

Thermal Management Thermal Switches

Honeywell's Thermal Management thermal switches are specifically designed for applications that require high current capacity and are subject to high vibration and shock. This series is capable of handling 7 amperes resistive load at 120 VAC RMS and 2.5 amperes inductive load at 28 VDC.

This series comes as SPST or SPDT configurations (see below).

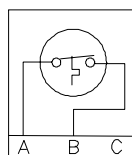
The base sensing module of the switch is a bimetallic element ensuring long life through a large range of environments. There is no better choice when it comes to cost and performance – specify Honeywell for your thermal control needs.

Honeywell can provide custom packaging to meet the customer's demanding requirements (contact factory).



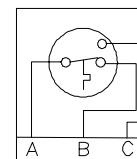
Schematics

SPST



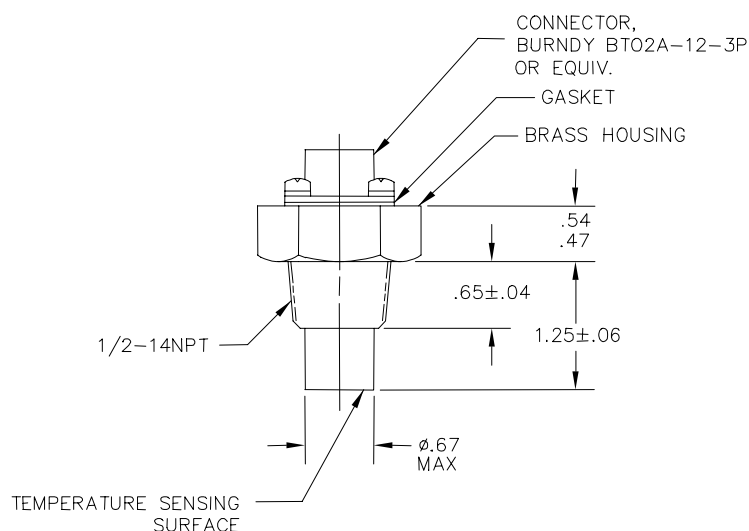
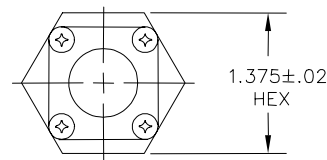
BURNDY
BT02A-12-3P
OR EQUIV

SPDT (TCST)



BURNDY
BT02A-12-3P
OR EQUIV

Configuration Drawing (Dimensions in inches)



Application Examples:

- Low idle temp control - locomotive
- Low water temp alarm
- Compressor overtemp
- Transmission overtemp

Performance

Contact Arrangement:	SPST SPDT (TCST -Two Circuit, Single Throw)
Contact Ratings:	7 amperes resistive load at 120 VAC RMS 2.5 amperes inductive load at 28 VDC
Endurance:	100,000 cycles min @ rated DC or AC loads
Insulation Resistance:	1000 megohms min at 500 VDC
Dielectric Withstanding Voltage:	1500 VAC RMS - connector pins to case, 500 microamperes max leakage

Environmental

Sine Vibration:	20g peak, 10 to 2000 Hz
Shock:	100g peak, 6ms
Ambient Temperature Range:	-40 to +400°F
Moisture Resistance:	98% RH and from +77 to +149°F

EMD Fan Control Thermal Switches



Honeywell's Fan Control thermal switches are specifically designed and qualified to operate the cooling fan contactor on EMD locomotive engines. This thermal switch is non-adjustable, thermally stable and is provided in a continuous range of temperature setpoints shown in the table below.

It uses large rugged contacts, high armature force and large snapping discs. This enables the fan control thermal switch to meet rugged performance requirements.

The base sensing module of the switch is a hermetically sealed element ensuring long life through a large range of environments. In addition, the cover, connector and push button are environmentally sealed to provide protection from steam cleaning.

Each switch comes with a press to test push button switch. This aids in verifying proper wiring and connection to fan controls and overtemperature alarms.

A mating connector assembly is available to convert from Pyle National to Burndy (consult factory).

WARRANTY: Due to the extreme reliability of the hermetic switch, the device is warranted for 4 years, the best warranty in the industry.

There is no better choice when it comes to cost and performance – specify Honeywell for your thermal control needs.

Application Examples:

- Fan Temperature Control
- Overtemperature Idle Control
- Low-idle Temperature Control
- Overtemperature Alarm
- Fluid Dump Freeze Protection

Performance

Contact Arrangement: SPST
SPDT (TCST -Two Circuit, Single Throw)

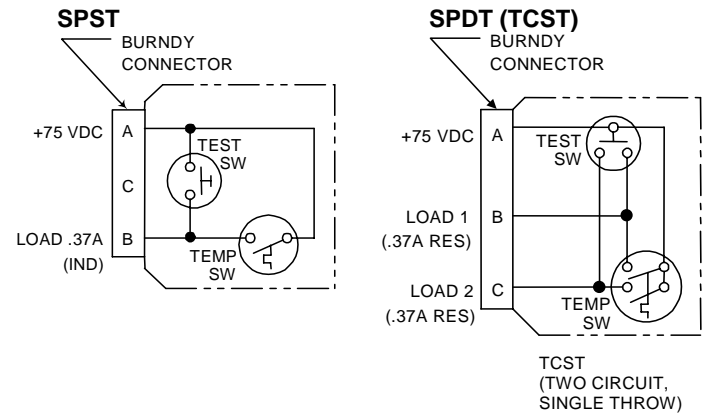
Endurance: Qualified to 1,000,000 cycles at EMD

Environmental

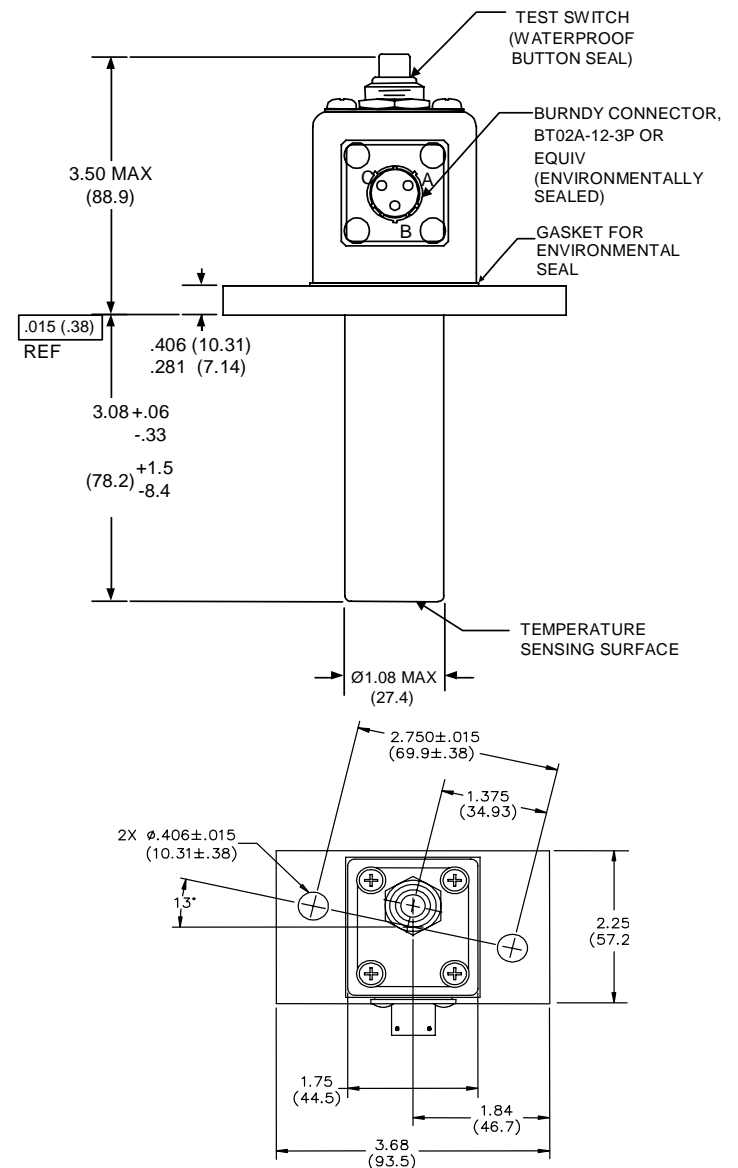
Cleaning: Environmentally sealed
Resistant to damage from steam cleaning

Brass Construction: Resistant to chemicals used in flushing cooling systems

Schematics



Configuration Drawings (Dimensions in inches)



Thermal Management Series Sample Ordering Code

See temperature and corresponding part number on Table.

HONEYWELL PN 975-0567	CLOSING TEMP °F	OPEN TEMP °F
-001SPST	205 ±5	225 ±5
-002SPST	185 ±5	205 ±5
-003SPST	165 ±5	185 ±5
-004SPST	140 ±5	160 ±5
-005SPST	55 ±5	65 ±5
-006SPST	240 +5	220 ±5

EMD Fan Control Switches Sample Ordering Code

See temperature part number on Table.

HONEYWELL PN 975-0485	CLOSING TEMP (°F)
-101 SPST	150 +3/-2
-102 SPST	155 +3/-2
-103 SPST	160 +3/-2
-104 SPST	165 +3/-2
-105 SPST	170 +3/-2
-106 SPST	175 +3/-2
-107 SPST	180 +3/-2
-108 SPST	185 +3/-2
-109 SPST	190 +3/-2
-110 SPST	195 +3/-2
-115 SPST	34 +3/-2
-117 SPDT*	200 +3/-2
-118 SPDT*	205 +3/-2
-119 SPDT*	210 +3/-2
-120 SPDT*	215 +3/-2
-125 SPST*	110 ±3

*Consult Factory

Find out more:

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