

# 6786 SERIES

-20°F to 350°F, Low Profile, Environmentally Sealed 1/2"

## Introduction

KLIXON® 6786 low profile environmentally sealed 1/2" thermostats provide clean and positive switching action while being 60% shorter than Sensata's similar 1/2" hermetic thermostats. They are designed for use where maximum shock and vibration resistance is required and protection against dust and foreign particles is important. KLIXON® 6786 series thermostats provide rapid thermal response and a dependable circuit which makes them ideal for applications like magnetic transformers for particle accelerators, cryogenic pumps, and aircraft window glass heaters.



## Features

- Environmentally sealed, low profile
- Normally open or normally closed
- Pre-set, non-adjustable calibration
- Single pole, single-throw (SPST)
- Max resistive load: 7 amp
- Operating temperature range: -20°F to 350°F (-29°C to 117°C)
- Ambient temperature range: -65°F to 400°F (-53.9°C to 204.4°C)
- Many options available including solder type terminals in parallel or opposed alignments, brackets, studs, and with or without surface mounting brackets
- UL recognized, file #E34618 (Go to UL online certifications directory web page)
- Canadian-UL (UL File #34618)

## PERFORMANCE CHARACTERISTICS

The standard 6786 utilizes silver contacts. Gold plated contacts can be furnished to assure reliable circuit switching under low wattage conditions.

### Contact Ratings (Resistive) Based on standard differential

30 VAC/DC	125 VAC	250 VAC	Life Cycles
5.0 Amperes	2.0 Amperes	1.0 Amperes	100,000
5.5 Amperes	3.0 Amperes	1.5 Amperes	50,000
6.0 Amperes	4.0 Amperes	2.0 Amperes	25,000
6.5 Amperes	5.0 Amperes	2.5 Amperes	10,000
7.0 Amperes	6.0 Amperes	3.0 Amperes	5,000

## Characteristics

<b>Switch Action</b>	SPST (snap-action)
<b>Dielectric Strength</b>	1250 VAC, rms, 60 cycles, terminal to case
<b>Vibration Resistance</b>	10–500Hz, 10G, per MIL-STD-202, Method 204, Condition A (unmonitored)
<b>Shock Resistance</b>	30G, 11 milliseconds
<b>Weight</b>	2.5 grams

## Operating Temperature

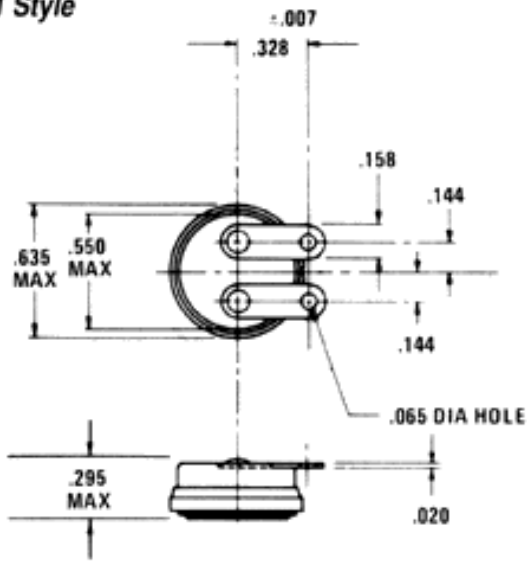
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
-20	-28.9	30	16.7	10	5.6
0	-17.8	30	16.7	10	5.6
10	-12.2	30	16.7	10	5.6
20	-6.7	20	11.1	8	4.4
30	-1.1	20	11.1	8	4.4
40	4.4	20	11.1	8	4.4
50	10.0	20	11.1	8	4.4
60	15.6	20	11.1	8	4.4
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
70	21.1	20	11.1	8	4.4
80	26.7	20	11.1	8	4.4
90	32.2	20	11.1	8	4.4
100	37.8	20	11.1	8	4.4
110	43.3	20	11.1	8	4.4
120	48.9	20	11.1	8	4.4
130	54.4	20	11.1	8	4.4
140	60.0	20	11.1	8	4.4
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
150	65.6	20	11.1	8	4.4
160	71.1	20	11.1	8	4.4
170	76.7	20	11.1	8	4.4
180	82.2	20	11.1	8	4.4
190	87.8	20	11.1	8	4.4
200	93.3	30	16.7	10	2.8
210	98.9	30	16.7	10	4.4
220	104.4	30	16.7	10	4.4

## Operating Temperature (continued)

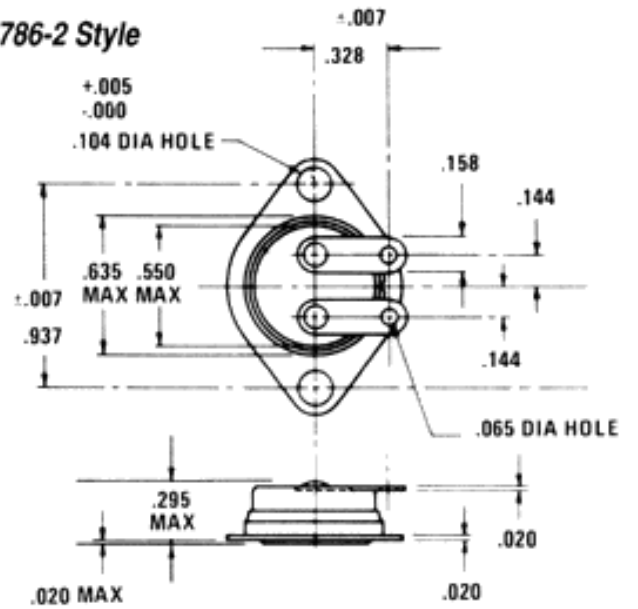
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
230	65.6	20	11.1	8	4.4
240	71.1	20	11.1	8	4.4
250	76.7	20	11.1	8	4.4
260	82.2	20	11.1	8	4.4
270	87.8	20	11.1	8	4.4
280	93.3	30	16.7	10	2.8
290	98.9	30	16.7	10	4.4
300	104.4	30	16.7	10	4.4
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
230	110.0	30	16.7	10	4.4
240	115.6	30	16.7	10	4.4
250	121.1	30	16.7	10	4.4
260	126.7	30	16.7	10	4.4
270	132.2	30	16.7	10	4.4
280	137.8	30	16.7	10	4.4
290	143.3	30	16.7	10	4.4
300	148.9	30	16.7	10	4.4
Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
310	154.4	40	22.2	12	6.7
320	160.0	40	22.2	12	6.7
330	165.6	40	22.2	12	6.7
340	171.1	40	22.2	12	6.7
350	176.7	40	22.2	12	6.7



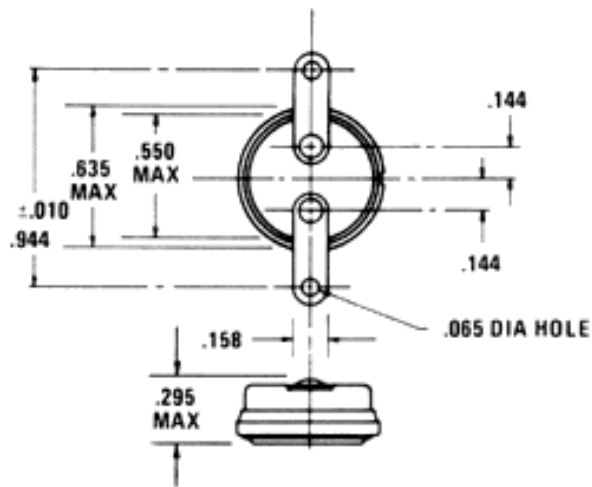
6786-1 Style



6786-2 Style



6786-3 Style





## AGENCY APPROVALS & CERTIFICATIONS

UL recognized, file #E34618  
Canadian-UL (UL File #34618)



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury.**

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