Precision Products

- Thermostats
- Switches



Thermal Management

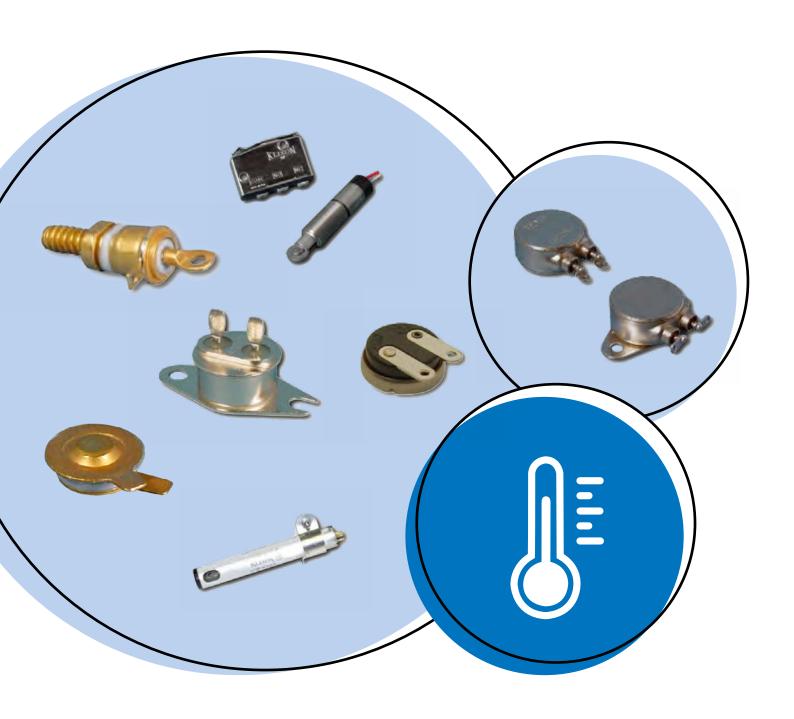
Industrial Components

Test & Measurement

RF & Microwaves

Aviation

Engineering & Service



... we provide solutions!





About us

Telemeter Electronic is a certified sales and service-providing company with more than 50 years history of experience. We are focused on a personal and partnership-based-cooperation by our professionally competent market specialists.

What do we offer?

We offer a comprehensive range of electronic and mechatronic components, devices and systems, detailed knowledge about it and many years of experience in diverse applications. Long lasting partnerships with selected and specialized manufacturers and our own development department ensure that we elaborate the best solution together with you.

What makes us different?

Our philosophy is to accurately identify the needs of our customers to find the right solution. We support you with our extensive range and individual adaptations, additions and developments.

... we provide solutions!

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KLIXON® Tiny Stat™ 3BT & 4BT Series Thermostats

General Description

- Tiny Stat[™] precision thermostat • Single pole, single throw (SPST)
- Hermetically sealed and back-filled with nitrogen
- Gold-plated contacts available upon request

Operating Switch Range • -18°C to 177°C (0°F to 350°F)

Max Current and Voltage Rating

10,000 life cycles

• 1 amp at 115VAC & 30VDC for 10,000 life cycles 0.01 amp at 30mVAC & 30mVDC (gold contacts, min amps) for

Approvals • 3BT: MIL-PRF-24236/19

• 4BT: MIL-PRF-24236/13

• MIL-PRF-24236 /24

• MII -PRF-24236/1

KLIXON® 5BT Series Hermetic Thermostats

General Description

- 1/2" bimetal disc thermostat, hermetically sealed Single pole, double throw (SPDT)
- High resistance to shock and vibration

Operating Switch Range • -54°C to 204°C (-65°F to 400°F)

Max Current and Voltage Rating

• 2 amp at 125VAC & 30VDC for

100 000 cycles • 3 amp at 125VAC & 30VDC for

50,000 cycles

KLIXON® M1, 11041 Series Hermetic Thermostats

- 1/2" bimetal disc thermostat, hermetically sealed
- Single pole, single throw (SPST)

Operating Switch Range Max Current and Voltage Rating • -54°C to 288°C (-65°F to 550°F)

- 5 amp at 30VAC & 30VDC at 100,000 cycles
- 6 amp at 125VAC at
- 5,000 cycles Other amperages, voltage,

cycles are available

KLIXON® M2 Series Hermetic Thermostats

General Description

- ½" bimetal disc thermostat, hermetically sealed
- Single pole, single throw (SPST)
- Low profile, tight tolerance, narrow differentials

Operating Switch Range

- -18°C to 149°C (0°F to 300°F)
 - 250,000 cycles

Max Current and Voltage Rating • 2 amp at 120VAC & 30VDC at

Approvals • MIL-PRF-24236/20 • S-311-641

Approvals

(#34618)

CUL recognized

KLIXON® 4344 Series Hermetic Thermostats

General Description

- ½" bimetal disc thermostat, hermetically sealed
- Single pole, single throw (SPST)
- Many option available, including switch packaged into probe and pipe strap mount options

Operating Switch Range • -54°C to 288°C (-65°F to 550°F)

• 7 amps, 30VAC/VDC at

- 5,000 cycles
- 3 amps. 125VAC at
- 50,000 cycles

Max Current and Voltage Rating

 Other amperages, voltage, cycles are available

KLIXON® 4391 Series Hermetic Thermostats

General Description

• ½" bimetal disc thermostat, hermetically sealed • Single pole, single or double throw (SPST/SPDT)

• Many option available, including optional overmold

Operating Switch Range • -18°C to 232°C (0°F to 450°F)

- 14 amps, 30VAC/VDC at 5,000 cycles
 - 6 amps, 125VAC at
 - 50.000 cycles
 - Other amperages, voltage, cycles are available

Max Current and Voltage Rating

Other Products



KLIXON® 7BT2 Series Thermostats

General Description

- · Environmentally sealed, high capacity, 1/2" himetal disc
- . SPST, normally open or closed

Operating Switch Range

• -1°C to 204°C (30°F to 400°F)

• 10 amps, 120VAC / 240VAC

• 7 amps. 277VAC

up to 100,000 cycles

up to 100,000 cycles

Max Current and Voltage Rating

KLIXON® 6786 Series Thermostats

• Environmentally sealed, low-profile, ½" bimetal disc • -29°C to 177°C (-20°F to 350°F) SPST, normally open or closed

Operating Switch Range

Max Current and Voltage Rating • 7 amps, 30VAC/VDC at 5,000 cycles

• 3 amps, 125VAC at 50,000 cycles

(#34618)

• UL & CUL recognized

• UL & CUL recognized

28303 series only:

UL / CUL recognized

(#34618)

KLIXON® Thermostat Probe Packages

General Description

 Extreme temperature probes (up to 550°F), fast response probes and parrow differential probes (2°F to 8°F reset differential) are available

Operating Switch Range Extreme temperature -54°C to 288°C (-65°F to 550°F)

· Fast response: -18°C to 177°C (0°F to 350°F)

Operating Switch Range

 Narrow differential: -18°C to 135°C (0°F to 275°F)

Max Current and Voltage Rating Approvals Extreme temperature,

- Extreme temperature: Up to 7 amps, various voltages Fast response:
- Up to 1 amp at 115VAC & 30VDC
 - Narrow differential: Up to 2 amp at 125VAC & 30VDC

KLIXON® AT/KX Series Limit Switches **General Description** Compact, hermetically sealed limit switches

General Description

Available options include various actuators,

• -54°C to 135°C (-65°F to 275°F) mounting brackets, terminations and body styles

Max Current and Voltage Rating AT Series:

Up to 4 amps (resistive) KX Series: Up to 10 amps (resistive)

KLIXON® 2SE Series Airflow Sensors

• Solid-state airflow sensors designed to recognize loss or reduction of airflow in power supplies, data processing units, electronic equipment

. SPST or SPDT, normally open or closed

Operating Temperature Range • 10°C to 50°C (50°F to 122°F)

0.40 amp at 30VDC

Max Current and Voltage Rating • Military

• 28VDC / 120VAC, from 16 amps up to 120 amps

 Aerospace Commercial

KLIXON® ACMP Series Aircraft Motor Protectors

General Description

- Single & three-phase protection
- · Locked rotor protection

Neutral tap

KLIXON® 6PS Pressure Switches

General Description

· Hermetic stainless steel construction · Snap action, standard & custom configurations

• 45 to 700 PSIA

Operating Switch Range

Max Current and Voltage Rating • 5 amps, 28VDC at

Max Current and Voltage Rating

50,000 cycles, resistive 2 amps, 28VDC at







KLIXON | 3BT / 4BT Series

Tiny Stat[™] Hermetic Thermostats, -18°C to 177°C, SPST

FEATURES

- Smallest snap-acting thermal switches on the market today
- Single Pole / Single Throw (SPST)
- Preset temperature set points, non-adjustable calibration
- · Hermetically sealed and back-filled with nitrogen
- · Various mounting configurations available
- Qualified to MIL-PRF-24236/13 (4BT) and MIL-PRF-24236/19 (3BT)

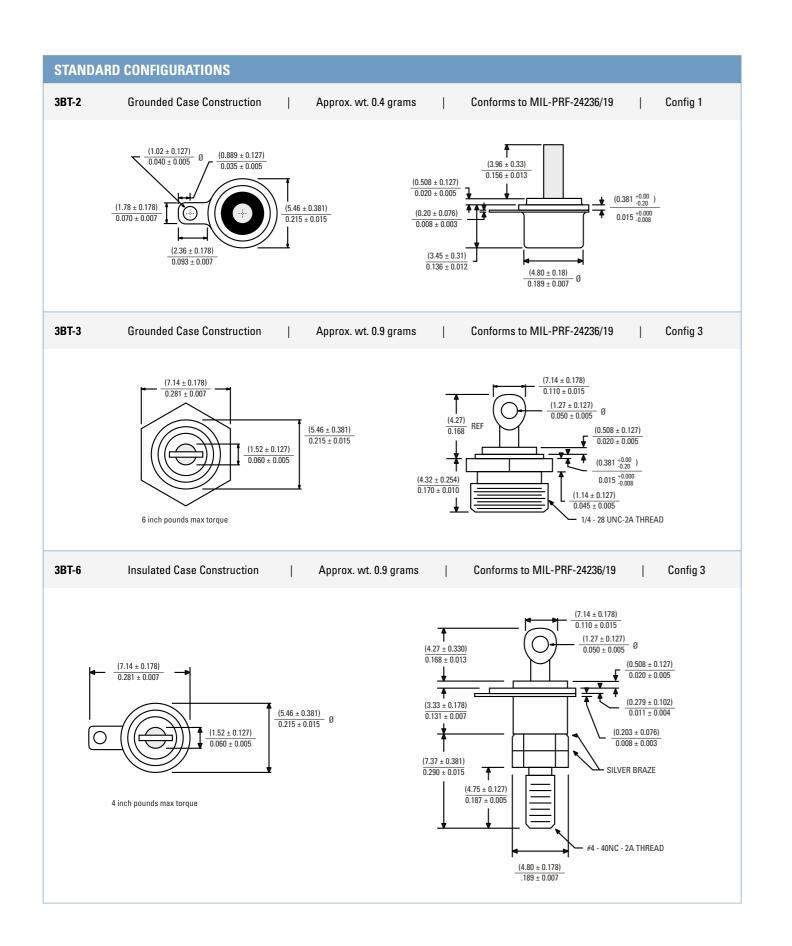
INTRODUCTION

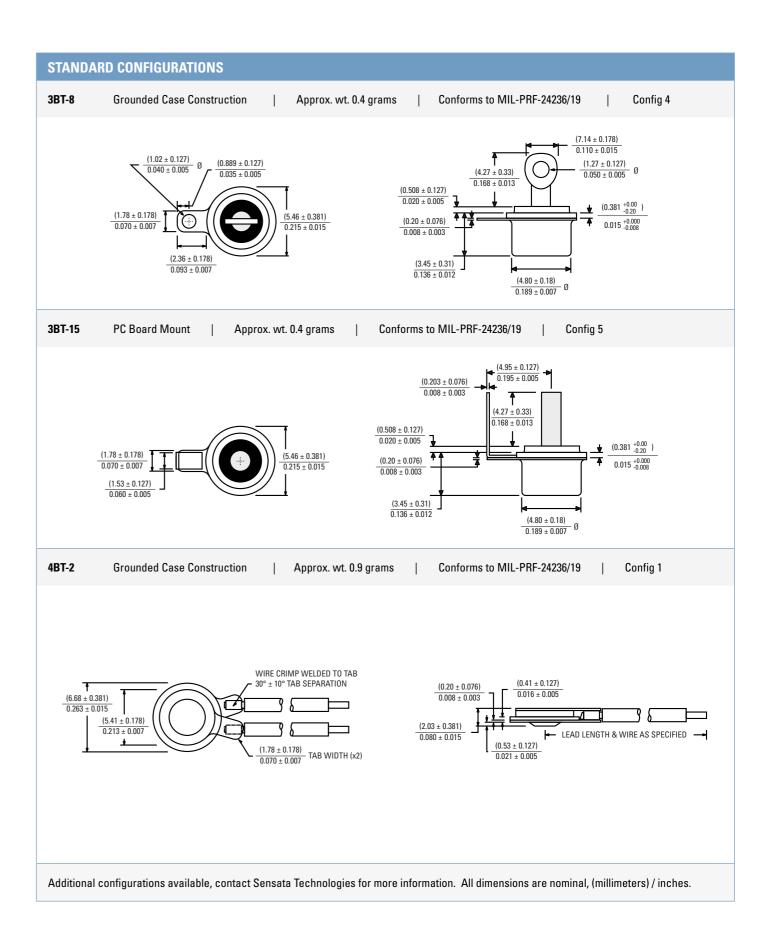
The Klixon® Tiny Stat™ 3BT and 4BT series combine an impressive list of superlatives in a reliable, hermetically sealed, snap—acting design. The 3BT and 4BT series are the smallest envelope size ever developed, ideal for remote sensing applications in locations with severe space limitations. The 3BT and 4BT are the lightest construction available on the market today, and are perfect for applications where weight is an important consideration. All Klixon Tiny Stats have an extremely fast response in order to permit early warning of overheat conditions. Their low mass internal components allow Tiny Stat precision thermostats to meet the most demanding shock and vibration standards of MIL-PRF-24236. Gold plated contacts can be furnished when low wattage conditions exist that requires reliable circuit switching.

Applications include electronics overheat protection, transformer windings and medical equipment.

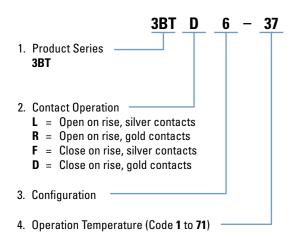
SPECIFICATIONS						
Contact Ratings	Cycles 10,000 10,000 10,000 10,000	Voltage 115VAC / 30 VDC 30 VAC / VDC 30VAC / VDC 115VAC	Amps (resistive) 1.00 (silver contacts) 0.10 (silver contacts) 500 mA and below (gold contacts) 200 mA and below (gold contacts)			
Contact Operations	Either close on	rise or open on rise , S	PST (Single Pole, Single Throw)			
Operating Temperature	-18°C to 177°C (+0°F to 350°F)				
Dielectric Strength	500 VAC, rms, 6	500 VAC, rms, 60 cycles for 1 minute, across open contacts, per MIL-STD-202, Method 301				
Contact Resistance	0.050 ohms maximum (0.100 ohms maximum for close on rise devices with set points greater than 175°F), per MIL-STD-202, Method 307					
Vibration	5–2000 Hz, 30 G, per MIL-STD-202, Method 204 Devices which open on rise should not be subjected to vibration while at temperature of 75°F or more below the opening temperature. Devices that close on rise should not be subjected to vibration while at temperatures of 75°F or more above the closing temperature.					
Shock	100 G, 6 millise	conds, per MIL-STD-20	2, Method 213			
Hermeticity	1 x 10 ⁻⁸ atm cc/	sec. maximum, per MII	L-STD-202, Method 112, Condition C			
Salt Spray	Per MIL-STD-202, Method 101, Condition B, 5% solution					
Weight	Basic Unit: 0.2 to 0.9 grams					
Ambient Temperature Range	-62°C to 177°C (-80°F to 350°F)					

STAN	DARD T	EMPER#	ATURE S	ETTING	S – STI). TOLE	RANCE O)F ± 4.4°	C (8°F)					
CODE		ATING RATURE	DIFFER	ENTIAL	CODE		RATING RATURE	DIFFEF	RENTIAL	CODE		ATING RATURE	DIFFER	ENTIAL
	°C	°F	°C	°F		°C	°F	°C	°F		°C	°F	°C	°F
1	-18	0	17	30	25	49	120	17	30	49	116	240	17	30
2	-15	5	17	30	26	52	125	17	30	50	118	245	17	30
3	-12	10	17	30	27	54	130	17	30	51	121	250	17	30
4	-9	15	17	30	28	57	135	17	30	52	124	255	17	30
5	-7	20	17	30	29	60	140	17	30	53	127	260	17	30
6	-4	25	17	30	30	63	145	17	30	54	129	265	17	30
7	-1	30	17	30	31	66	150	17	30	55	132	270	17	30
8	2	35	17	30	32	68	155	17	30	56	135	275	17	30
9	4	40	17	30	33	71	160	17	30	57	138	280	17	30
10	7	45	17	30	34	74	165	17	30	58	141	285	17	30
11	10	50	17	30	35	77	170	17	30	59	143	290	17	30
12	13	55	17	30	36	79	175	17	30	60	146	295	17	30
13	16	60	17	30	37	82	180	17	30	61	149	300	17	30
14	18	65	17	30	38	85	185	17	30	62	152	305	17	30
15	21	70	17	30	39	88	190	17	30	63	154	310	17	30
16	24	75	17	30	40	91	195	17	30	64	157	315	17	30
17	27	80	17	30	41	93	200	17	30	65	160	320	17	30
18	29	85	17	30	42	96	205	17	30	66	163	325	17	30
19	32	90	17	30	43	99	210	17	30	67	166	330	17	30
20	35	95	17	30	44	102	215	17	30	68	168	335	17	30
21	38	100	17	30	45	104	220	17	30	69	171	340	17	30
22	41	105	17	30	46	107	225	17	30	70	174	345	17	30
23	43	110	17	30	47	110	230	17	30	71	177	350	17	30
24	46	115	17	30	48	113	235	17	30	Consu	It factory	for additio	nal tempe	eratures





STANDARD 3BT PART NUMBER BUILDER

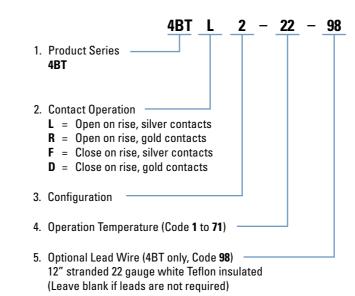




The example to the left is a 3BT-6 configuration, close on rise, gold contacts, close on rise at $82^{\circ}\text{C} \pm 4.4^{\circ}\text{C}$, open at $65^{\circ}\text{C} \pm 4.4^{\circ}\text{C}$.

4BT Series

STANDARD 4BT PART NUMBER BUILDER





The example to the left is a 4BT-2 configuration, open on rise, silver contacts, open on rise at 41°C \pm 4.4°C, close at 24°C \pm 4.4°C with 12" wire leads



CTANDADD TEMPEDATURE CETTINGS



KLIXON | 5BT Series

SPDT Hermetic Thermostats, -54°C to 204°C

FEATURES

- Single Pole / Double Throw (SPDT)
- Preset temperature set points, non-adjustable calibration
- High resistance to shock and vibration

- Hermetically sealed, vacuum baked and back-filled with nitrogen
- Various mounting configurations available
- Qualified to MIL-PRF-24236/24

INTRODUCTION

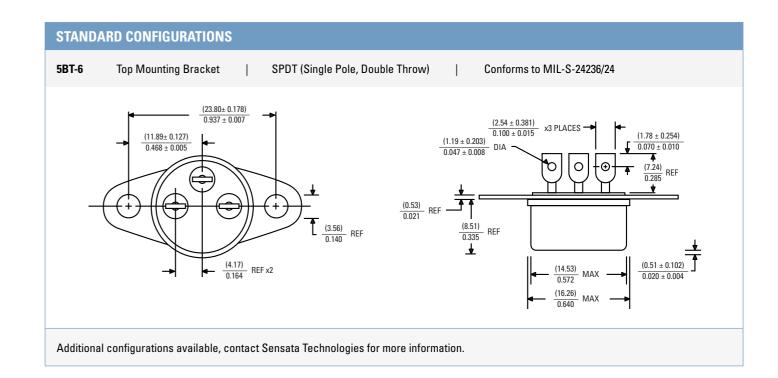
The Klixon® 5BT series thermostat is a high reliability, hermetically sealed thermal switch. The single pole, double throw design allows versatility and economy in providing two functions within the same device. Typically these Klixon switches are used to control and indicate at a preset temperature. One pole can control a cooling fan and the other pole can indicate impending danger. The 5BT thermostat is the ideal choice where quality and reliability in a double throw device are critical. Applications include data processing equipment, computers, electronic equipment, communication equipment, cooling and heating systems.

SPECIFICATIONS						
Contact Ratings	<i>Cycles</i> 100,000 50,000	Voltage 125VAC, 30VAC, 30 VDC 125VAC, 30VAC, 30 VDC	Amps (resistive) 2.0 3.0			
Contact Operations	SPDT (Single P	ole, Double Throw)				
Operating Temperature	-54°C to 204°C (-65°F to 400°F)				
Dielectric Strength	1250 VAC, rms,	60 cycles for 1 minute, terminal	to case per MIL-STD-202, Method 301			
Contact Resistance	0.050 ohms max	0.050 ohms maximum per MIL-STD-202, Method 307				
Insulation Resistance	100 megaohms	100 megaohms min. at 500 VDC				
Vibration	10-2000 Hz, 10G, per MIL-STD-202, Method 204, Condition D					
Shock	60G, 11 milliseconds, per MIL-STD-202, Method 213					
Hermeticity	1 x 10 ⁻⁸ atm cc/	sec. maximum, per MIL-STD-20	2, Method 112, Condition C			
Salt Spray	Per MIL-STD-2	02, Method 101, Condition B, 5%	solution			
Humidity	MIL-STD-202, N	Method 103, Condition A				
Sand & Dust	MIL-STD-202, N	Nethod 110, Condition A				
Weight	6 grams (withou	ut bracket) to 7 grams (with bra	cket)			
Ambient Temperature Range	-54°C to 232°C (-65°F to 450°F) Maximum ambient exposure while in the closed position is 93°C above contact closing temperature.					

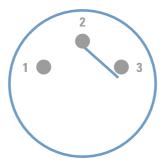
STAND	ARD TEM	IPERATU	RE SETTIN	NGS	
	ATING RATURE	DIFFER	RENTIAL	TOLERANCE	
°C	°F	°C	°F	±°C	± °F
- 54	- 65	17	30	6	10
- 40	- 40	17	30	6	10
-26	- 15	17	30	6	10
- 18	0	11	20	4.4	8
- 12	10	11	20	4.4	8
- 7	20	11	20	4.4	8
- 1	30	11	20	4.4	8
4	40	11	20	4.4	8
10	50	11	20	4.4	8
16	60	11	20	4.4	8
21	70	11	20	4.4	8
27	80	11	20	4.4	8
32	90	11	20	4.4	8
38	100	11	20	4.4	8
43	110	11	20	4.4	8
49	120	11	20	4.4	8
54	130	11	20	4.4	8
60	140	11	20	4.4	8
66	150	11	20	4.4	8
71	160	11	20	4.4	8
77	170	11	20	4.4	8

	OPERATING TEMPERATURE		ENTIAL	TOLERANCE		
°F	°C	°F	°C	±°F	±°C	
180	82	20	11.1	8	4.4	
190	88	20	11.1	8	4.4	
200	93	20	11.1	8	4.4	
210	99	20	11.1	8	4.4	
220	104	20	11.1	8	4.4	
230	110	20	11.1	8	4.4	
240	116	20	11.1	8	4.4	
250	121	20	11.1	8	4.4	
260	127	20	11.1	8	4.4	
270	132	20	11.1	8	4.4	
280	138	20	11.1	8	4.4	
290	143	20	11.1	8	4.4	
300	149	20	11.1	8	4.4	
310	154	25	13.9	10	5.6	
320	160	25	13.9	10	5.6	
330	166	25	13.9	10	5.6	
340	171	25	13.9	10	5.6	
350	177	25	13.9	10	5.6	
375	191	35	19.4	12	6.7	
400	204	35	19.4	12	6.7	
	Consult fa	ctory for ac	dditional ter	mperatures		

5BT Series

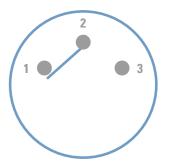


LOW TEMPERATURE CONTACT POSITION



Terminals 1 & 2 are opened and terminals 2 & 3 are closed at the low temperature settings

HIGH TEMPERATURE CONTACT POSITION



Terminals 1 & 2 are closed and terminals 2 & 3 are open at the high temperature settings





KLIXON | M1 and 11041 Series

1/2" Disc Hermetic Thermostats, -54°C to 288°C, SPST

FEATURES

- Single Pole / Single Throw (SPST)
- Preset temperature set points, non-adjustable calibration
- High resistance to shock and vibration

- Hermetically sealed, vacuum baked and back-filled with nitrogen
- Various mounting configurations available
- Qualified to MIL-PRF-24236/1

INTRODUCTION

The Klixon® M1/11041 series of thermostats are engineered for exceptional vibration and shock resistance to provide reliable switching in the most demanding applications. Prior to the final weld, finished assemblies are vacuum baked and back–filled with dry nitrogen. The inert, dry atmosphere eliminates moisture and other volatilizes to prevent condensation at low temperatures or possible contact contamination at high temperatures. This back–fill also improves the dielectric characteristics of the device and prevents oxidation of the contacts. The M1 thermostat is the ideal choice where quality and reliability are paramount.

SPECIFICATIONS						
Contact Ratings (Resistive)	Cycles 100,000 50,000 25,000 10,000 5,000	30VDC / 30VAC 5.0 amps 5.5 amps 6.0 amps 6.5 amps 7.0 amps	125VAC 2.0 amps 3.0 amps 4.0 amps 5.0 amps 6.0 amps	250VAC 1.0 amps 1.5 amps 2.0 amps 2.5 amps 3.0 amps		
Operating Temperature	-54°C to 2	88°C (-65°F to 550°F)			
Dielectric Strength	1250 VAC,	rms (root mean squ	ıare), 60 cycles	for 1 minute, terminal to case per MIL-STD-202, Method 301		
Contact Resistance	0.050 ohm	0.050 ohms maximum per MIL-STD-202, Method 307				
Insulation Resistance	100 mego	100 megohms min. at 500 VDC				
Vibration	5-1000 Hz	5-2000 Hz, 20G, per MIL-STD-202, Method 204, Condition D (monitored) 5-1000 Hz, 100G, per MIL-STD-202, Method 204, Condition D (unmonitored) 1000-2000 Hz, 50G, per MIL-STD-202, Method 204, Condition D (unmonitored)				
Shock	100G, 6 m	illiseconds, per MIL	-STD-202, Meth	nod 213		
Hermeticity	1 x 10 ⁻⁸ at	1 x 10 ⁻⁸ atm cc/sec. maximum, per MIL-STD-202, Method 112, Condition C				
Salt Spray	Per MIL-STD-202, Method 101, Condition B, 5% solution					
Average Weight	4.8 grams	4.8 grams (without bracket) to 5.9 grams (with bracket)				
Ambient Temperature Range	-62°C to 288°C (-80°F to +550°F) Maximum ambient exposure while in the closed position is 93°C above contact closing temperature.					

STAND	STANDARD TEMPERATURE SETTINGS					
	OPERATING TEMPERATURE		ENTIAL	TOLERANCE		
°C	°F	°C	°F	± °C	±°F	
- 54	- 65	17	30	6	10	
- 40	- 40	17	30	6	10	
-26	- 15	17	30	6	10	
- 18	0	11	20	3	5	
- 12	10	11	20	3	5	
- 7	20	11	20	3	5	
- 1	30	11	20	3	5	
4	40	11	20	3	5	
10	50	11	20	3	5	
16	60	11	20	3	5	
21	70	11	20	3	5	
27	80	11	20	3	5	
32	90	11	20	3	5	
38	100	11	20	3	5	
43	110	11	20	3	5	
49	120	11	20	3	5	
54	130	11	20	3	5	
60	140	11	20	3	5	
66	150	11	20	3	5	
71	160	11	20	3	5	
77	170	11	20	3	5	
82	180	11	20	3	5	
88	190	11	20	3	5	
93	200	11	20	3	5	

OPERATING TEMPERATURE		DIFFER	RENTIAL	TOLERANCE		
°C	°F	°C	°F	± °C	± °F	
99	210	17	30	4.4	8	
104	220	17	30	4.4	8	
110	230	17	30	4.4	8	
116	240	17	30	4.4	8	
121	250	17	30	4.4	8	
127	260	17	30	4.4	8	
132	270	17	30	4.4	8	
138	280	17	30	4.4	8	
143	290	17	30	4.4	8	
149	300	17	30	4.4	8	
154	310	22	40	7	12	
160	320	22	40	7	12	
166	330	22	40	7	12	
171	340	22	40	7	12	
177	350	22	40	7	12	
191	375	22	40	7	12	
204	400	22	40	7	12	
218	425	22	40	7	12	
232	450	22	40	7	12	
246	475	39	70	14	25	
260	500	39	70	14	25	
274	525	39	70	14	25	
288	550	39	70	14	25	
	Consult fa	actory for a	dditional ter	nperatures		

M1 and 11041 Series

Straight Terminals Straight Terminals Straight Terminals → 16.26 (0.540) MAX → 16.26 (0.

NOTE: Stud mount, surface and top mounting brackets are available. Dimensions listed are for reference only. Please contact Sensata for more detailed envelope drawings.

Application areas of Precision Products







KLIXON | M2 Series

Narrow Differential Thermostats,-18°C to 149°C, SPST

FEATURES

- · Low profile, narrow differential
- Hermetically sealed, vacuum baked and back-filled with nitrogen
- Single Pole / Single Throw (SPST)
- · High resistance to shock and vibration

- Preset temperature set points, non-adjustable calibration
- Qualified to MIL-PRF-24236/20, S-311-641
- On NASA S-311-664 QPL

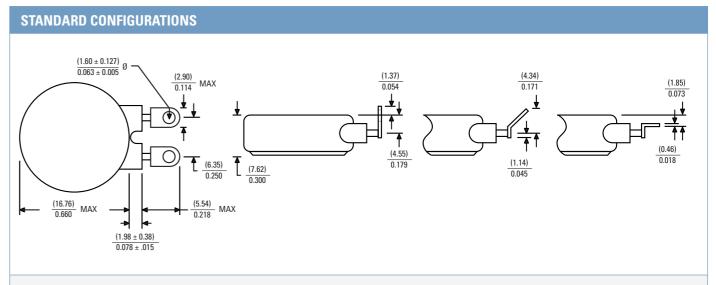
INTRODUCTION

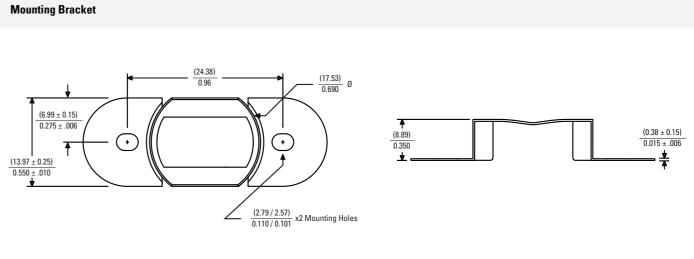
The Klixon® M2 series of thermostats are engineered for exceptional vibration and shock resistance to provide reliable switching in a low-profile, narrow differential package for the most demanding applications. Prior to the final weld, finished assemblies are vacuum baked and back—filled with dry nitrogen. The inert, dry atmosphere eliminates moisture and other volatilizes to prevent condensation at low temperatures or possible contact contamination at high temperatures. This back—fill also improves the dielectric characteristics of the device and prevents oxidation of the contacts. The M2 thermostat is the ideal choice where quality and reliability are paramount. Applications include: airplane wing de-icing systems, satellite heaters, aircraft controls, warning devices, and electronic device overheat protection.

SPECIFICATIONS					
Contact Ratings (Resistive)	Cycles 30VDC / 30VAC 120VAC 250,000 2.0 amps 2.0 amps				
Operating Temperature	-18°C to 149°C (0°F to 300°F)				
Dielectric Strength	1250 VAC, rms, 60 cycles for 1 minute, terminal to case per MIL-STD-202, Method 301				
Contact Resistance	0.050 ohms maximum per MIL-STD-202, Method 307				
Vibration	10-2000 Hz, 10G, per MIL-STD-202, Method 204, Condition D (monitored)				
Shock	100G, 6 milliseconds, per MIL-STD-202, Method 213				
Hermeticity	1 x 10 ⁻⁸ atm cc/sec. maximum, per MIL-STD-202, Method 112, Condition C				
Salt Spray	Per MIL-STD-202, Method 101, Condition B, 5% solution				
Average Weight	5.4 grams (average)				
Ambient Temperature Range	-54°C to 204°C (-65°F to +400°F) Maximum ambient exposure for close on rise devices is 38°C above contact operating temperature, for open on rise devices it is 38°C below contact operating temperature.				

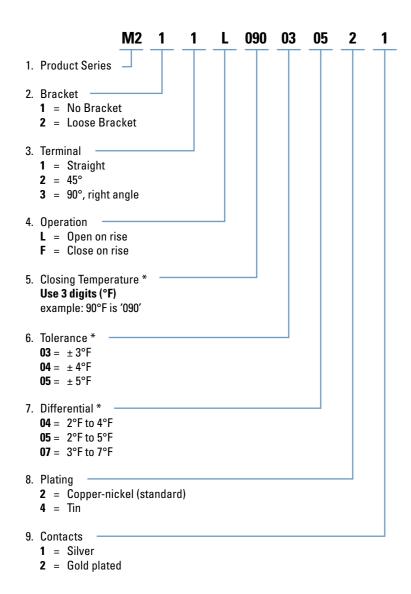
STANDARD TEMPERATURE SETTINGS					
CLOSING TEMPERATURE RANGE	OPENING TEMPERATURE DIFFERENTIAL	TOLERANCE			
	DITERENTAL	Standard	Special		
17°C to 121°C (0°F to 250°F)	1°C to 3°C (2°F to 5°F)	± 2°C (± 4°F)	± 1.7°C (± 3°F)		
122°C to 149°C (251°F to 300°F)	2°C to 4°C (3°F to 7°F)	± 3°C (± 5°F)	± 2°C (± 4°F)		

The standard operating temperatures, differential and tolerances are shown in this table, but can be customized to meet your specific requirements.





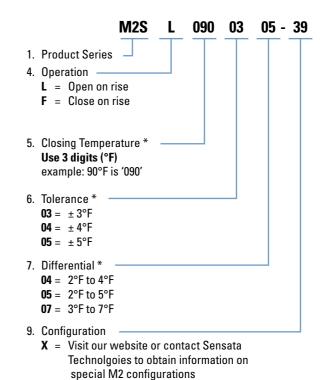
STANDARD M2 PART NUMBER BUILDER



^{*} See temperature table for standard tolerances / differentials

Example is a M2 series, no bracket, straight terminals, open on rise at $90^{\circ}F \pm 3^{\circ}F$ with $2^{\circ}F$ to $5^{\circ}F$ differential, copper-nickel plating, silver contacts

SPECIAL M2 PART NUMBER BUILDER



STANDARD TEMPERATURE SETTINGS



KLIXON | 4344 Series

1/2" Disc Hermetic Thermostats -54°C to 288°C, SPST

FEATURES

- Single Pole / Single Throw (SPST)
- Preset temperature set points, non-adjustable calibration
- High resistance to shock and vibration
- Max resistive load: 7 amps

- · Hermetically sealed, welded steel construction
- Various mounting configurations available, including probe, strapmount or immersion thermostat
- Canadian-UL (UL File #34618), CSA (File #LR24458)

INTRODUCTION

The Klixon® 4344 series of thermostats are engineered with a snap-acting bimetal dis, producing a crisp, positive switching action. The standard 4344 comes copper-nickel plated with silver contacts. Other plating finishes are available upon request.

SPECIFICATIONS						
Contact Ratings (Resistive)	Cycles 30VDC / 30VAC 125VAC 250VAC 100,000 5.0 amps 2.5 amps 1.0 amps 50,000 5.5 amps 3.0 amps 1.5 amps 25,000 6.0 amps 4.0 amps 2.0 amps 10,000 6.5 amps 5.0 amps 2.5 amps 5,000 7.0 amps 6.0 amps 3.0 amps					
Gold Contact Ratings (Resistive)	30VDC / 30VAC 115VAC 220VAC 500 mA and below 200 mA and below 100 mA and below					
Operating Temperature	-54°C to 288°C (-65°F to 550°F)					
Dielectric Strength	1250 VAC, rms, 60 cycles for 1 minute, terminal to case per MIL-STD-202, Method 301					
Contact Resistance	0.050 ohms maximum per MIL-STD-202, Method 307					
Vibration	5-2000 Hz, 20G, per MIL-STD-202, Method 204, Condition D (unmonitored)					
Shock	100G, 6 milliseconds, per MIL-STD-202, Method 213					
Hermeticity	1 x 10 ⁻⁵ atm cc/sec. maximum, per MIL-STD-202, Method 112, Condition C					
Salt Spray	Per MIL-STD-202, Method 101, Condition B, 5% solution					
Average Weight	4.8 grams (without bracket) to 5.9 grams (with bracket)					
Ambient Temperature Range	-62°C to 288°C (-80°F to +550°F) Maximum ambient exposure while in the closed position is 93°C above contact closing temperature.					
Electrical Ratings	720 VA, 110-600 VAC, break but not make, ungrounded cup* 360 VA, 600 VAC, make and break, ungrounded cup 125 VA Pilot Duty, 24 to 240 VAC, make and break, grounded or ungrounded cup *At this rating, suitable as a control circuit, temperature limiting device for hazardous location motors and generators.					

STAINDAND TEINIFENATURE SETTINGS						
	ATING RATURE	DIFFER	RENTIAL	TOLERANCE		
°C	°F	°C	°F	±°C	±°F	
- 54	- 65	17	30	6	10	
- 40	- 40	17	30	6	10	
-26	- 15	17	30	6	10	
- 18	0	11	20	3	5	
- 12	10	11	20	3	5	
- 7	20	11	20	3	5	
- 1	30	11	20	3	5	
4.4	40	11	20	3	5	
10	50	11	20	3	5	
16	60	11	20	3	5	
21	70	11	20	3	5	
27	80	11	20	3	5	
32	90	11	20	3	5	
38	100	11	20	3	5	
43	110	11	20	3	5	
49	120	11	20	3	5	
54	130	11	20	3	5	
60	140	11	20	3	5	
66	150	11	20	3	5	
71	160	11	20	3	5	
77	170	11	20	3	5	
82	180	11	20	3	5	
88	190	11	20	3	5	
93	200	11	20	3	5	

	ATING RATURE	DIFFER	ENTIAL	TOLERANCE	
°C	°F	°C	°F	± °C	±°F
99	210	17	30	4.4	8
104	220	17	30	4.4	8
110	230	17	30	4.4	8
116	240	17	30	4.4	8
121	250	17	30	4.4	8
127	260	17	30	4.4	8
132	270	17	30	4.4	8
138	280	17	30	4.4	8
143	290	17	30	4.4	8
149	300	17	30	4.4	8
154	310	22	40	7	12
160	320	22	40	7	12
166	330	22	40	7	12
171	340	22	40	7	12
177	350	22	40	7	12
191	375	22	40	7	12
204	400	22	40	7	12
218	425	22	40	7	12
232	450	22	40	7	12
246	475	39	70	14	25
260	500	39	70	14	25
274	525	39	70	14	25
288	550	39	70	14	25
	Consult fa	actory for ac	dditional ter	nperatures	





KLIXON | 4391 Series

High Capacity, Hermetically Sealed Thermostats SPST or SPDT, Manual or Auto Reset

FEATURES

- Single Pole / Single Throw (SPST) or Single Pole / Double Throw (SPDT)
- Automatic or manual reset
- Preset temperature set points, non-adjustable calibration
- · High current capacity, environmentally sealed

- · Normally open or closed
- Various mounting brackets are available
- · Capacity optional overmold

INTRODUCTION

The Klixon® 4391 series snap-acting disc type control is designed to provide crisp, positive switching action. The 4391 is the most versatile of the Klixon precision thermostats with its available SPST or SPDT switching, automatic or manual reset, and overmold options.

SPECIFICATIONS							
Contact Ratings (Resistive)	Cycles 100,000 50,000 25,000 10,000 5,000	30VDC / 30VAC 10.0 amps 11.0 amps 12.0 amps 13.0 amps 14.0 amps	125VAC 4.0 amps 6.0 amps 8.0 amps 10.0 amps 12.0 amps	250VAC 2.0 amps 3.0 amps 4.0 amps 5.0 amps 6.0 amps			
Operating Temperature		Non-Overmold: -18°C to 232°C (0°F to 450°F) Silicone Overmold: -18°C to 204°C (0°F to 400°F)					
Dielectric Strength	1250 VAC, rms, 60 cycles for 1 minute (1500VAC available upon request)						
Vibration	5-500 Hz,	5-500 Hz, 3G (std), 5-500, 5G (high vibration construction option)					
Hermeticity	1 x 10 ⁻⁵ atı	1 x 10 ⁻⁵ atm cc/sec. maximum					
Ambient Temperature Range		Non-Overmold: -54°C to 232°C (-65°F to 450°F) Silicone Overmold: -51°C to 204°C (-60°F to 400°F)					
Weight		mold: 21 grams e Overmold: 56 gra	ms				

STANDARD TEMPERATURE SETTINGS								
	SPST (Sing	le Pole / Single	Throw), Standa	ard Vibration	SPDT (Sir	ngle Pole / Dou	ble Throw), Hig	h Vibration
OPERATING TEMPERATURE	DIFFER	ENTIAL	TOLERANCE		DIFFERENTIAL		TOLERANCE	
	°C	°F	± °C	± °F	°C	°F	± °C	±°F
-18 to 93°C (0 to 200°F)	8	15	3	5	14	25	4.4	8
-99 to 149°C (210 to 300°F)	14	25	4	7	17	30	6	10
-160 to 177°C (325 to 350°F)	25	45	7	12	25	45	7	12
-191 to 232°C * (375 to 450°F) auto reset only	33	60	8	15	14	60	8	15

Standard temperature set points are at every 5°F degrees (for example, 320°F, 325°F, 330°F).

Consult Sensata Technologies if a custom operating temperature range is required.

* Available in automatic reset only



KLIXON | 7BT2 Series

High Capacity, Environmentally Sealed Thermostats -1°C to 204°C, SPST

FEATURES

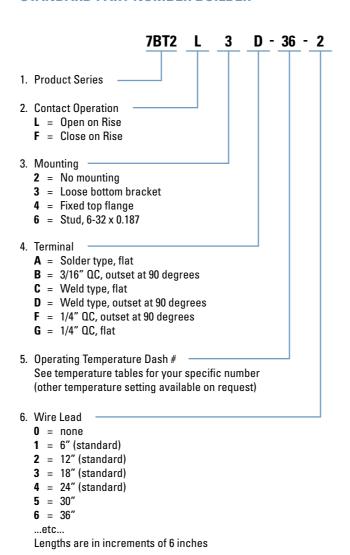
- Single Pole / Single Throw (SPST)
- Preset temperature set points, non-adjustable calibration
- High current capacity, environmentally sealed
- Max resistive load: 15 amps
- UL, Canadian-UL (UL File #34618), KEMA (ENEC, file #2018218.03)

INTRODUCTION

The Klixon® 7BT2 thermostat is a snap—acting disc type control designed to provide crisp, positive switching action. The bimetal disc and electrical contacts are enclosed in a stainless steel cup to provide protection from dust and other foreign particles. The 7BT2 is available in a variety of configurations, making it a versatile candidate for your thermal protection needs.

SPECIFICATIONS						
Contact Ratings (Resistive, Max Temp 400°F)	Cycles 120 VAC 240VAC 30VDC 100,000 15.0A 7.5A 10A					
Operating Temperature	-1°C to 204°C (30°F to 400°F)					
Dielectric Strength	2000 VAC, rms, 60 cycles for 1 minute, terminal to case					
Ambient Temperature Range	-29°C to 204°C (-20°F to +400°F)					

STANDARD PART NUMBER BUILDER



STANDARD TEMPERATURE SETTINGS						
DASH #		ATING RATURE	DIFFER	ENTIAL	TOLERANCE	
	°C	°F	°C	°F	±°C	±°F
1	49	120	11	20	3	5
2	52	125	11	20	3	5
3	54	130	11	20	3	5
4	57	135	11	20	3	5
5	60	140	11	20	3	5
6	63	145	11	20	3	5
7	66	150	11	20	3	5
8	68	155	11	20	3	5
9	71	160	11	20	3	5
10	74	165	11	20	3	5
11	77	170	11	20	3	5
12	79	175	11	20	3	5
13	82	180	11	20	3	5
14	85	185	11	20	3	5
15	88	190	11	20	3	5
16	91	195	11	20	3	5
17	93	200	11	20	3	5
18	96	205	17	30	4.4	8
19	99	210	17	30	4.4	8
20	102	215	17	30	4.4	8
21	104	220	17	30	4.4	8
22	107	225	17	30	4.4	8
23	110	230	17	30	4.4	8
24	113	235	17	30	4.4	8
25	116	240	17	30	4.4	8
26	118	245	17	30	4.4	8

DASH #		ATING RATURE	DIFFEF	RENTIAL	TOLEI	TOLERANCE	
	°C	°F	°C	°F	±°C	± °F	
27	121	250	17	30	4.4	8	
28	124	255	17	30	4.4	8	
29	127	260	17	30	4.4	8	
30	129	265	17	30	4.4	8	
31	132	270	17	30	4.4	8	
32	135	275	17	30	4.4	8	
33	138	280	17	30	4.4	8	
34	141	285	17	30	4.4	8	
35	143	290	17	30	4.4	8	
36	146	295	17	30	4.4	8	
37	149	300	17	30	4.4	8	
38	152	305	22	40	7	12	
39	154	310	22	40	7	12	
40	157	315	22	40	7	12	
41	160	320	22	40	7	12	
42	163	325	22	40	7	12	
43	166	330	22	40	7	12	
44	168	335	22	40	7	12	
45	171	340	22	40	7	12	
46	174	345	22	40	7	12	
47	177	350	22	40	7	12	

For 30° F to 110° F and 360° F to 400° F, consult factory for a customer specific dash #

CTANDADD TEMPEDATUDE CETTINGS



KLIXON | 6786 Series

1/2" Disc, Low Profile Thermostats -29°C to 177°C, SPST

FEATURES

- Single Pole / Single Throw (SPST)
- Preset temperature set points, non-adjustable calibration
- Normally open or normally closed
- Max resistive load: 7 amps

- Environmentally sealed, low profile
- Various mounting configurations available including brackets, studs, and with or without surface mounting brackets
- UL recognized, Canadian-UL (UL File #34618)

INTRODUCTION

The Klixon® 6786 thermostat is a snap—acting disc type control designed to provide crisp, positive switching action for applications where maximum shock and vibration resistance is required. The Klixon snap—acting disc and fine silver electrical contacts are sealed in a stainless steel cup to provide protection from dust and other foreign particles. This construction also assures rapid thermal response plus dependable circuit operation at all times. The small size of the 6786 makes it particularly suitable where space and weight accommodations are limited.

SPECIFICATIONS						
Contact Ratings (Resistive)	Cycles 100,000 50,000 25,000 10,000 5,000	30VDC / 30VAC 5.0 amps 5.5 amps 6.0 amps 6.5 amps 7.0 amps	125VAC 2.0 amps 3.0 amps 4.0 amps 5.0 amps 6.0 amps	250VAC 1.0 amps 1.5 amps 2.0 amps 2.5 amps 3.0 amps		
Operating Temperature	-29°C to 177°C (-20°F to 350°F)					
Dielectric Strength	1250 VAC, rms, 60 cycles for 1 minute, terminal to case per MIL-STD-202, Method 301					
Vibration	10-500 Hz	, 10G, per MIL-STD-	202, Method 20	4, Condition A (unmonitored)		
Shock	30G, 11 m	illiseconds				
Ambient Temperature Range	-54°C to 2	04°C (-65°F to +400°	'F)			
Average Weight	2.5 grams					

STAND	STANDARD TEMPERATURE SETTINGS						
	ATING RATURE	DIFFER	RENTIAL	TOLE	RANCE		
°C	°F	°C	°F	± °C	±°F		
-29	- 20	17	30	6	10		
- 18	0	11	20	6	10		
- 12	10	11	20	6	10		
- 7	20	11	20	4.4	8		
- 1	30	11	20	4.4	8		
4.4	40	11	20	4.4	8		
10	50	11	20	4.4	8		
16	60	11	20	4.4	8		
21	70	11	20	4.4	8		
27	80	11	20	4.4	8		
32	90	11	20	4.4	8		
38	100	11	20	4.4	8		
43	110	11	20	4.4	8		
49	120	11	20	4.4	8		
54	130	11	20	4.4	8		
60	140	11	20	4.4	8		
66	150	11	20	4.4	8		
71	160	11	20	4.4	8		
77	170	11	20	4.4	8		

	ATING RATURE	DIFFER	RENTIAL	TOLERANCE		
°C	°F	°C	°F	±°C	±°F	
82	180	11	20	4.4	8	
88	190	11	20	4.4	8	
93	200	11	20	6	10	
99	210	17	30	6	10	
104	220	17	30	6	10	
110	230	17	30	6	10	
116	240	17	30	6	10	
121	250	17	30	6	10	
127	260	17	30	6	10	
132	270	17	30	6	10	
138	280	17	30	6	10	
143	290	17	30	6	10	
149	300	17	30	6	10	
154	310	22	40	7	12	
160	320	22	40	7	12	
166	330	22	40	7	12	
171	340	22	40	7	12	
177	350	22	40	7	12	
	Consult factory for additional temperatures					



KLIXON | Probe Assemblies

Custom Immersion-Type Thermostat Probes

FEATURES

- Various Klixon® thermostats in custom probe assemblies
- Preset temperature set points, non-adjustable calibration
- Normally open or normally closed
- Hermetically sealed (probe only)

- Extreme temperature, fast response, narrow differential or custom probe assembly configurations
- Qualified to MIL-S-24236, MIL-S-24236/2, MIL-S-24236/11, and MIL-S-24236/25 (order by MS number)

INTRODUCTION

To meet a wide range of application requirements, Klixon® probe—type thermostat packages are available in a variety of sizes, configurations, and thermal characteristics. Select from one of our existing designs, or specify custom requirements to suit your needs.

• Extreme Temperature Probes:

Constant speed drives, aircraft refrigeration systems, food processing equipment, and missile hydraulic systems often require protection from or indication of extreme high or low temperatures. These Klixon® snap—acting thermostat probes are designed to provide reliable, consistent performance over a long cycle life in the harshest of environments. These probes provide excellent shock and vibration resistance and operate as low as -54°C (-65°F) and as high as 288°C (550°F) and incorporate the reliable Klixon M1/11041 thermostat.

• Fast Response Probes

Quick response to rapidly changing temperature is a virtue of the low thermal mass series of probe. The Klixon® 3BT Tiny Stat™ is located at the end of the probe for ultimate sensitivity. Quick response to rapidly changing temperatures is a virtue of the low thermal mass series probes.

Narrow Differential Control Probes:

These thermostat probes accurately open and close with a narrow 1°C to 4.4°C (2°F to 8°F) differential, providing close temperature control in applications ranging from environmental to power tube coolant systems. Probe assembly incorporates the reliable Klixon® M2 thermostat.







Probe Assemblies

STANDARD PART NUMBER BUILDER

21542 - 03 - XXX - 01 1. Package Type — Extreme Temperature (M1 thermostat) **21542** = 3/4'' - 16 thread w/ connector 21543 = 1/2'' pipe thread w/ leads **21548** = 3/4'' - 16 thread w/ leads 21549 = 1/2" pipe thread w/ connector Narrow Differential (M2 thermostat) 21545 = 1/2'' pipe thread w/ leads **21546** = 3/4" - 16 thread w/ connector **21547** = 3/4'' - 16 thread w/ leads 21550 = 1/2" pipe thread w/ connector Fast Response (3BT thermostat) 21544 = 1/8" pipe thread with leads 21557 = 1/8" pipe thread with connector **21561** = 7/16" - 20 thread with leads 21562 = 7/16" - 20 thread with connector 2. Probe Length **XX** = value of 2 times the length of probe needed Probes lengths available in 1/2" increments from 1" to 6", length measured from bottom of hex to tip of probe For example, for a 1.5" probe, part number would require a 03 3. Operating Characteristics **XXX** = 3-digit code to be assigned by Sensata Technologies based on the customers specific requirements for the thermostat within the assembly 4. Wire Lead **01** = 6" **02** = 12" **03** = 18" Lengths are in increments of 6 inches.

For connectors, please contact Sensata Technologies

for the code





KLIXON | AT/KX Series

Precision Switches -29°C to 177°C, SPST

AT FEATURES

- Meet the demands of low-level current switching applications
- Various mechanical and electrical configurations available as standard or custom configurations
- Actuation plungers of various shapes and materials available
- Multi-pole switch package options
- Wiring can be supplied as flying leads or via a variety of standard connectors
- · Mounting via threaded bushings or side-plate design

KX FEATURES

- Hermetic seal provides exceptional operational freedom from environmental conditions
- Compactly designed to fit small, narrow spaces
- · Available with either screw or solder lug type terminals
- Snap-acting sine switch provides exceptional resistance to shock and vibration
- · Embedded leads are available
- Lead lengths can be supplied to customer requirements

INTRODUCTION

Due to its broad performance envelope, small size, and ability to be easily incorporated into a wide variety of packages, this is our most popular family of precision hermetic switches. Klixon® AT series switches are available as basic switches, basic switches with mounting brackets and actuators, or as switch packages. Packages are formed by configuring various electrical terminations, actuator means and physical construction around one or more basic switches. Since these sources are still far from exhaustive, please call if you need something you don't see. (There are too many designs to include here.) We would also be pleased to consider new designs for custom packaging.

Within this family there are four basic switches: the AT, the 3AT, the 4AT, and the 10AT. Each has been optimized for particular performance characteristics and is capable of meeting the demands of low-level current switching applications.

The Klixon® KX Series hermetically sealed sine switch is a precision snap—acting device. It is designed for use in the aerospace industry and for other applications where operational freedom from environmental conditions is a requirement. (Performance chart.)

KX series switches are sealed within a one-piece steel case engineered to withstand extremely low or high ambient pressures. True hermetic sealing is achieved with a metal "wave type" diaphragm at the actuating lever. The actuating arm is keyed to hold the arm in alignment and to prevent damage to the diaphragm.

The switching element is the versatile Klixon® sine switch. This simple, one-piece element eliminates knife edges and high friction joints. Rigidly supported at both ends and accurately prestressed in tension, the sine switch features outstanding resistance to shock and vibration.

Klixon® switches have been used in a variety of aircraft, weapons systems, aircraft engine and aerospace applications for well over 30 years. A brief listing of typical applications include:

- Door interlock systems
- · Aircraft engine ignitions
- Aircraft missile launcher position indication
- External stores emergency jettison switches
- Stowed / deployed indication for thrust reversers

- Safety ignition indication for military jet engines
- Radar pod door switches
- Tank/armored personnel carrier missile launcher switches
- Tank gun turret position indication

SPECIFICATION	IS						
			AT	3AT	4AT	10AT	КХ
	Res.	3 amp	1 amp	1 amp	3 amp	4 amp	10 amp
Current Ratings (28VDC)	Ind.	1 amp	0.5 amp	0.5 amp	1 amp	1 amp	5 amp
	Lamp	1 amp	0.5 amp	0.5 amp	1 amp	2 amp	3 amp
Min Life at Rated L	oad Cycles	25K	50K	25K	25K	25K	25K
Min Mechanical Life Cycles 100K		100K	50K	50K	25K		
Ambient Tempera	Ambient Temperature Range -54°C to 135°C (-65°F to 275°F)			-54°C to 232°C (-65°F to 450°F)	-171°C to 135°C (-275°F to 275°F)	-65°C to 135°C (-85°F to 275°F)	-54°C to 135°C (-65°F to 275°F)
Dielectri Terminal to C Terminal to Term		-	000 300	500 500	1000 800	1000 800	1250 1250
	x Leakage cc He/Dec			1 x	10-8		1 x 10 ⁻⁶
	Shock		200G, 6 ms sawtooth				
	Vibration		65G, 10 - 2000Hz, .5 DA or 65 G RMS				
Insulation Resistance @ 500VDC 100 megaohms		100 megaohms	100 megaohms	100 megaohms	_		







FEATURES

- · Solid-state design for improved reliability
- SPST or SPDT configuration
- · Normally open or normally closed

- · Commercial or military grades available
- Low power dissipation (approximately 3 watts)
- Excellent shock and vibration resistance

INTRODUCTION

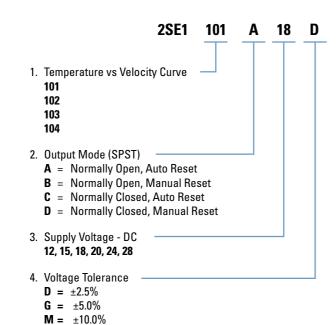
Sensata is a world leader in the design and manufacture of air flow sensors. We build devices that are high-quality, dependable, and reasonably priced. We can customize Klixon® air flow sensors to meet your engineering needs. Our solid—state vane switch is ideal for recognizing loss or reduction of airflow in electronic equipment. Typically used in power supplies, data processing equipment, and large electronic cabinets.

Unlike its electromechanical vane switch predecessor, our solid-state switch continues to provide reliable switching even in the dirtiest of environments. Klixon® air flow sensors are designed to recognize loss or reduction of airflow in:

- Power supplies
- Data processing units
- · Commercial electronic equipment
- Military electronic equipment

SPECIFICATIONS	
Supply Voltage	30 VDC max
Switching Capacity	up to 400 milliamps
Operating Temperature	+10°C to +50°C
Ambient Temperature Range	up to 150°C
Life Cycles	100,000
Average Weight	20 grams

STANDARD PART NUMBER BUILDER



ACMP Series



KLIXON | ACMP Series

Single & Three-Phase Aircraft Motor Protectors

FEATURES

- Single and three-phase protection
- · Locked rotor protection
- Neutral trap

- Thermal protection
- Meets thermal protection requirements of MIL-M-7969, direct acting type, Method III

INTRODUCTION

Sensata motor protection for aircraft prevents hazards beyond the control of the manufacturer — hazards such as sustained overload and excessive temperatures. Since the protecting devices are sensitive to both temperature and current they inherently protect against a variety of abnormal conditions while allowing maximum motor output before shutdown. Motor life is extended by limiting the damaging temperatures to a designed level.

The Klixon® ACMP is basically a bimetallic thermostat with a built—in heating element which is installed in series with the motor winding. The actuating element is a Klixon® snap—acting thermal disc. The built—in heaters simulate winding temperatures caused by increases in current. This protector provides crisp, positive switching when the specified trip current is sustained for a specific duration at room temperature. The device will also actuate when an excessive ambient temperature condition occurs, providing protection against overheat conditions other than overload. Separately, the disc protects against excessive ambient temperature and the heaters protect against excessive current increases (as experienced during locked motor conditions). Together, the heaters and disc protect against any combination of overload and ambient conditions.

Inherent protection means that a protector is built into a motor and becomes an integral part of the system. For this reason, Klixon® protectors should only be applied by the motor manufacturer after detailed application tests to determine the heating characteristics of the motor under a full range of load and ambient conditions to verify the selected rating will meet the specific application requirements. Consult a sales correspondent at left for test samples.

SPECIFICATIONS					
Part Number	28VDC	120VAC			
SKA	16 amps	16 amps			
МКА	50 amps	50 amps			
КА	100 amps	100 amps			
SJE	30 amps	30 amps			
MJE	60 amps	60 amps			
ВЈЕ	120 amps	120 amps			





KLIXON | 6PS Series

Hermetic Stainless Steel Pressure Switch

FEATURES

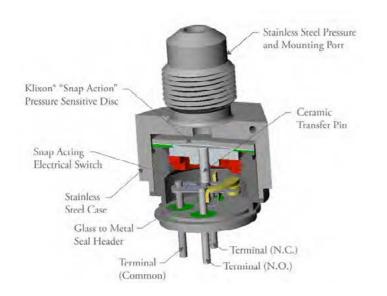
- Hermetically sealed per MIL-E-5400 paragraph 6.3.10
- Covers actuation range of 45 to 700 PSIA
- Maximum corrosion resistance under hostile conditions
- 300 series stainless steel construction for all environment exposed parts
- Stainless steel and brass construction for media exposed parts
- · High vibration resistance
- 8000 psi minimum burst pressure
- · SPDT switch configuration
- · Available in a wide range of standard and custom configurations

INTRODUCTION

The Klixon® 6PS series precision pressure switches are snap-acting, all-welded devices with hermetically sealed switch contacts. Our pressure switches were developed for applications in aerospace and electronics where high reliability and/or resistance to severe environments is required. To ensure maximum corrosion resistance under hostile conditions, all parts exposed to the pressure media and the environment are made of brass or 300 series stainless steel — no rubber parts are used.

Small and lightweight, 6PS Series switches can be mounted by their pressure ports alone, allowing maximum flexibility of design. Full contact force is maintained even during high shock and vibration—regardless of applied pressure—because the positive, snap-action disc works in tandem with snap-action switch contacts.

There are over 1,000 existing 6PS switch package designs. The 6PS is ideal for highly customized package and performance needs.

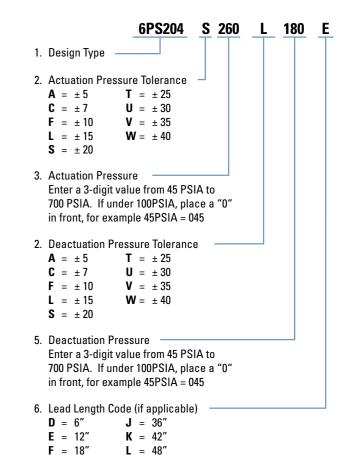


PRESSURE SPECIFICATIONS						
Range of Actuation Pressure Settings	at STP from 45 PSIA to 700 PSIA					
Range of Deactuation Pressure Settings	Standard: 60% to 85% of actuation pressure Special: 85% to 90% of actuation pressure					
Range of Tolerances on Actuation & Deactuation Pressure	Standard: up to ±6% of actuation pressure (±10 PSI minimum) Special: up to ±4% of actuation pressure (±5 PSI minimum) Choice of deactuation pressure setting and					
	tolerances affects price					

SPECIFICATIONS					
Temperature Rating	-54°C to +135°C (-65°F to 275°F)				
Vibration Resistance	25 G, 20–2000 cps (no contact chatter in excess of 10 microseconds)				
Burst Pressure	8,000 PSI minimum				
Proof Pressure	8 times actuating pressure				
Life @ Rated Current	50,000 cycles				
Current Capacity	Resistive : 5amp @ 28 VDC Inductive : 2amp @ 28 VDC Lamp : 1amp @ 28 VDC				
Dielectric Strength	Terminal to terminal : 1000 vrms Terminal to case : 1000 vrms				
Weight	Without Leads : 30 grams max With Connector : 60 grams max				
Metal Parts Exposed to Pressure & Environment	300 series stainless steel CA-360-2 (1/2 hard leaded brass)				
Potting Material	Epoxy resin				

See pressure table for standard tolerances for the actuation and deactuation pressures. Note, after building a part number, consult the factory for pricing and to confirm pressure specifications are valid.

6PS PART NUMBER BUILDER



 $\mathbf{M} = 60^{\prime\prime}$

N = 72"

Actuation Pressure (PSIA)			Deactuation Pressure (PSIA)					
Pressure	Standard Tolerance	Special Tolerance	Standard 60% to 85%	Special 85% to 90%	Standard Tolerance	Special Tolerance		
45 to 134	± 10	± 5	28 to 112	40 to 117	± 10	± 5		
135 to 164	± 10	± 7	83 to 137	117 to 144	± 10	± 7		
165 to 249	± 15	± 10	101 to 208	142 to 216	± 15	± 10		
250 to 369	± 20	± 15	153 to 310	217 to 324	± 20	± 15		
370 to 429	± 25	± 20	225 to 361	319 to 378	± 25	± 20		
430 to 489	± 30	± 20	261 to 412	370 to 432	± 30	± 20		
490 to 549	± 35	± 25	297 to 463	421 to 486	± 35	± 25		
550 to 599	± 40	± 25	333 to 510	472 to 540	± 40	± 25		
600 to 700		Consult Factory						

 $\mathbf{F} = 18^{\prime\prime}$

 $\mathbf{G} = 24^{\prime\prime}$

 $H = 30^{\prime\prime}$

6PS SERIES - DESIGN TYPE FLATTENED & PIERCED MS33678-10SI-3P (SPDT) TERMINALS 1S33678-10SL-4P (SPST NC/NO) (10.34 ± 0.381) 0.407 ± 0.015 (24.13) MAX 0.950 $\frac{(52.45)}{2.065}$ MAX ±000 $-\frac{(1.27)}{0.050}$ DIA (8.89) MAX - COMMON 0.350 (1.52 ± 0.127) ∟ N.O. 0.060 ± 0.005 $4 - \frac{(19.05)}{0.750} \text{ MAX} \rightarrow$ Lockwire holes are $.047 \pm .006 [1.19 \pm .15]$ diameter. Located $.050 \pm .008 [1.27 \pm .20]$ SPDT **SPDT SPDT** SPDT SPST SPST from port face of hex 6PS100 6PS150 6PS102 6PS152 6PS103 6PS153 1/8" OD Tubing without lockwith lockwithout lockwith lockwithout lockwith lock-MS 33656 -E2 wire holes wire holes wire holes wire holes wire holes wire holes 6PS250 6PS200 6PS202 6PS252 6PS203 6PS253 3/16" OD Tubing without lockwith lockwithout lockwith lockwithout lockwith lock-MS 33656 -E3 wire holes wire holes wire holes wire holes wire holes wire holes 6PS350 6PS353 6PS300 6PS302 6PS352 6PS303 1/4" OD Tubing without lockwith lockwithout lockwith lockwithout lockwith lock-MS 33656 -E4 wire holes wire holes wire holes wire holes wire holes wire holes 6PS400 6PS450 6PS402 6PS452 6PS403 6PS453 5/16" OD Tubing without lockwith lockwithout lockwith lockwithout lockwith lock-MS 33656 -E5 wire holes wire holes wire holes wire holes wire holes wire holes 6PS500 6PS550 6PS502 6PS552 6PS503 6PS553 3/8" OD Tubing without lockwith lockwith lockwith lockwithout lockwithout lock-MS 33656 -E6 wire holes wire holes wire holes wire holes wire holes wire holes 6PS600 6PS650 6PS602 6PS652 6PS603 6PS653 1/8" Pipe Fitting without lockwith lockwithout lockwith lockwithout lockwith lock-MS 33677 wire holes wire holes wire holes wire holes wire holes wire holes 6PS700 6PS750 6PS752 6PS753 6PS702 6PS703 1/4" Pipe Fitting without lockwith lockwith lockwithout lockwith lockwithout lock-MS 33677 wire holes wire holes wire holes wire holes wire holes wire holes

CDC CEDIES	- DESIGN TY	/DE							
UPS SERIES									
		PT1H-8-3P CONNECTOR		POTTED LEADS					
· · · · · · · · · · · · · · · · · · ·		(16.51) 0.650	(48.79) 1.921 MAX	0.381) 0.015 T POTTING SLEEVE					
.006 [1.19 ± .1 Located .050 : .20] from port	± .008 [1.27 ±	SPST	SPST	SPDT	SPDT	SPST (NC)	SPST (NC)	SPST (NO)	SPST (NO)
1/8" OD Tubing MS 33656 -E2		6PS104 without lock-wire holes	6PS154 with lock-wire holes	6PS101 without lock-wire holes	6PS151 with lock-wire holes	6PS105 without lock-wire holes	6PS155 with lock-wire holes	6PS106 without lock-wire holes	6PS156 with lock-wire holes
3/16" OD Tubing MS 33656 -E3		6PS204 without lock-wire holes	6PS254 with lock-wire holes	6PS201 without lock-wire holes	6PS251 with lock-wire holes	6PS205 without lock-wire holes	6PS255 with lock-wire holes	6PS206 without lock-wire holes	6PS256 with lock-wire holes
1/4" OD Tubing MS 33656 -E4		6PS304 without lock-wire holes	6PS354 with lock-wire holes	6PS301 without lock-wire holes	6PS351 with lock-wire holes	6PS305 without lock-wire holes	6PS355 with lock-wire holes	6PS306 without lock-wire holes	6PS356 with lock-wire holes
5/16" OD Tubing MS 33656 -E5		6PS404 without lock-wire holes	6PS454 with lock-wire holes	6PS401 without lock-wire holes	6PS451 with lock-wire holes	6PS405 without lock-wire holes	6PS455 with lock-wire holes	6PS406 without lock-wire holes	6PS456 with lock-wire holes
3/8" OD Tubing MS 33656 -E6		6PS504 without lock-wire holes	6PS554 with lock-wire holes	6PS501 without lock-wire holes	6PS551 with lock-wire holes	6PS505 without lock-wire holes	6PS555 with lock-wire holes	6PS506 without lock-wire holes	6PS556 with lock-wire holes
1/8" Pipe Fitting MS 33677		6PS604 without lock-wire holes	6PS654 with lock-wire holes	6PS601 without lock-wire holes	6PS651 with lock-wire holes	6PS605 without lock-wire holes	6PS655 with lock-wire holes	6PS606 without lock-wire holes	6PS656 with lock-wire holes
1/4" Pipe Fitting MS 33677		6PS704 without lock-wire holes	6PS754 with lock-wire holes	6PS701 without lock-wire holes	6PS751 with lock-wire holes	6PS705 without lock-wire holes	6PS755 with lock-wire holes	6PS706 without lock-wire holes	6PS756 with lock-wire holes

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Germany

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