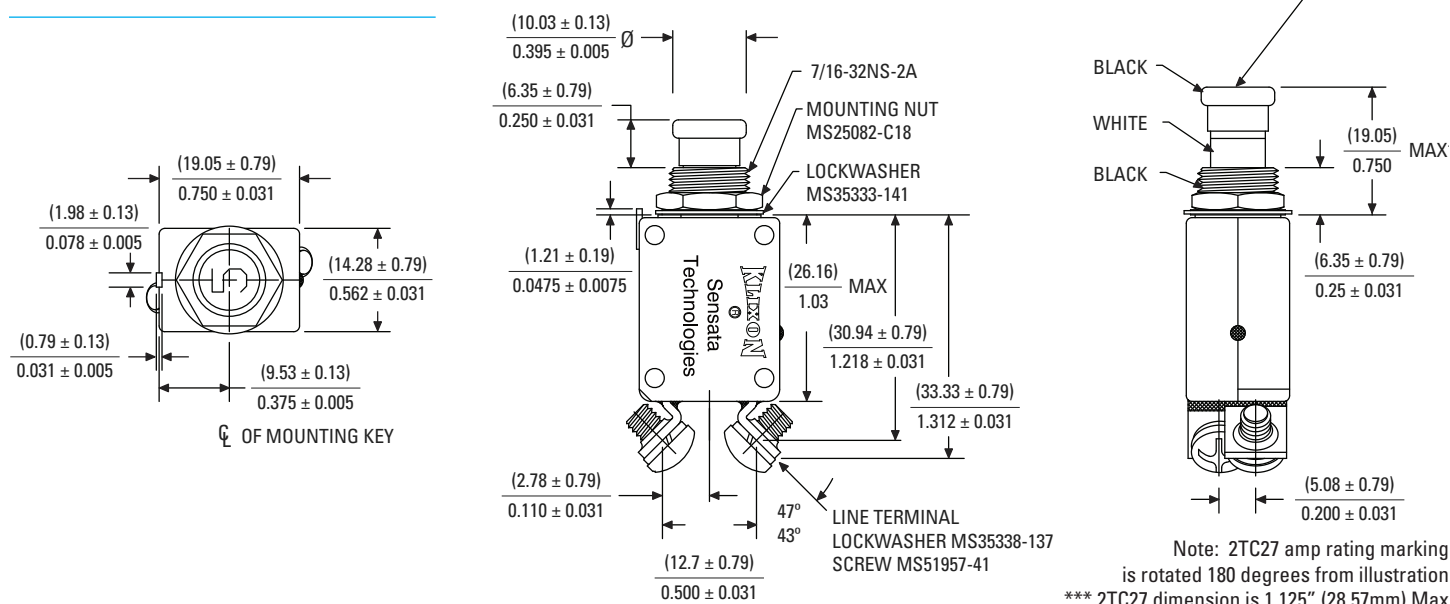
### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

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







# KLIXON® | 2TC49 SERIES

## 2.5 to 10 Amps, Single Pole Aircraft Circuit Breakers

### FEATURES

- Extension of the 2TC series
- Ambient Compensated
- 2.5 to 10 amps ratings
- Miniature size, lightweight
- Separable link
- Redundancy protection in hard fault, catastrophic conditions

### DESCRIPTION

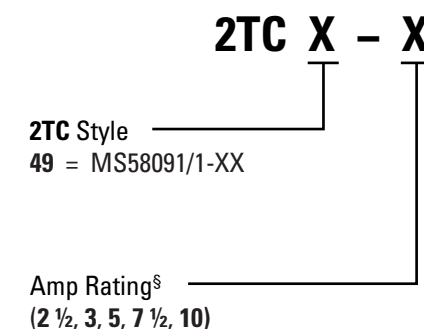
The Klixon® 2TC49 “Dual Safety™” circuit breaker represents a refinement in electrical control and circuit protection. The 2TC49 dual safety circuit breaker incorporates a fusible element in a standard 2TC (MS 3320) package size to provide redundant protection in hard fault conditions.

“Hard Fault” Tripping - The 2TC49 dual safety circuit breaker operates identically to a standard circuit breaker under all normal conditions, including short circuit. In the event of circumstances, which disable the internal circuit breaker mechanisms, such that the device is able to carry current, but unable to clear an overload via its normal means, the dual safety element acts as a built in fuse to provide redundant circuit protection. The key part in the dual safety design is a two part current carrying element joined by a special alloy. The geometry and material of the element determine its heating properties. The elements heating properties are slower than the bimetal sensor but faster than the smoke curve of the wire the rating is designed to protect. In the case where the standard mechanism is disabled or cannot operate normally, the separable element “fuses” open, interrupting the current. The benefits of the dual safety design result in calibrated overcurrent protection (based on fuse times) and specified post fuse dielectric properties for system and human protection.

### PERFORMANCE CHARACTERISTICS

Interrupt Current Capacity	2.5 amps : 6,000 amps @ 28 VDC 2.5 amps : 2,800 amps @ 115 VAC, 400 Hz 3-10 amps : 2,500 amps @ 115 VAC, 400 Hz
Vibration Resistance	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	Exceeds 50G's
Insulation Resistance	100 MΩ min @500VDC
Endurance	120VAC 400Hz 2,500 cycles inductive 5,000 resistive load  28VDC 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	2TC49 - 25 gm max

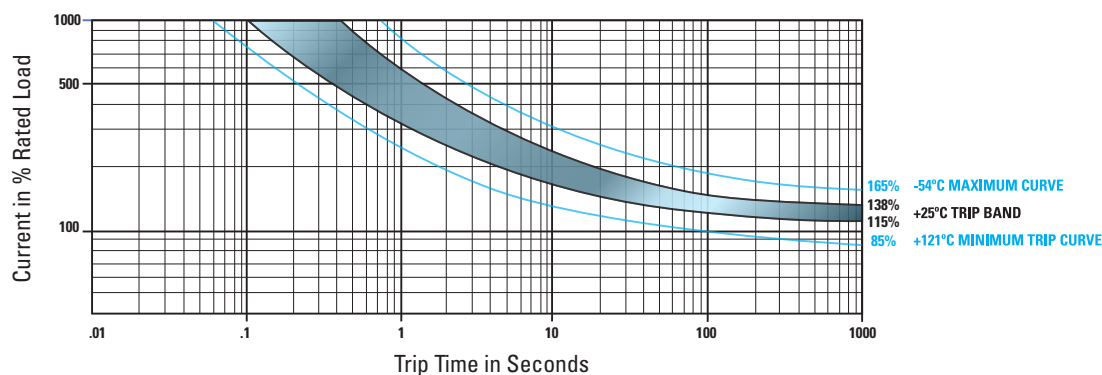
### ORDERING INFORMATION



§ Amperage ratings of 2.5 to 10 amps are MS approved



## 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
2.5	0.70	7.5	0.30
3	0.55	10	0.28
5	0.35	2.5 to 10 amps = MS approved <sup>®</sup>	

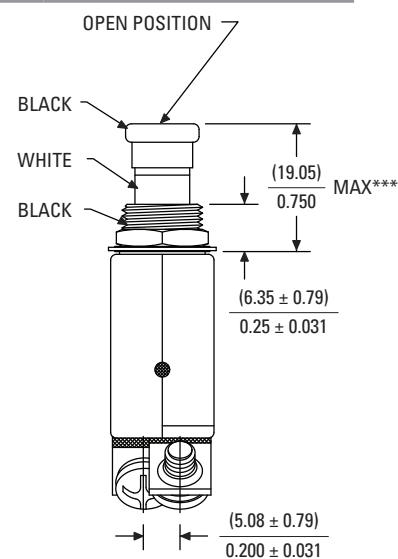
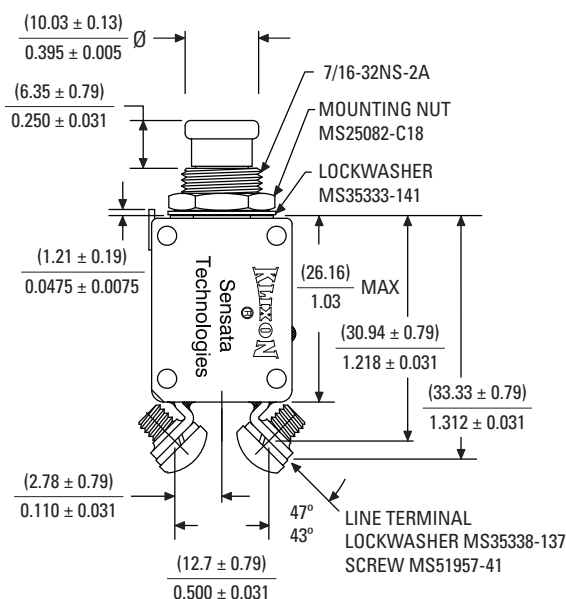
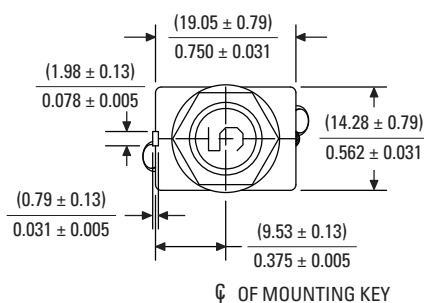
### CALIBRATION

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
-55 / -65	115%	165%	7 to 40	.6 to 3.0	.16 to .8
+121 / 250	90%	138%	3 to 13	.33 to 1.1	.07 to .3

### % OVERLOAD RATED CURRENT

Nominal Amperage Rating	Time (Seconds)						
	400%	500%	600%	700%	800%	900%	1000%
2.5 amps	—	—	34.0	20.0	13.0	9.0	6.0
3 amps	—	—	34.0	20.0	13.0	9.0	6.0
5 amps	—	95.0	36.0	18.0	10.0	6.0	3.5
7.5 amps	69.0	28.0	14.0	8.0	4.0	3.5	2.0
10 amps	60.0	35.0	20.0	12.0	7.0	4.0	2.5

### DIMENSIONAL DRAWINGS





# Klixon® | 3TC2, 3TC14 & 3TC27 SERIES

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

### FEATURES

- Ambient Compensated
- 15 to 35 amps, 120VAC, 28VDC
- Miniature size, lightweight
- Trip-free, coordinated ratings
- High 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

### DESCRIPTION

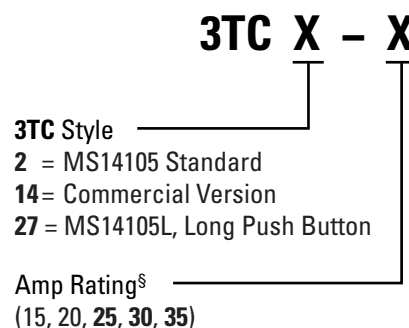
The Klixon® single-pole 3TC devices are the smallest, lightest aircraft circuit breakers available today. They represent "state-of-the-art" protection for today's aerospace power systems. Their lightweight and small size make them especially well suited for aircraft, avionics, electrical systems, communication 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	15-35 amps: 6,000 amps @ 28 VDC 15-35 amps: 2,000 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	120VAC 400Hz 2,500 cycles inductive 5,000 resistive load  28VDC 5,000 resistive load 10,000 cycles mechanical no load
Overload Cycling	Minimum 100 cycles @ 200% rated current
Acceleration	Exceeds 10G's
Weight	3TC27 - 36 gm max

### ORDERING INFORMATION

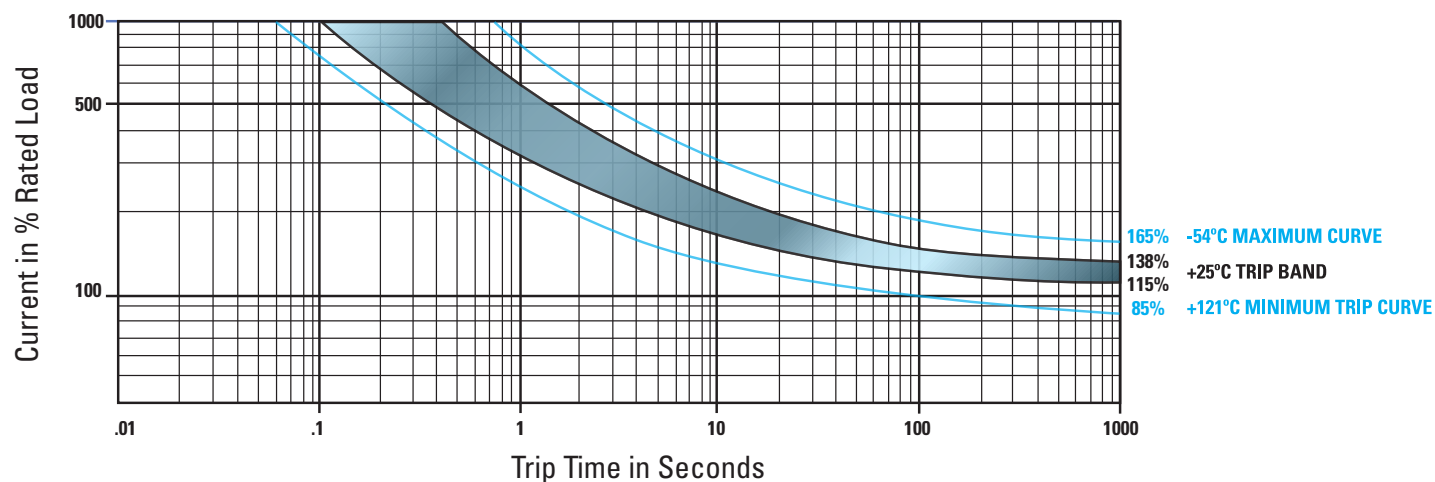


‡ Part Number 14500-1 Fits 15/32 Bushing

\$ Amperage ratings of 25 to 35 amps are MS approved

\* Other vibration levels available, contact factory for details

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



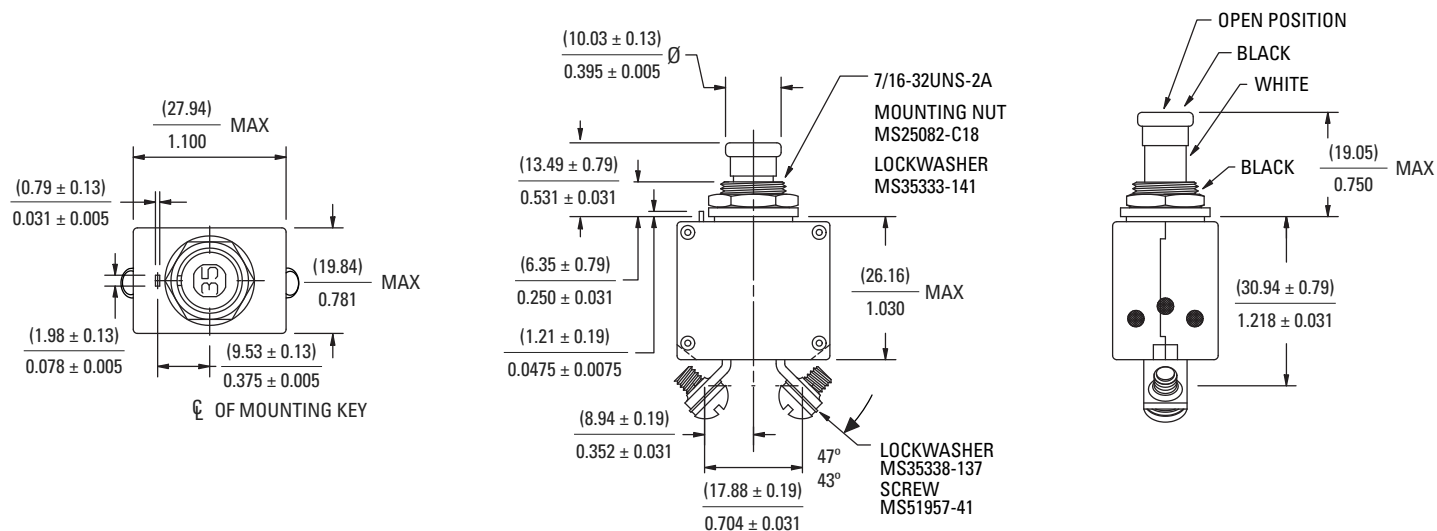
### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Amp Rating	Max Drop
15	0.25
20	0.25
25	0.25
30	0.25
35	0.25

### CALIBRATION

TEMP °C / °F	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25 / +77	115%	138%	4 to 20	.4 to 1.7	.10 to .40
-54 / -65	115%	160%	6 to 35	.55 to 3.0	.15 to .70
+121 / 250	85%	138%	2 to 15	.25 to 1.0	.06 to .25

## DIMENSIONAL DRAWINGS



\*\*\* 3TC27 dimension is 1.125" (28.57mm) Max



# KLIXON® | 5TC SERIES

## 20 to 50 Amp, Aircraft Circuit Breakers

### FEATURES

- 28VDC or 120VAC, 20 to 50 Amps
- High vibration resistance and interrupt capacity
- Ambient temperature compensation and trip-free design
- European & SAE standards
- All U.S. and most European aircraft OEM's qualifications

### ADDITIONAL OPTIONS\*

- Longer push buttons
- Terminal barriers

### DESCRIPTION

The Klixon® single-phase TC devices are the smallest, lightest aircraft circuit breakers available today. Their light-weight and small size make them especially well suited for aircraft, avionics and electronic systems. Despite the small size, the TC series offers the endurance and reliability required by exacting military specifications.

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

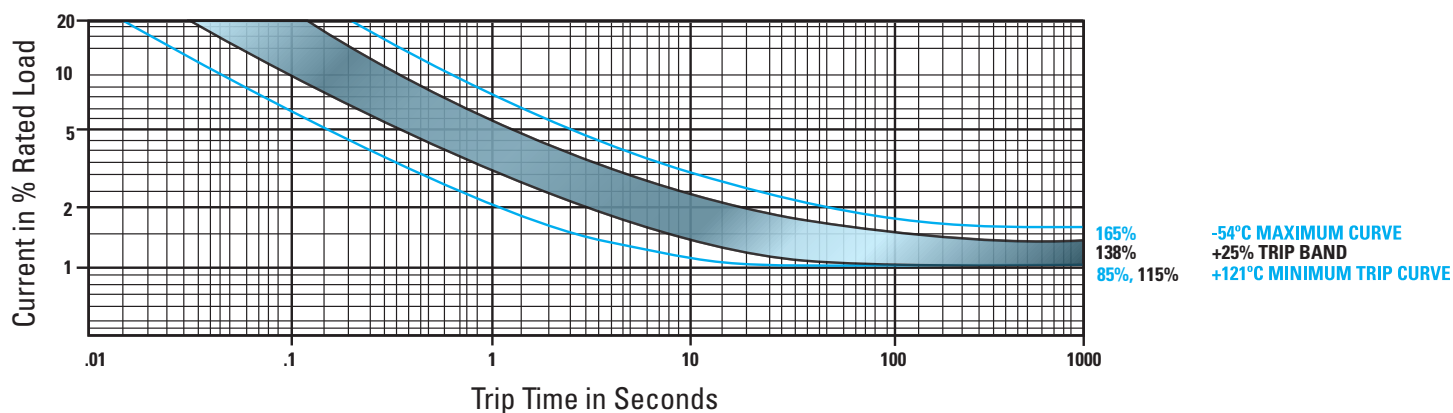
PERFORMANCE CHARACTERISTICS	
Calibration : 200% rated current, 73°F (23°C)	5TC: 20A to 50A for 2 to 18 seconds
Ultimate Trip at 77°F (25°C)	Must hold : 110% Must trip : 145%
Endurance	2,500 cycles : 115 VAC, 400 Hz Inductive 2,500 cycles : 28 VDC, Inductive 2,500 cycles : 28 VDC, Resistive 5,000 cycles : Mechanical, no load
Interrupt Current Capacity	20 to 50 amps: 4000 amps at 28 VDC 20 to 50 amps: 2000 amps at 115 VAC, 400 Hz
Vibration Resistance**	10G minimum, 80 - 500 Hz
Mechanical Shock Resistance	50G
Insulation Resistance	100 MΩ min
Acceleration	10G
Weight	5TC - 58 gm max 5TC with auxiliary switch - 59 gm max

\*\* Other vibration levels available, contact factory for details

ORDERING INFORMATION	
Sensata PN	Qualifications PN
5TC50-XX	ASNE0732-005
5TC65-XX	NSA93121
5TC66-XX	EN3361-006



## TRIP CURVE - Approximate Time, Current Characteristics at 73°F (23°C)



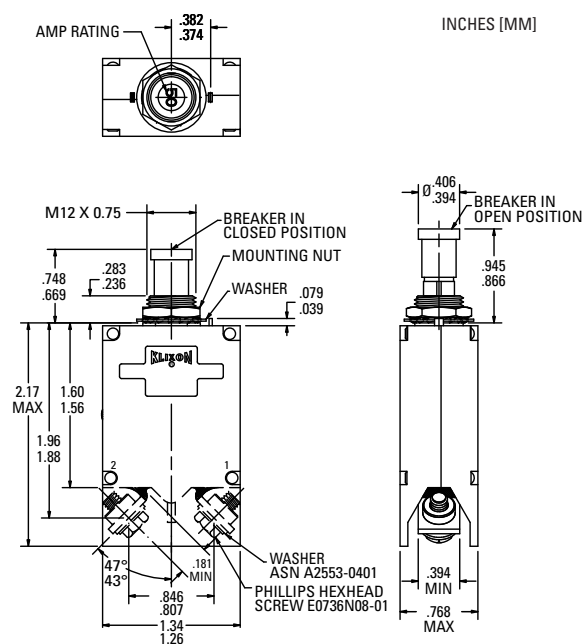
### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Part Number	Max Voltage Drop
5TCXX-20	0.15
5TCXX-25	0.15
5TCXX-35	0.15
5TCXX-50	0.12

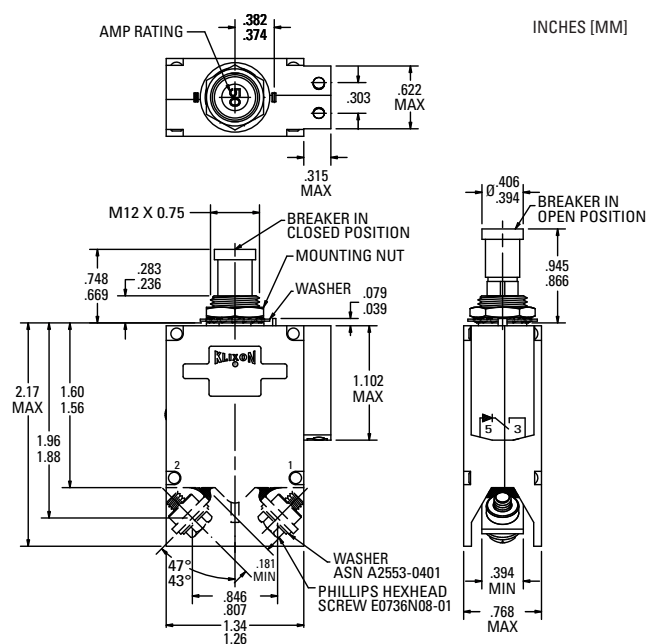
### CALIBRATION : 20 TO 50 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	110%	145%	2 to 18	.4 to 1.6	.10 to .40
-54	110%	165%	70 max	.6 to 3.0	.15 to .70
+70	105%	145%	7 to 35	.6 to 3.0	.15 to .70
+121	90%	145%	2 to 13	.25 to 1.0	.06 to .25

### DIMENSIONAL DRAWINGS - 5TC50



### DIMENSIONAL DRAWINGS - 5TC65





# KLIXON® | 6TC & 9TC SERIES

## 1 to 35 Amp, Three-Phase Aircraft Circuit Breakers

### FEATURES

- 28VDC or 120VAC, 1 to 35 Amps
- High vibration resistance and interrupt capacity
- Ambient temperature compensation and trip-free design
- Mil-qualifications
- European & SAE standards
- All U.S. and most European aircraft OEM's qualifications

### ADDITIONAL OPTIONS\*

- Longer push buttons
- High vibration
- Metric mounting or terminal thread
- Dust boot ‡
- Auxiliary switch ‡‡

### DESCRIPTION

The Klixon® three-phase 6TC & 9TC circuit breakers provide ambient compensated circuit protection in a lightweight, subminiature package size. The three phase design integrates each individual phase to provide overcurrent protection in the event of simultaneous or unbalanced overloads, including short circuit conditions.

The 6TC series is compatible with the single-phase 2TC and 3TC. The 6TC is available in ratings from 2 to 20 amps, with military and various commercial approvals on most styles.

PERFORMANCE CHARACTERISTICS	
Calibration : 200% rated current, 77°F (25°C)	6TC: 2A to 25A for 4 to 20 seconds 9TC: 2A to 35A for 4 to 20 seconds
Ultimate Trip at 77°F (25°C)	Must hold : 145% Must trip : 110%
Endurance	2,500 cycles : 120 VAC, 400 Hz Inductive 5,000 cycles : 120 VAC, 400 Hz Resistive 5,000 cycles : Mechanical, no load
Interrupt Current Capacity	2-20 amps : 2,000 amps @ 120 VAC, 400 Hz 1, 15-35 amps : 2,000 amps @ 120 VAC, 400Hz
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	50G
Insulation Resistance	100 MΩ min
Acceleration	10G
Weight	6TC14 - 65 gm max 9TC14 - 110 gm max

ORDERING INFORMATION	
Sensata PN	Qualifications PN
6TC2	MS14154
6TC37	MS14154L
6TC63	MS14154V
9TC2	MS14153

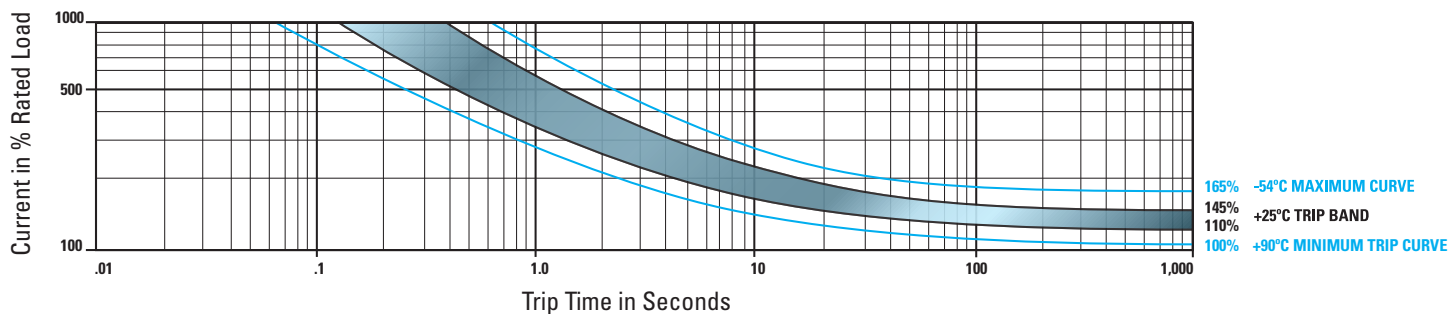
\*\* Other vibration levels available, contact factory for details

‡‡‡ Available on 6TC device only

6TC 2, 2.5, 3, 4, 5, 7.5, 10, 15, 20 military approved

9TC 1, 15, 20, 25, 30, 35 military approved

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



### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

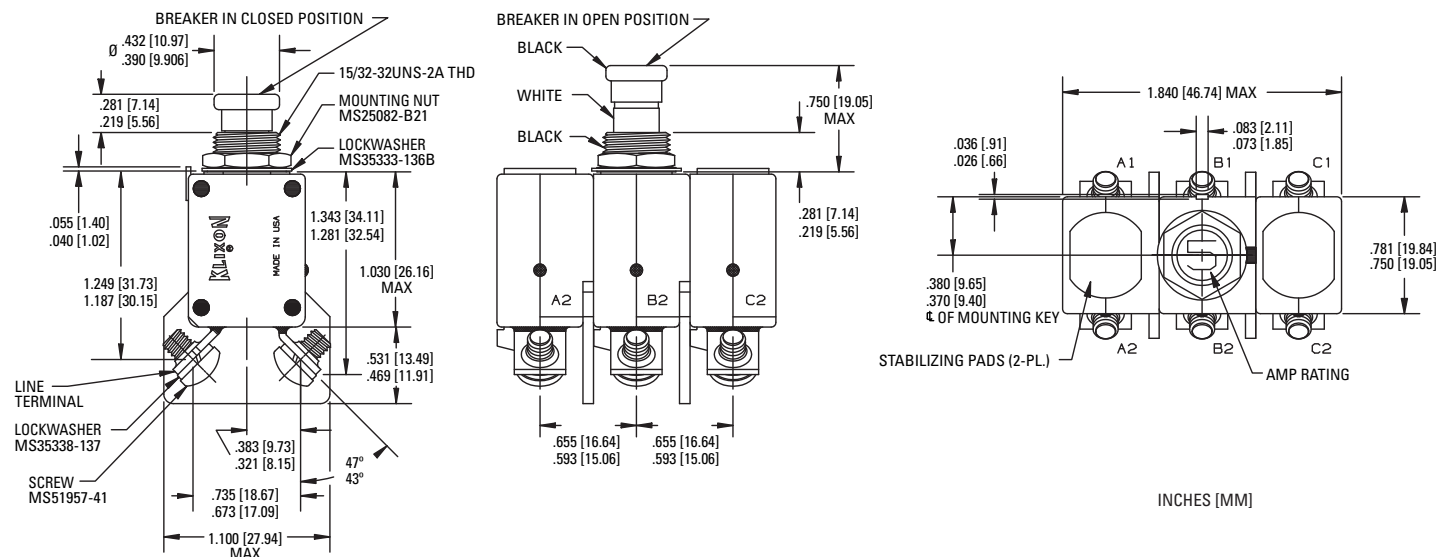
Part Number	***Max Voltage Drop	Part Number	***Max Voltage Drop
6TC14-2	0.70	6TC14-20	0.176
6TC14-2½	0.50	6TC14-25, 30, 35	0.20
6TC14-3	0.40		
6TC14-4	0.37		
6TC14-5	0.35		
6TC14-7½	0.182	9TC14-1	1.1
6TC14-10	0.176	9TC14-15, 20, 25, 30, 35	0.25
6TC14-15	0.176		

### CALIBRATION : 1 TO 35 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	110%	145%	4 to 20	.4 to 2.0	.10 to .53
-54	110%	165%	6 to 40	.55 to 3.5	.15 to .80
+71	100%	145%	3 to 20	.33 to 1.7	.08 to .40

\*\*\* Maximum voltage drop at 100%, nominal rated current

## DIMENSIONAL DRAWINGS - 6TC14





# KLIXON® | 7274 & 7277 SERIES

## ½ to 20 Amp, Single-Phase Aircraft Circuit Breakers

### FEATURES

- 30VDC or 120VAC, ½ to 20 Amps
- High vibration resistance and interrupt capacity
- Non-ambient temperature compensated
- MIL-C-5809 qualified

### DESCRIPTION

The Klixon® 7274 & 7277 series are small, lightweight, low amperage devices that are specifically designed to protect aircraft / aerospace cable and components in airborne vehicles and equipment. The 7274/7277 series are small, light weight, low amperage devices that are specically designed to protect aircraft / aerospace cable such as at ribbon, fused multi-conductor tape and printed circuit conductors now being used in lighter weight power distribution systems and components in airborne vehicles and equipment. The 7274 series features a tripfree indicating-type reset button. Also, a “wiping action” contact design assures low voltage drop, faster trip time and high reliability in low voltage applications. They are available in standard ratings from 0.5 to 20 amps.

### ADDITIONAL OPTIONS\*

- Longer push buttons
- Dust boot
- Auxiliary switch, waterproof panel seal

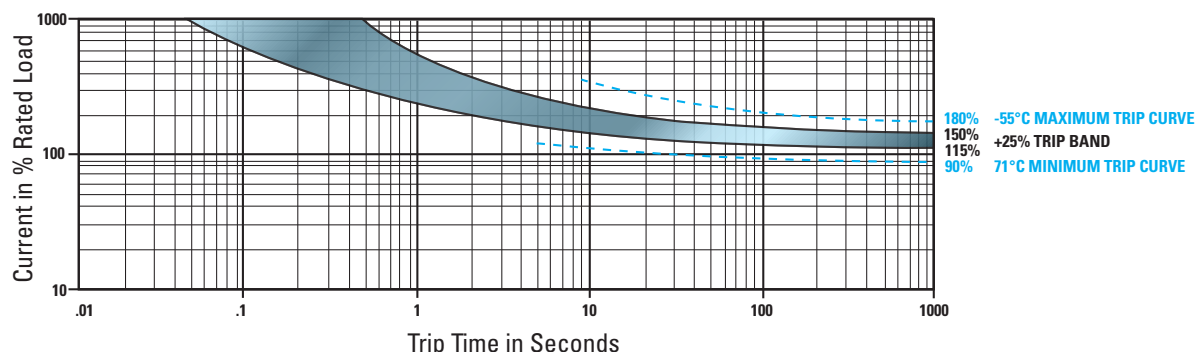
PERFORMANCE CHARACTERISTICS	
Calibration : 200% rated current, 77°F (25°C)	0.5A to 20A for 2 to 35 seconds
Ultimate Trip at 77°F (25°C)	Must hold : 110% Must trip : 150%
Endurance	2,500 cycles: 120 VAC, 400 Hz inductive 5,000 cycles: 120 VAC, 400 Hz resistive 2,500 cycles: 30 VDC inductive 5,000 cycles: 30 VDC resistive 10,000 cycles: Mechanical, no load
Interrupt Current Capacity	½ to 5 amps: unlimited at 28 VDC 7½ to 15 amps: 2,000 amps at 28 VDC ½ to 1½ amps: unlimited at 120 VAC, 400 Hz 2 to 5 amps: 800 amps at 120 VAC, 400 Hz 7½ to 20 amps: 500 amps at 120 VAC, 400 Hz
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	35G
Insulation Resistance	100 MΩ min
Acceleration	10G
Weight	7274 & 7277 - 33 gm max

\*\* Other vibration levels available, contact factory for details

ORDERING INFORMATION	
Sensata PN	Qualifications PN
7274-2-XX	MS26574-XX
7274-4-XX	MS26574-XXA
7274-11-XX	MS22073-XX
7274-69-XX	MS22073-XXV
7274-70-XX	MS26574-XXL
7271-1-XX	others same format available amp ratings 1/2, 3/4, 1, 11/2, 2, 21/2, 3, 4, 5, 71/2, 10, 15, 20. Not mil approved on 15 and 20



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



### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

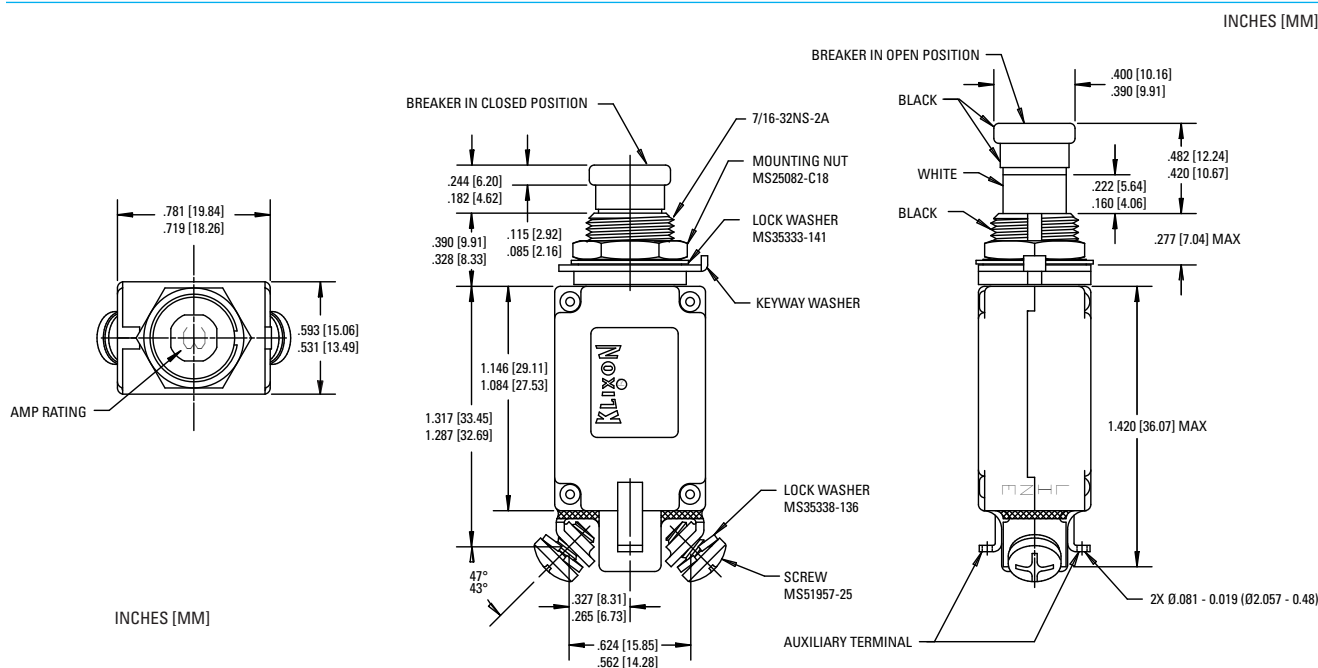
Part Number	***Max Voltage Drop	Part Number	***Max Voltage Drop
7274-XX-½	2.00	7274-XX-4	0.45
7274-XX-¾	1.45	7274-XX-5	0.35
7274-XX-1	1.10	7274-XX-7	0.30
7274-XX-1½	0.75	7274-XX-10	0.28
7274-XX-2	0.75	7274-XX-15	0.25
7274-XX-2½	0.70	7274-XX-20	0.25
7274-XX-3	0.55		

### CALIBRATION : 1 TO 35 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	115%	150%	2 to 20	.16 to 1.2	.046 to .8
-55	135%	180%	—	—	—
+71	90%	130%	—	—	—

\*\*\* Maximum voltage drop at 100%, nominal rated current

## DIMENSIONAL DRAWINGS - 7274-4





# KLIXON® | 15TC SERIES

## 20 to 50 Amp, Three-Phase Aircraft Circuit Breakers

### FEATURES

- 28VDC or 120VAC, 20 to 50 Amps
- High vibration resistance and interrupt capacity
- Non-ambient temperature compensated
- Trip-free design

### ADDITIONAL OPTIONS\*

- Longer push buttons
- Auxiliary switch - male or female contacts available
- Terminal barriers

### DESCRIPTION

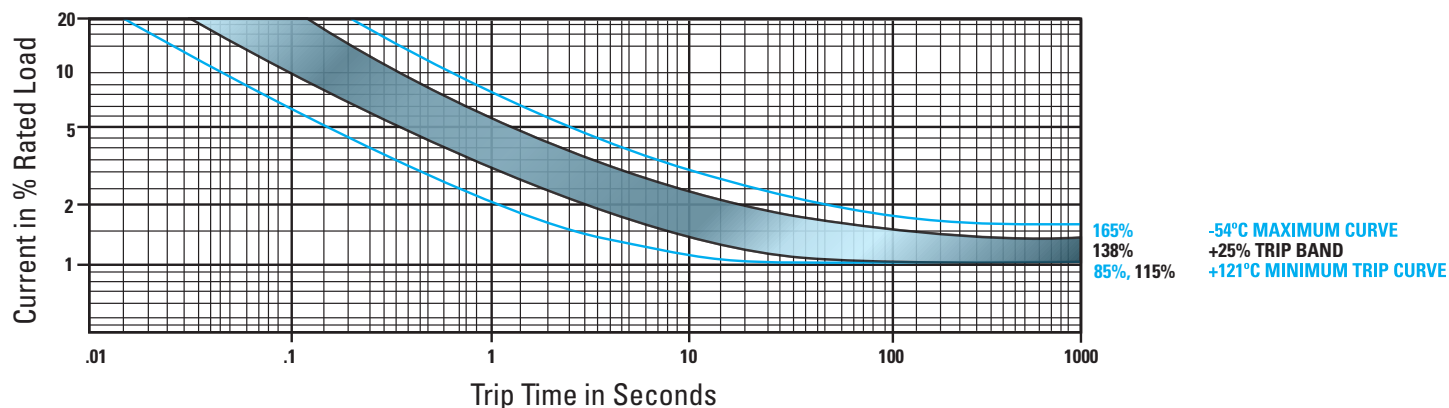
The Klixon® three-phase 15TC series circuit breaker was designed to meet the package size and performance requirements of inactive military standard MS90351 in the 20 to 50 amp range. This lightweight, high performance, non-ambient temperature compensated circuit breaker is well suited for aircraft, avionics and electrical systems.

PERFORMANCE CHARACTERISTICS	
Calibration : 200% rated current, 73°F (23°C)	15TC: 20A to 50A for 10 to 70 seconds
Ultimate Trip at 73°F (23°C)	Must hold : 110% Must trip : 145%
Endurance	2,500 cycles : 115 VAC, 400 Hz Inductive 5,000 cycles : Mechanical, no load
Interrupt Current Capacity	20 to 50 amps: 4000 amps at 28 VDC 20 to 50 amps: 2000 amps at 115 VAC, 400 Hz
Vibration Resistance**	3G minimum, 2000 Hz
Mechanical Shock Resistance	50G
Weight	127 grams (std) 132 grams (auxiliary)

\*\* Other vibration levels available, contact factory for details

ORDERING INFORMATION
Sensata PN
15TC20-XX 15TC30-XX 15TC35-XX 15TC40-XX 15TC45-XX 15TC50-XX

## TRIP CURVE - Approximate Time, Current Characteristics at 73°F (23°C)



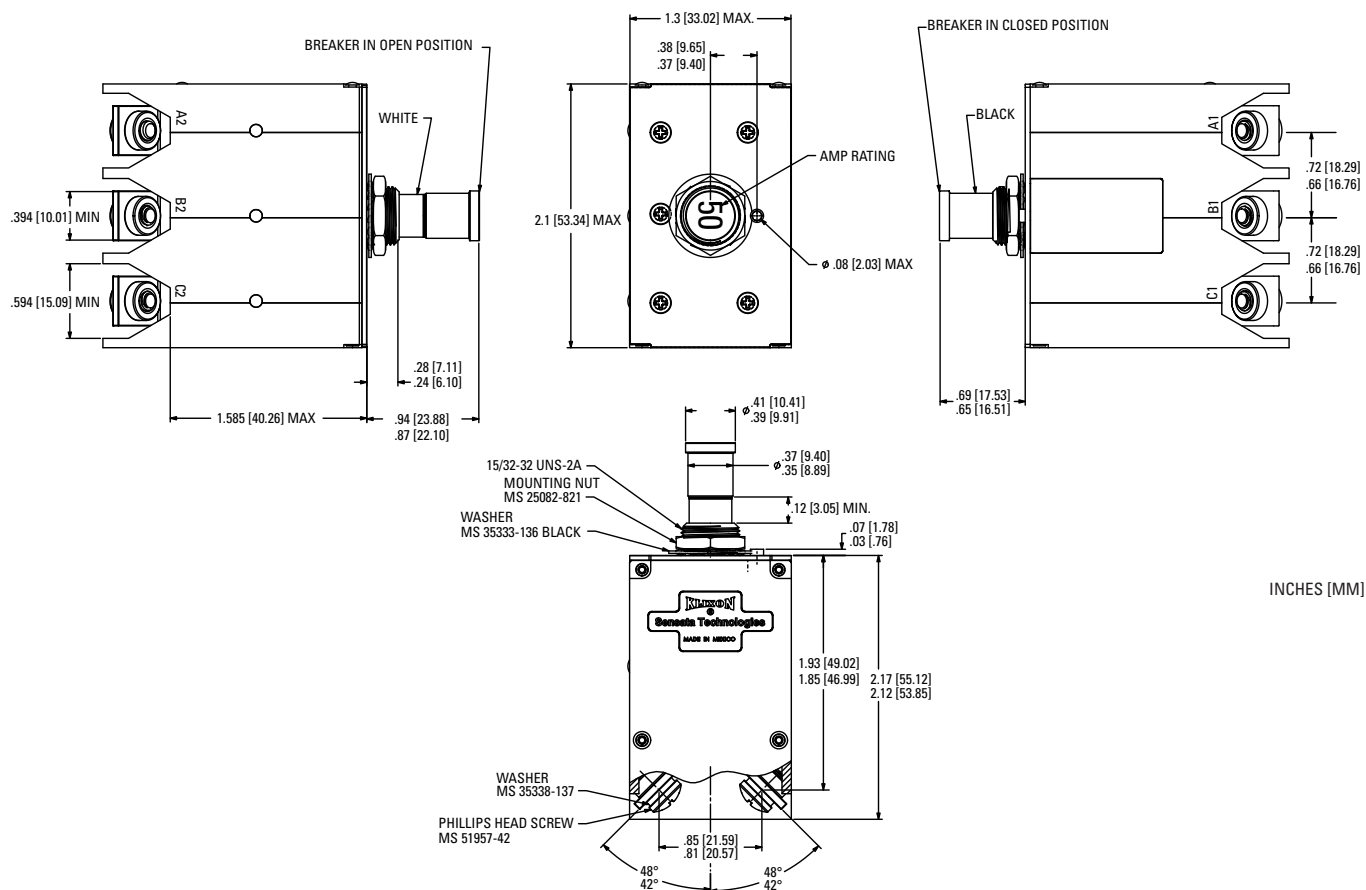
### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Part Number	Max Voltage Drop
15TCXX	0.30

### CALIBRATION : 20 TO 50 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+23	110%	145%	10 to 70	.15 to 5.2	.05 to 1.3
-55	105%	145%	10 to 70	.15 to 5.2	.05 to 1.3
+70	110%	165%	10 to 70	.15 to 5.2	.05 to 1.3

## DIMENSIONAL DRAWINGS - 15TC30





# KLIXON® | 6752 SERIES

## 2.5 to 100 Amp, Single & Three-Phase Circuit Breakers

### FEATURES

- 28VDC or 120VAC, 2.5 to 100 Amps
- Usable on large electrical systems : 6000 amps interrupting capacity
- Ambient temperature compensation and trip-free design
- Mil-qualifications
- Long trouble-free operation: 20,000 operating cycles
- Military approved

### DESCRIPTION

The Klixon® 6752 series are thermal-magnetic circuit breakers designed and manufactured to meet the more stringent military standards of today's jet aircraft, specifically MIL-DTL-22715. The higher short circuit capacity, vibration resistance and longer cycling life of the 6752 series exceed previous military standards.

### ADDITIONAL OPTIONS

- Auxiliary switch available
- Terminal barriers

### PERFORMANCE CHARACTERISTICS

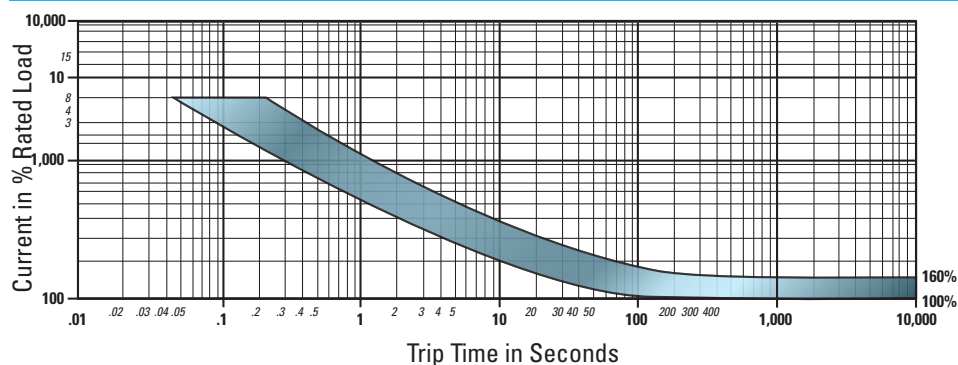
Calibration : 200% rated current, 77°F (25°C)	6752-12, 6752-300: 2.5A to 50A 6752-100: 2.5A to 100A
Ultimate Trip at 77°F (25°C)	Must hold : 145% Must trip : 110%
Endurance	5,000 cycles : 120 VAC, 400 Hz Inductive 5,000 cycles : 120 VAC, 400 Hz Resistive 5,000 cycles : 28 VDC, 400 Hz Resistive 5,000 cycles : 28 VDC, 400 Hz Inductive 5,000 cycles : Mechanical, no load (-100's) 10,000 cycles : Mechanical, no load
Interrupt Current Capacity	2.5 - 50 amps : 6,000 amps @ 30 VDC (-12's) 2.5 - 50 amps : 6,000 amps @ 120 VA, 400 Hz 2.5 - 50 amps : 4,200 amps @ 205 VA, 400 Hz 50 - 100 amps : 3,500 amps @ 120 VAC, 400Hz 50 - 100 amps : 6,000 amps @ 28 VDC
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	30G
Acceleration	10G
Weight	6752-12 - 91 gm max 6752-100 - 114 gm max 6752-305 - 292 gm max

### ORDERING INFORMATION

Sensata PN	Qualifications PNs	
6752-12-2½	MS24571-2	MS24571-2V
6752-12-5	MS24571-5	MS24571-5V
6752-12-7½	MS24571-7	MS24571-7V
6752-12-10	MS24571-10	MS24571-10V
6752-12-15	MS24571-15	MS24571-15V
6752-12-20	MS24571-20	MS24571-20V
6752-12-25	MS24571-25	MS24571-25V
6752-12-35	MS24571-35	MS24571-35V
6752-12-50	MS24571-50	MS24571-50V
6752-100-50	MS25361-50	
6752-100-60	MS25361-60	
6752-100-70	MS25361-70	
6752-100-75	MS25361-75	
6752-100-80	MS25361-80	
6752-100-90	MS25361-90	
6752-100-100	MS25361-100	
6752-102-50	MS25361-50V	
6752-102-60	MS25361-60V	
6752-102-70	MS25361-70V	
6752-102-75	MS25361-75V	
6752-102-80	MS25361-80V	
6752-102-90	MS25361-90V	
6752-102-100	MS25361-100V	



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



### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Part Number	***Max Voltage Drop	Part Number	***Max Voltage Drop
6752-12-2½	0.60	6752-300-2½	0.60
6752-12-5	0.40	6752-300-5	0.40
6752-12-7½	0.30	6752-300-7½	0.30
6752-12-10	0.25	6752-300-10	0.25
6752-12-15	0.25	6752-300-15	0.25
6752-12-20	0.25	6752-300-20	0.25
6752-12-25	0.25	6752-300-25	0.25
6752-12-35	0.25	6752-300-35	0.25
6752-12-50	0.25	6752-300-50	0.25

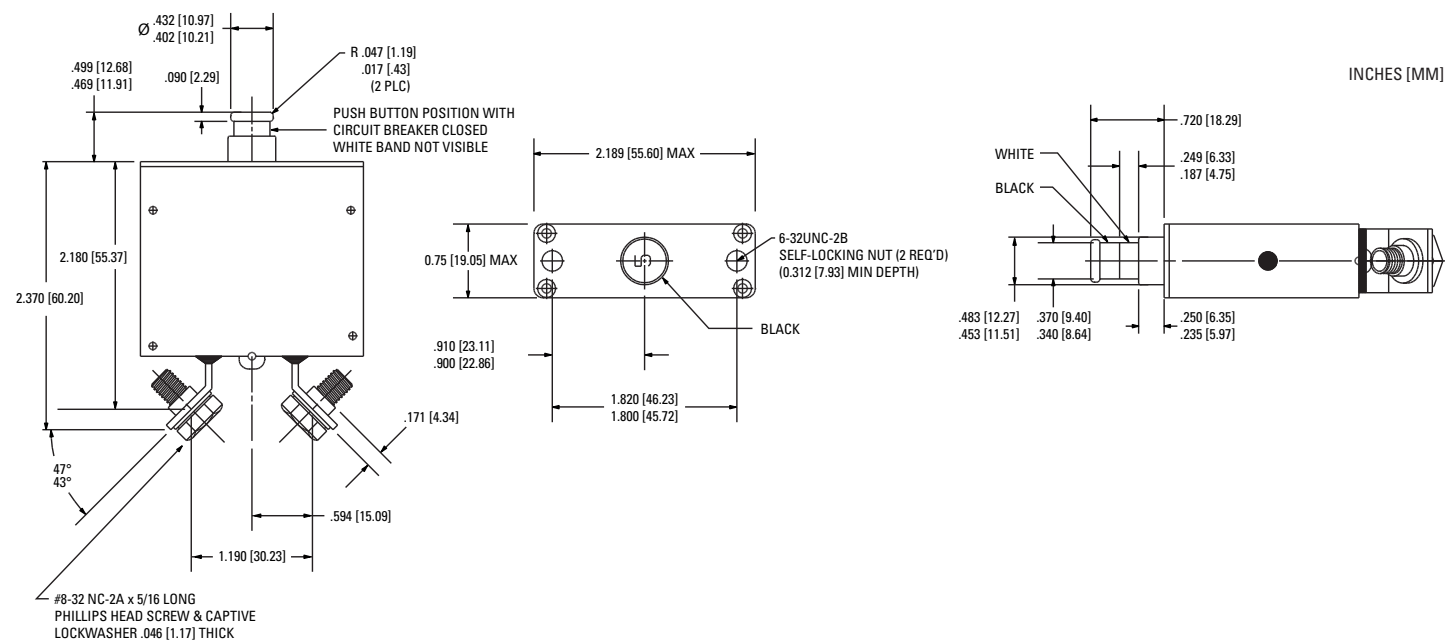
### CALIBRATION : 2.5 TO 50 AMPS (6752-12, -300)

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	110%	138%	12 to 65	2.3 to 10	.33 to 1.40
-54	110%	160%	12 to 65	2.3 to 10	.33 to 1.40
+93	105%	138%	12 to 65	2.3 to 10	.33 to 1.40
+121	105%	138%	12 to 65	2.3 to 10	.33 to 1.40

### CALIBRATION : 50 TO 100 AMPS (6752-100)

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	105%	138%	15 to 65	2 to 10	1.40
-54	125%	165%	15 to 65	2 to 10	1.40
+71	100%	145%	15 to 65	2 to 10	1.40

## DIMENSIONAL DRAWINGS - 6752-12





# KLIXON® | 7270 & 7271 SERIES

## 3 to 35 Amp, Miniature Aircraft Circuit Breakers

### FEATURES

- 30VDC or 120VAC, 3 to 35 Amps
- Miniature aircraft breaker
- Ambient temperature compensation and trip-free design
- AS58091 qualified
- High interrupting capacity
- Available with neck mounting or standard cover plate

### DESCRIPTION

The Klixon® 7270 and 7271 series circuit breakers were designed to utilize less space behind the panel while protecting wire and cable in aircraft and ground support equipment on 120 VAC, 400 Hz or 30 VDC systems. The units are available with neck mounting (7270-1 and 7271-8) or standard cover plate (7270-7 and 7271-3).

### ORDERING INFORMATION

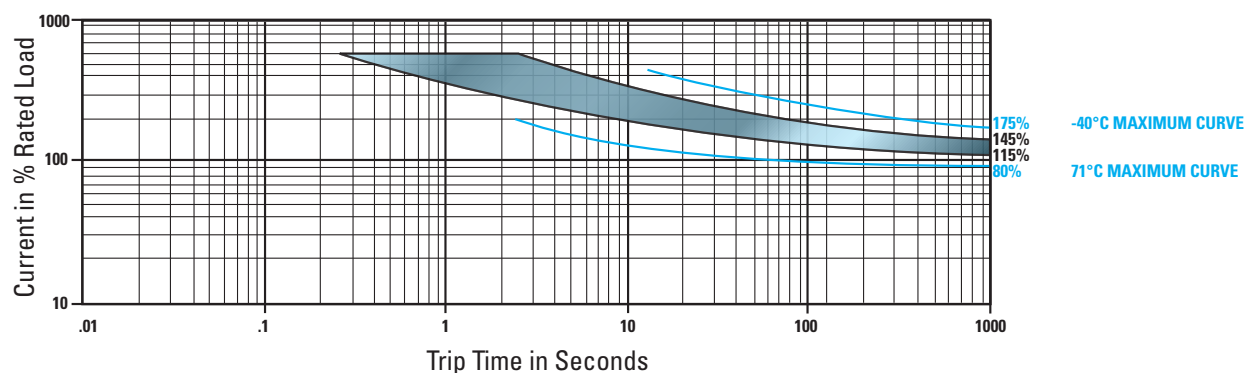
Sensata PN	Qualifications PN
7270-1	
7270-1-3	—
<b>7270-1-5</b>	MS24509-A-5
<b>7270-1-7½</b>	MS24509-A-7½
<b>7270-1-10</b>	MS24509-A-10
<b>7270-1-15</b>	MS24509-A-15
7270-1-20	—
7270-1-25	—
7270-1-30	—
7270-1-35	—
7270-7	
7270-7-3	—
<b>7270-7-5</b>	MS24509-B-5
<b>7270-7-7½</b>	MS24509-B-7½
<b>7270-7-10</b>	MS24509-B-10
<b>7270-7-15</b>	MS24509-B-15
7270-7-20	—
7270-7-25	—
7270-7-30	—
7270-7-35	—
7270-3	
7270-3-3	—
<b>7270-3-5</b>	MS24510-B-5
<b>7270-3-7½</b>	MS24510-B-7½
<b>7270-3-10</b>	MS24510-B-10
<b>7270-3-15</b>	MS24510-B-15
7270-3-20	—
7270-3-25	—
7270-3-30	—
7270-3-35	—
7270-8	
7270-8-3	—
<b>7270-8-5</b>	MS24510-A-5
<b>7270-8-7½</b>	MS24510-A-7½
<b>7270-8-10</b>	MS24510-A-10
<b>7270-8-15</b>	MS24510-A-15
7270-8-20	—
7270-8-25	—
7270-8-30	—
7270-8-35	—

\*\* Other vibration levels available, contact factory for details  
 ††† Available on 6TC device only

### PERFORMANCE CHARACTERISTICS

Calibration : 200% rated current, 77°F (25°C)	3A to 35A for 15 to 65 seconds
Ultimate Trip at 77°F (25°C)	Must hold : 145% Must trip : 105%
Endurance	5,000 cycles : 30 VDC, Inductive 2,500 cycles : 30 VDC, Resistive 5,000 cycles : 120 VAC, 400 Hz Inductive 5,000 cycles : 120 VAC, 400 Hz Resistive 5,000 cycles : Mechanical, no load
Interrupt Current Capacity	4,000 amps @ 30 VDC 3,500 amps @ 120 VAC, 400Hz
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	30G
Insulation Resistance	100 MΩ min
Acceleration	10G
Weight	7270-1 - 39 gm max 7271-8 - 39 gm max

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



### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Part Number	Part Number	***Max Voltage Drop
7270-X-3	7271-X-3	0.75
7270-X-5	7271-X-5	0.65
7270-X-7½	7271-X-7½	0.50
7270-X-10	7271-X-10	0.50
7270-X-15	7271-X-15	0.50
7270-X-20	7271-X-20	0.50
7270-X-25	7271-X-25	0.50
7270-X-30	7271-X-30	0.50
7270-X-35	7271-X-35	0.50

\*\*\* Maximum voltage drop at 100%, nominal rated current

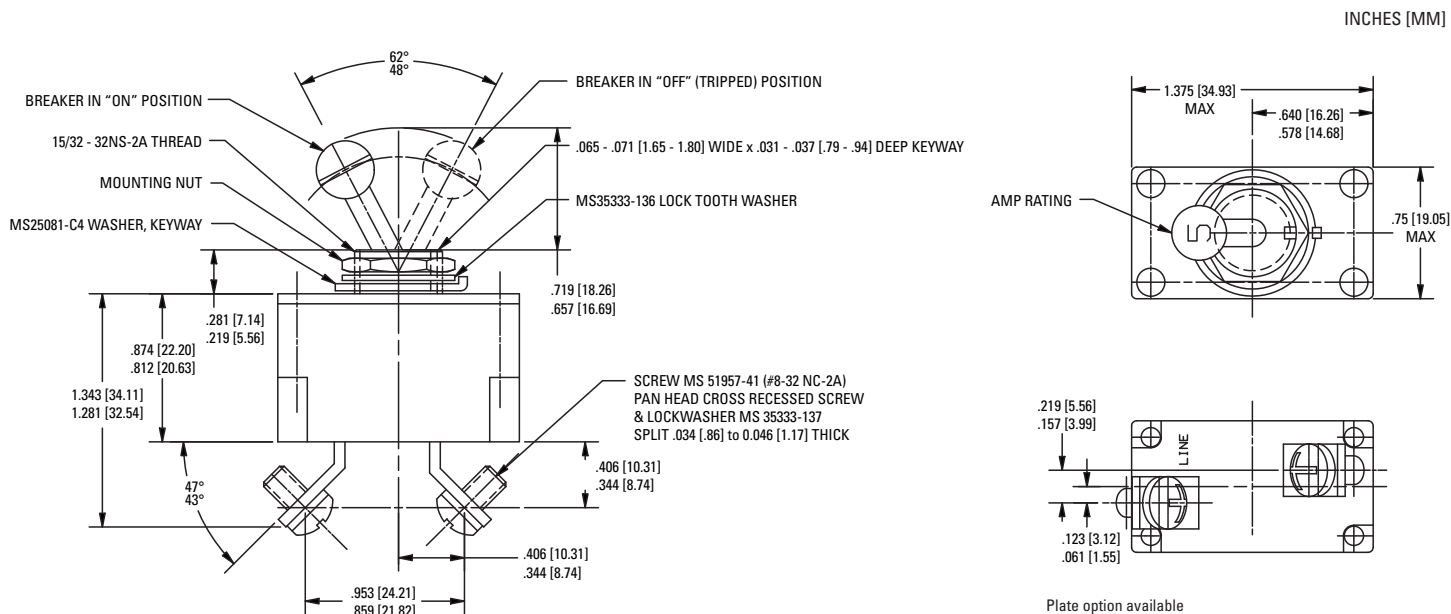
### CALIBRATION : 3 TO 35 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds		
			200%	500%	1000%
+25	105%	145%	15 to 65	2 to 10	1.4
-40	138%	175%	15 to 65	2 to 10	1.4
70	80%	125%	15 to 65	2 to 10	1.4

### MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

Amps	Calibration @ 25°C (in seconds)		
	200%	400%	600%
3 amps	40 to 120	3 to 26	1 to 12
5 amps	40 to 100	3 to 22	1 to 10
7½ to 35 amps	10 to 70	0.75 to 7.0	0.25 to 2.5

## DIMENSIONAL DRAWINGS - 7270-1





# Klixon® | 20TC SERIES

## Single-Phase, Aircraft Circuit Breaker (Rocker-Type)

### FEATURES

- 30VDC or 120VAC, 3 to 35 Amps
- Versatile rocker actuator: snap-on, switch type
- Panel mounting
- Provides dual function (on/off) circuit switching and protection

### DESCRIPTION

The Klixon® 20TC series circuit breakers offer the advantages of integrating an on/off switch and a circuit protector in a trim, compact package. The snap-on actuators are available on request in a variety of colors, styles and indication markings designed to provide a stylish console appearance to the panels of light aircraft.

Several different types of actuators are available. The translucent actuator permits quick identification of the actuator position under low ambient lighting conditions by emitting a soft glow from a light source, such as an edge-lighted panel. Colored actuators will be hot letter stamped in white. White and translucent actuators will be stamped in black.

### ADDITIONAL OPTIONS

- Various styles and colors (black, white, translucent, colored)

### ROCKER BUTTON OPTIONS

Order Rocker PN = SR12507 - 156 - **X**

<b>X</b>	<b>Options</b>
1	Push ON / Landing Lights
2	Push ON / Nav Light
3	Push ON / Anti-Cool
4	Push ON / Pilot Heat
5	Push ON / Boost Pump
6	Push ON / Glide Slope
7	Push ON / Marker Beacon
8	Push ON / Strobe Light
9	ON
11	"SR to Invert Marking"
13	Push ON / Rotating Beacon
16	Push ON / Elevator Trim
18	Push ON / Radio Master
19	Push ON / LDG Light
20	ON / OFF
22	"Colored Box"
26	OFF / ON
27	Push ON / Low Boost
28	Push ON / High Boost
29	Push ON / WX Radar
30	Push ON / Prop De-Ice
33	Push ON / Standby Vac
34	No Actuator

### PERFORMANCE CHARACTERISTICS

Calibration : 200% rated current, 77°F (25°C)	3A to 35A for 10 to 130 seconds
Ultimate Trip at 77°F (25°C)	Must hold : 150% Must trip : 110%
Endurance	5,000 cycles: 120 VAC, 400 Hz inductive 5,000 cycles: 120 VAC, 400 Hz resistive 2,500 cycles: 28 VDC, 400 Hz inductive 2,500 cycles: 28 VDC, 400 Hz resistive 10,000 cycles: Mechanical, no load
Interrupt Current Capacity	2,000 amps at 30 VDC 1,000 amps at 120 VAC, 400 Hz
Vibration Resistance**	10G minimum, 50 - 500 Hz
Mechanical Shock Resistance	50G
Acceleration	10G
Weight	39 gm max



## MAX VOLTAGE DROP @ NOMINAL RATED CURRENT

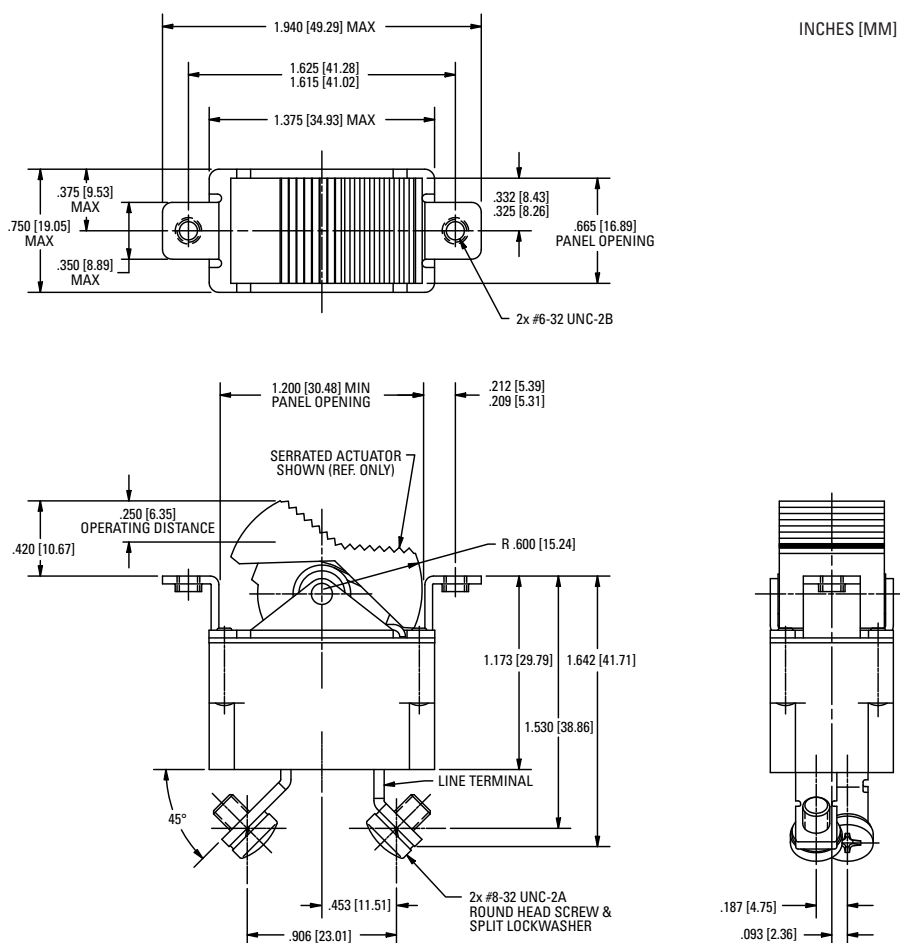
Part Number	***Max Voltage Drop	Part Number	***Max Voltage Drop
20TC2-3	0.75	20TC2-15	0.50
20TC2-4	0.75	20TC2-20	0.50
20TC2-5	0.65	20TC2-25	0.50
20TC2-7½	0.50	20TC2-30	0.50
20TC2-10	0.50	20TC2-35	0.50

## CALIBRATION : 1 TO 35 AMPS

TEMP °C	MIN ULT TRIP	MAX ULT TRIP	Trip Time in Seconds 200%
+25	110%	150%	10 to 130

\*\*\* Maximum voltage drop at 100%, nominal rated current

## DIMENSIONAL DRAWINGS - 20TC2





# KLIXON® | 7235 & 7236 SERIES

## 7½ to 400 Amp, Thermal Overload Sensing Controls

### FEATURES

- High reliability: does not switch overload current
- Adaptable for AC, DC, single-phase, or three-phase applications
- Stops nuisance trips: unaffected by transient current surges
- Long trouble-free operation: 20,000 operating cycles
- Military approved

### DESCRIPTION

The Klixon® 7235 and 7236 overload sensing controls are designed for the remote sensing of overloads in aircraft electrical systems or other applicable remote systems. They are for the protection of 28 VDC circuits or for 120 VAC single-phase or three-phase circuits operating at 60 to 1000 Hz. For three-phase AC circuit protection, a 28 VDC control circuit is required.

One three-phase relay or three single-phase relays with their coils wired in series may be used in the control circuit. With either arrangement, all three phases will trip open simultaneously when an overload exists in any one phase. Klixon® overload sensing controls consist of a bimetal thermal actuating disc in series with the load terminals and an auxiliary single-phase, double-throw switch fitted to the main base forming a compact vibration-proof construction. The aircraft relay is wired in series with the sensing control through the S2 terminal of the auxiliary switch. When the control senses and overload, the Klixon® disc operates the auxiliary switch, breaking circuit S1-S2 and making circuit S1-S3. This opens the relay, thus opening the load circuit.

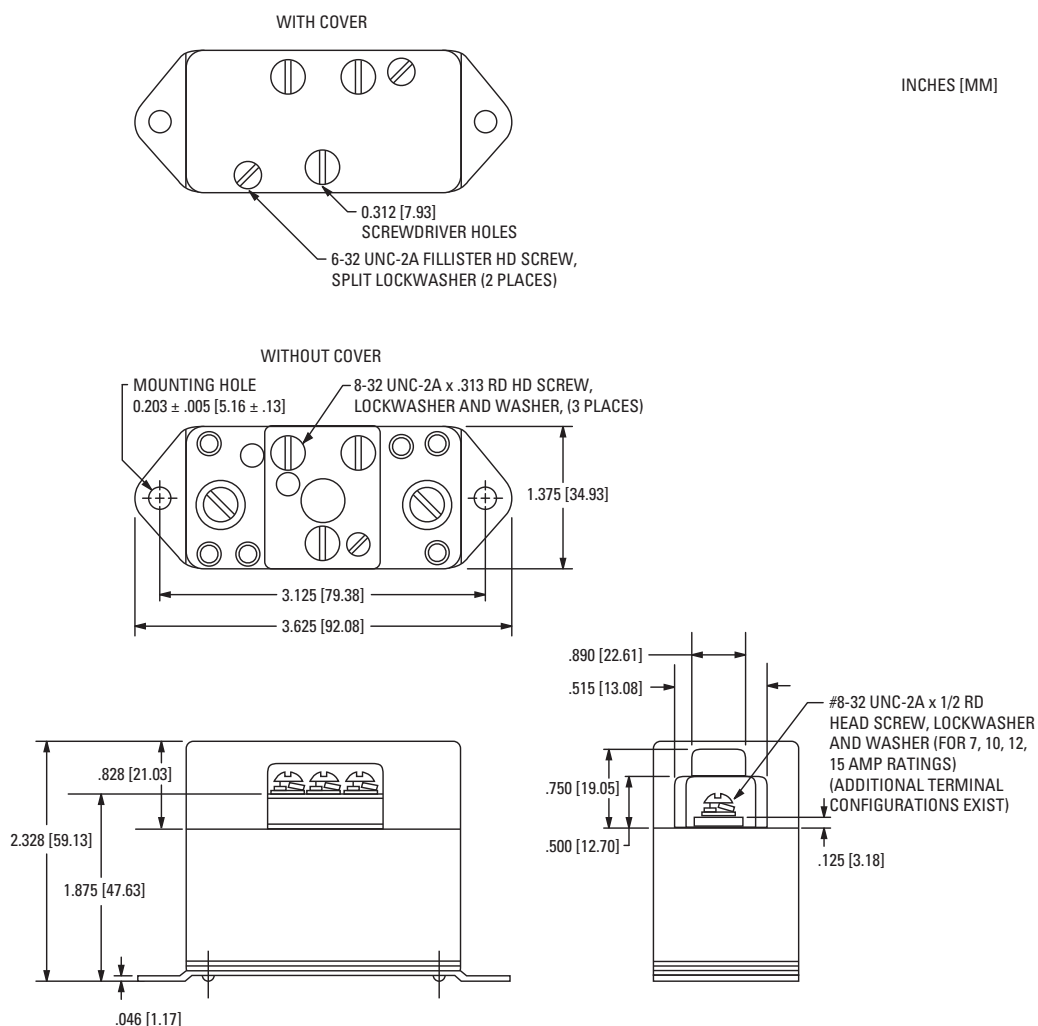
PERFORMANCE CHARACTERISTICS	
Amp Rating	7–50 amps: 2,000 amp adjusted circuit Over 50 amps: 4,000 amp adjusted circuit
Vibration Resistance	1.52mm (0.06") total excursion, 10–55 cps
Mechanical Shock Resistance	25G
Acceleration	10G
Resistance	Corrosion: 15 hours (QQ-M-151A) Sand and dust: 4 hours
Explosion Proof	3 cycles at 100 amps
Short Circuit Rupture	Relay capacity: 5 cycles, 20 VDC, 40,000 ft alt.
Weight	gm max

ORDERING INFORMATION
Sensata PN
7235-2-XX (7, 12, 15, 20, 25, 30, 35, 40, 50, 70, 80, 90, 100, 125)
7236-2-XX (150, 175, 200, 250, 300, 400)

## SPECIFICATIONS

	7235-1	7235-2	7236-1	7236-2
<b>Ratings</b>	7 to 125 amps	7 to 125 amps	150 to 400 amps	150 to 400 amps
<b>(S1 - S3) Resistance R1</b>	0.75 ohms	None	0.75 ohms	None
<b>Continuous Current Capacity (S1-S3)</b>	3 amps	10 amps	3 amps	10 amps
<b>(S1-S3) Contact Rating</b>	10 amps	10 amps	10 amps	10 amps

## DIMENSIONAL DRAWINGS - 7235





# KLIXON® | 3SB SERIES

## Simulators, single-phase, low amp, quick trip

### FEATURES

- High shock and vibration performance
- Optional panel mount configuration, replaceable amp rating inserts (reference PN # 27515 when ordering), auxiliary switch

### DESCRIPTION

The Klixon® 3SB series simulator circuit breaker was developed by Sensata Technologies to meet the growing needs of the commercial and military simulator industry. Due to the high operational cost of live training, more and more training is being conducted on simulators. The realism and complexity of tomorrow's simulators will require a circuit breaker that can provide the same "look and feel" of industry accepted circuit breakers in order to create a superior training environment.

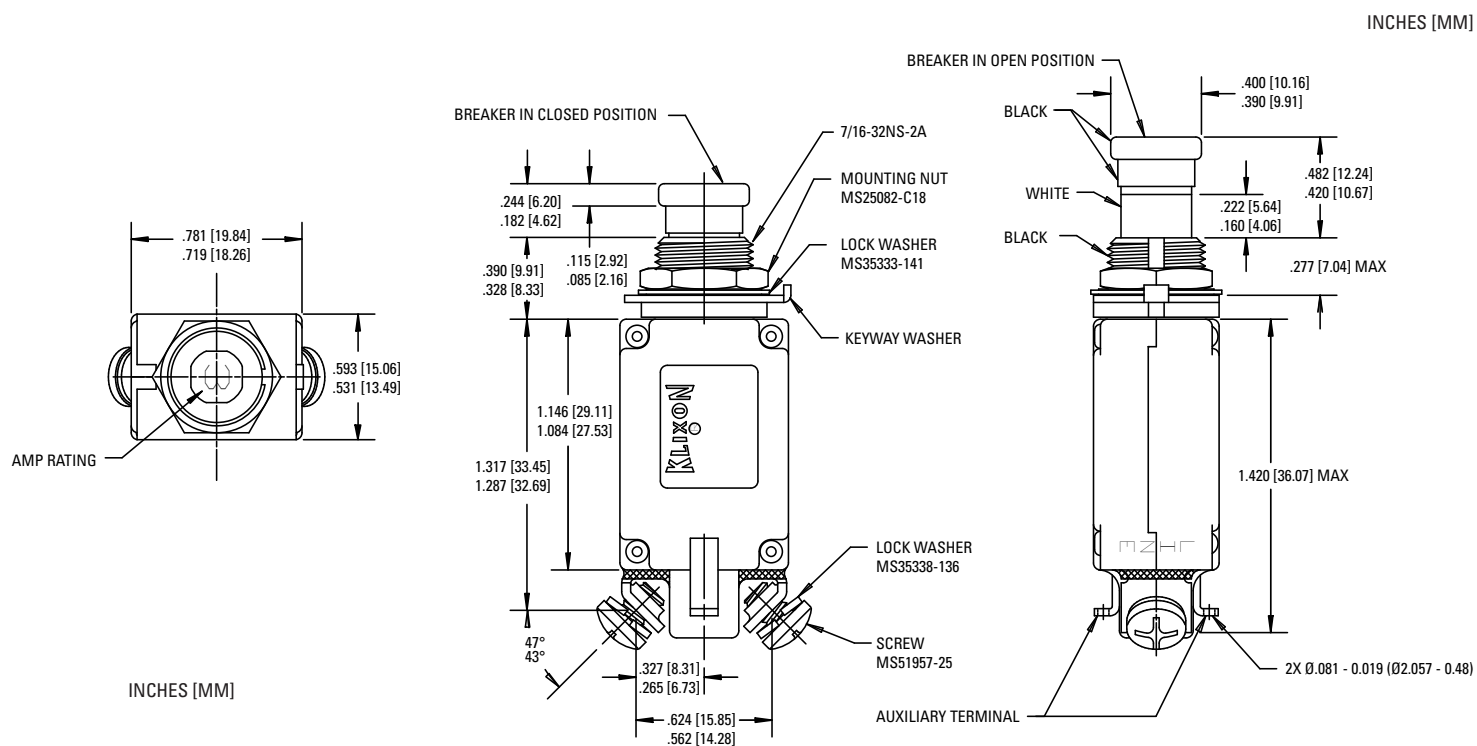
The 3SB electromechanical devices provide fast trip response with low current draw at 28 VDC. For adaptability to aircraft cockpit panel mounting, they are packaged in a standard MS 26574 style thermal circuit breaker configuration. This fast trip/low current performance provides the opportunity for system level savings. It enables the designer to potentially downsize the system power source and eliminate expensive I/O boards or other electronics while also reducing the amount of cabling required. Changes in training schemes normally entail system rewiring to reconfigure the simulator, which becomes labor intensive and costly. With the incorporation of a 3SB device the training changes can easily be achieved through system software without the time and cost associated with rewiring.

Klixon simulator circuit breakers also provide the same tactile feel as standard Mil qualified breakers for superior training realism. Klixon circuit breakers offer flexibility by offering replaceable ampere rating inserts. (To order different amp rating insert tabs, reference part number 27515.) Attached to the top of the push button actuator, they match the current rating used in the actual aircraft. These inserts can be rotated within the push button to meet your cockpit configuration needs. An optional auxiliary switch for remote indications and a variety of connection alternatives are also available.

PERFORMANCE CHARACTERISTICS	
Calibration : 200% rated current, 77°F (25°C)	200mA max, current draw @ 28VDC 3 seconds max trip time
Endurance	25,000 cycles : Mechanical, no load 1,000 cycles : Electrical trip cycles (min @ 28 VDC)
Vibration Resistance**	5G maximum, 50 - 500 Hz
Mechanical Shock Resistance	5G
Acceleration	5G
Open & Reset Force	5 lb maximum
Weight	30 grams maximum

ORDERING INFORMATION
Sensata PN
3SB2 -1- XX <i>N= no amp rating</i>
3SB2-1- XX <i>amp rating standard device</i>
3SB4-1-XX <i>auxiliary device</i>

## DIMENSIONAL DRAWINGS - 3SB4



## MIL Approved KLIXON® Aircraft Circuit Breakers

MS #	Sensata #	Page	MS #	Sensata #	Page	MS #	Sensata #	Page
MS 3320	2TC2	6	MS 14154V	6TC63	14	MS 26574	7274-2	16
MS 3320L	2TC27	6	MS 5809/1	2TC49	8	MS 26574A	7274-4	16
MS 3320V	2TC63	6	MS 24571	6752-12	20	MS 26574L	7274-70	16
MS 14105	3TC2	10	MS 24571V	6752-12	20	MS 24509A	7270-1	22
MS 14105L	3TC27	10	MS 25361	6752-100	20	MS 24509B	7270-7	22
MS 14153	9TC2	14	MS 25361V	6752-102	20	MS 24510A	7271-8	22
MS 14154	6TC2	14	MS 22073	7274-11	16	MS 24510B	7271-3	22
MS 14154L	6TC37	14	MS 22073V	7274-69	16	MS 25244	3TC7	10

## ADDITIONAL SENSATA PRODUCTS FOR AEROSPACE & MILITARY



AIRPAX™ hydraulic-magnetic circuit breakers provide amperages up to 300 amp, voltages up to 300VDC / 600VAC, and interrupt capacities up to 50,000 amps. AIRPAX™ circuit breakers and protectors are available in hermetically or environmentally sealed packages, with an extensive offering of terminal, handle and auxiliary switch options.

*Product Series: AP/MIL, APL, APG, IAG, 205, IAL, LEL, 209*



DIMENSIONS™ DC to AC power inverters are becoming the product of choice for operating sophisticated electronic equipment when grid power is not available. DIMENSIONS™ single-phase and three phase quasi-sine waveform units with input voltages ranging from 12 to 300VDC and continuous output power ranges from 100 to 12,000 watts. DIMENSIONS™ pure sine wave units are available with 12, 24, or 48VDC inputs and outputs ranging from 250 to 10,000 watts.





## ABOUT SENSATA TECHNOLOGIES

Sensata Technologies provides leaders in the automotive, appliance, aircraft, industrial, HVAC/R, over-the-road truck, heavy vehicle, bus, RV, marine, telecom and datacom global markets with sensing, protection and control solutions. Our mission is to improve safety, efficiency and environmental protection for millions of people worldwide.

Sensata Technologies is headquartered in Attleboro, Massachusetts in the United States and has business and manufacturing centers and sales offices throughout the world.

## THE SUPPLIER YOU WANT. THE PARTNER YOU NEED.

At Sensata Technologies we do all we can to ensure your satisfaction. We apply our unsurpassed experience and expertise to focus on your needs. We adhere to the highest technical, manufacturing and testing standards. Our experts work with you to ensure the quality and precision it takes to meet the most demanding application requirements. No wonder a world of businesses relies on the more than 1 billion sensor, protection and control devices we manufacture each year to optimize our customers' own leading-edge technologies.

## WE DO IT ALL FOR YOU.

We are dedicated to being our customers' first choice – no matter where in the world you are located. We do this by:

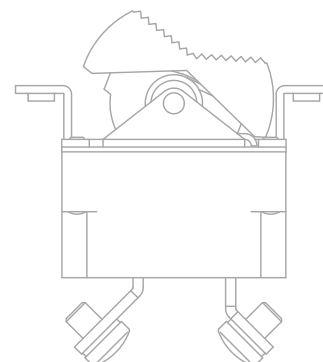
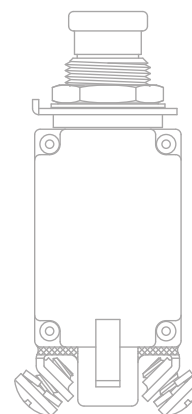
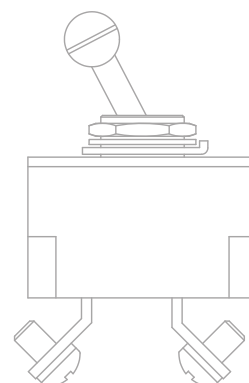
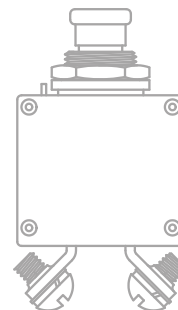
- Offering rugged designs and in-house testing facilities to ensure consistent quality
- Locating business centers close to your markets in every region of the world
- Consolidating manufacturing in large Make sites in cost-effective locations
- Partnering with those setting the latest standards in industrial and automotive system performance, safety and emission control

## SAFETY, PERFORMANCE, RELIABILITY

You will find Sensata products wherever increased safety, performance and reliability are required and where improved machine productivity and efficiency are desired. You will find our products in an endless number of applications including HVAC and refrigeration, transportation, aircraft, trucks, buses, trains, datacom and telecom, construction, mining, agriculture, boats, recreational vehicles and material handling equipment. Our products are also found in compressors, pumps, hydraulics, pneumatics, process control and factory automation equipment, alternative fuel systems, communication towers and much more.

## MANUFACTURING PRODUCTS TO THE HIGHEST STANDARDS.

Sensata's manufacturing and technology centers are ISO / TS16949 and ISO 14001 certified throughout the world.



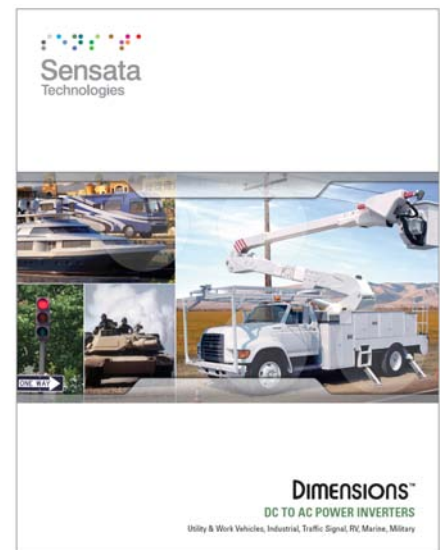
## OTHER SENSATA CATALOGS THAT MAY INTEREST YOU:



Klixon™ Thermal Circuit Breakers  
Literature PN 2455009001



Airpax™ Power Protection Catalog  
Literature PN 2455005000



Dimensions™ DC to AC Inverters  
Literature PN 2455008000

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