

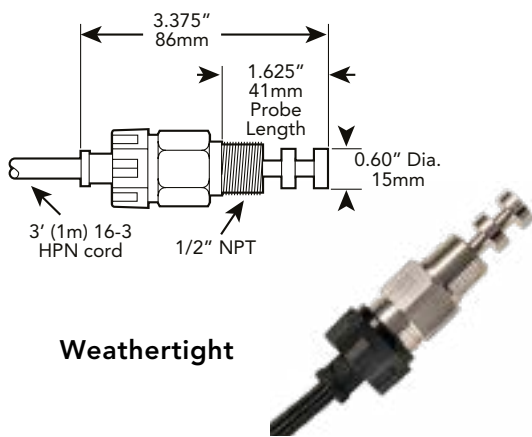
Remote Thermostats for Weathertight and Hazardous Location Oil Heaters (see p.21 for model numbers)

REMOTE THERMOSTATS for OIL HEATERS					
Weathertight	Hazardous Location	Temperature Range		Sensing Unit	Thread Size
		ON	OFF		
DIT68	DIT68EP	60°F (16°C)	80°F (27°C)	LSU-6	1/2" NPT
DIT810	DIT810EP	80°F (27°C)	100°F (38°C)	LSU-8	1/2" NPT
DIT1012	DIT1012EP	100°F (38°C)	120°F (49°C)	LSU-10	1/2" NPT
DIT1214	DIT1214EP	120°F (49°C)	140°F (60°C)	LSU-12	1/2" NPT

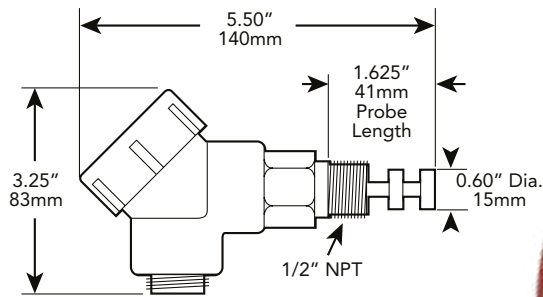
Switch Capacity

- 120 V - 15amp
- 208 V - 10amp
- 240 V - 10amp
- 277 V - 7.2amp
- *10amp at reduced life cycle

12 V DC } Pilot
24 V DC } Duty Only



Weathertight



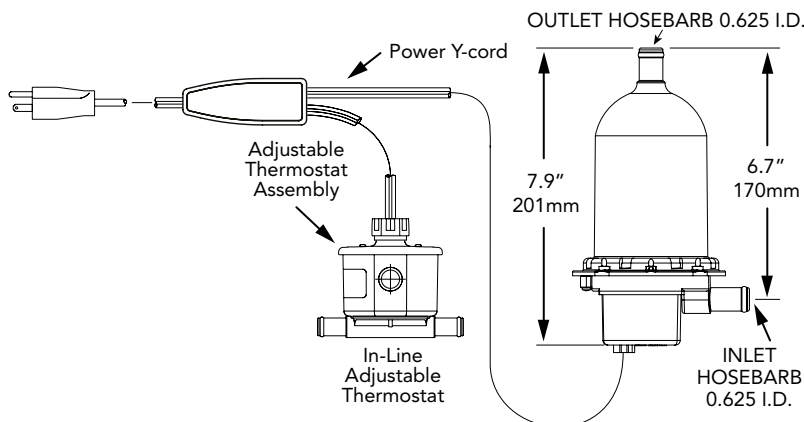
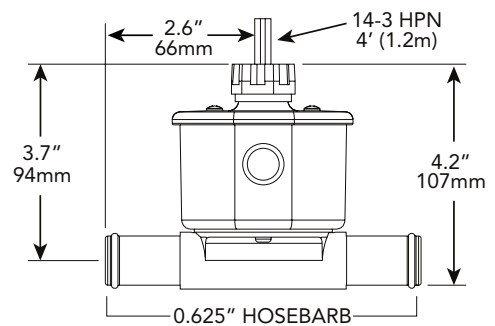
Hazardous Location

Remote Adjustable Thermostat for TPS Thermosiphon Engine Heater (see p.7 for model numbers)

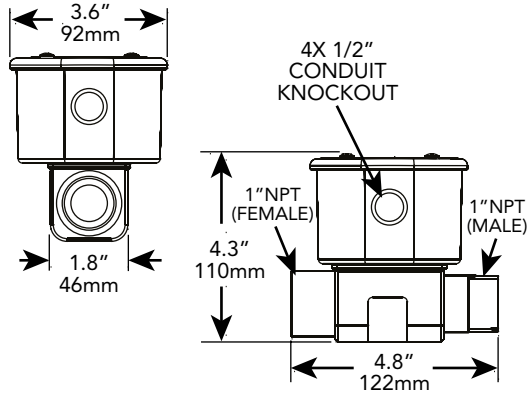
5/8" HB x 5/8" HB

Part Number	Adjustable Range Temperature Setting	Sensing Unit
TFTA-5/8HB	Adjustable 90°-130°F (32°-54°C)	FSU90-130

Part number does not include "Y" cord

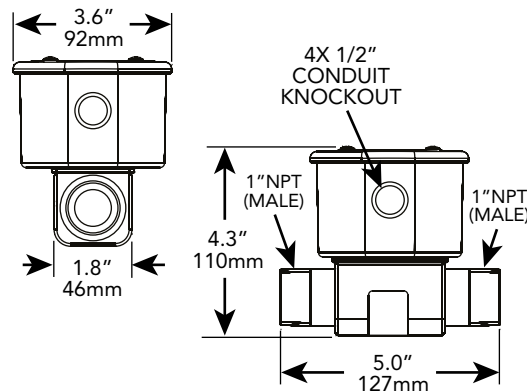


When using a thermostat above rated capacity or on 3 phase applications, select the proper control box with transformer and contactor as shown on page 30.



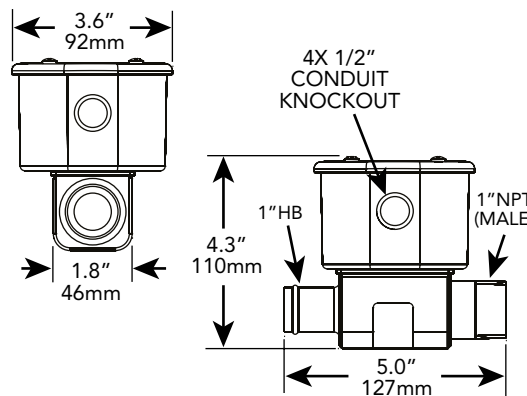
1" NPT female x 1" NPT male CONDUIT TYPE ENCLOSURE

Part Number	Temperature Setting		Maximum Capacity Ratings		
	On	Off	120/240V	277V	480V
TFTC8-200	80°F (27°C)	100°F (38°C)	25 amp	22 amp	12.5 amp
TFTC10-200	100°F (38°C)	120°F (49°C)	25 amp	22 amp	12.5 amp
TFTC12-200	120°F (49°C)	140°F (60°C)	25 amp	22 amp	12.5 amp
TFTCA-200	Adjustable 90°–130°F (32°–54°C)		25 amp	22 amp	12.5 amp



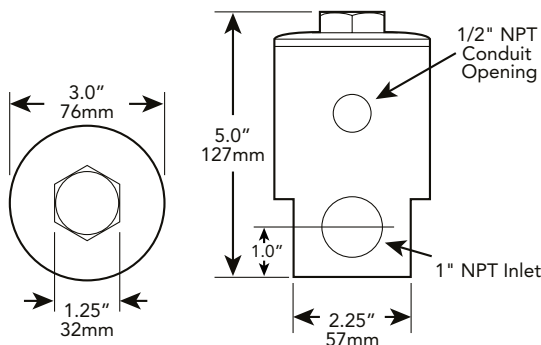
1" NPT male x 1" NPT male CONDUIT TYPE ENCLOSURE

Part Number	Temperature Setting		Maximum Capacity Ratings		
	On	Off	120/240V	277V	480V
TFTC8-220	80°F (27°C)	100°F (38°C)	25 amp	22 amp	12.5 amp
TFTC10-220	100°F (38°C)	120°F (49°C)	25 amp	22 amp	12.5 amp
TFTC12-220	120°F (49°C)	140°F (60°C)	25 amp	22 amp	12.5 amp
TFTCA-220	Adjustable 90°–130°F (32°–54°C)		25 amp	22 amp	12.5 amp



1" hose barb x 1" NPT male CONDUIT TYPE ENCLOSURE

Part Number	Temperature Setting		Maximum Capacity Ratings		
	On	Off	120/240V	277V	480V
TFTC8-240	80°F (27°C)	100°F (38°C)	25 amp	22 amp	12.5 amp
TFTC10-240	100°F (38°C)	120°F (49°C)	25 amp	22 amp	12.5 amp
TFTC12-240	120°F (49°C)	140°F (60°C)	25 amp	22 amp	12.5 amp
TFTCA-240	Adjustable 90°–130°F (32°–54°C)		25 amp	22 amp	12.5 amp



HAZARDOUS LOCATION CONDUIT TYPE ENCLOSURE

Part Number	Temperature Setting		Maximum Capacity Ratings		
	On	Off	120/240V	277V	480V
TFT10ER	100°F (38°C)	120°F (49°C)	25 amp	22 amp	12.5 amp

When using a thermostat above rated capacity or on 3 phase applications, select the proper control box with transformer and contactor as shown on page 30.

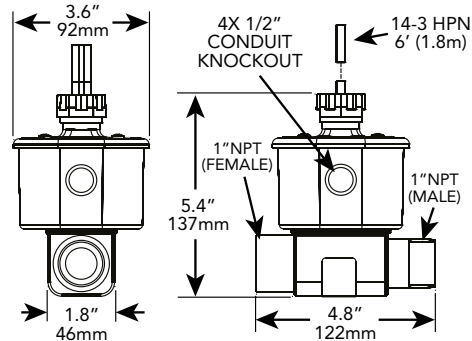
1" NPT female x 1" NPT male

20 amp



CORD CONNECTED

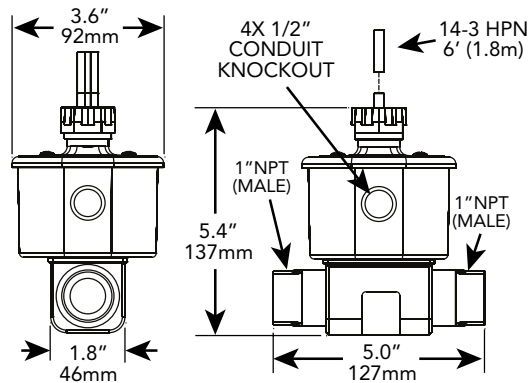
Part Number	Temperature Setting		Maximum Capacity Ratings	
	On	Off	120/240V	277V
TFT8-200	80°F (27°C)	100°F (38°C)	20 amp	20 amp
TFT10-200	100°F (38°C)	120°F (49°C)	20 amp	20 amp
TFT12-200	120°F (49°C)	140°F (60°C)	20 amp	20 amp
TFTA-200	Adjustable 90°–130°F (32°–54°C)		20 amp	20 amp



1" NPT male x 1" NPT male

CORD CONNECTED

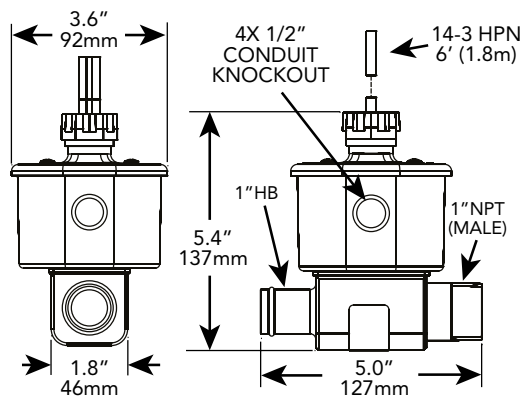
Part Number	Temperature Setting		Maximum Capacity Ratings	
	On	Off	120/240V	277V
TFT8-220	80°F (27°C)	100°F (38°C)	20 amp	20 amp
TFT10-220	100°F (38°C)	120°F (49°C)	20 amp	20 amp
TFT12-220	120°F (49°C)	140°F (60°C)	20 amp	20 amp
TFTA-220	Adjustable 90°–130°F (32°–54°C)		20 amp	20 amp



1" hose barb x 1" NPT male

CORD CONNECTED

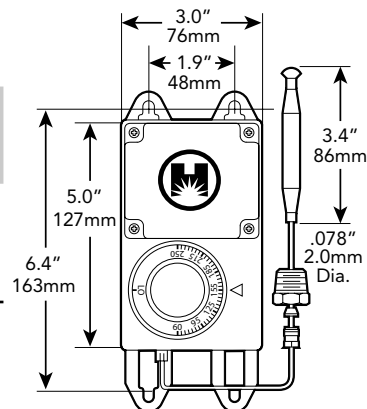
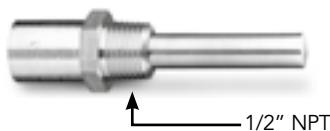
Part Number	Temperature Setting		Maximum Capacity Ratings	
	On	Off	120/240V	277V
TFT8-240	80°F (27°C)	100°F (38°C)	20 amp	20 amp
TFT10-240	100°F (38°C)	120°F (49°C)	20 amp	20 amp
TFT12-240	120°F (49°C)	140°F (60°C)	20 amp	20 amp
TFTA-240	Adjustable 90°–130°F (32°–54°C)		20 amp	20 amp



REMOTE ADJUSTABLE With 5' (1.5m) Capillary Probe

Part Number	Adjustable Range Temperature Setting	Maximum Capacity Ratings		
		120/208/240V	277V	480V
AT6525	65 - 250°F (18 - 121°C) (Open or Off Setting) Differential 4°F (2.2°C) (Close or On Setting)	25 amp	22 amp	5 amp

ATW
Aluminum
Well for
AT6525



Control systems allow for quick electrical installation of all HOTSTART engine heaters. They are designed as a time and labor saving component. Control systems are especially useful on installations that require two coolant heaters or combinations of a coolant heater and oil heater/hydraulic heater etc.

All control boxes on this page are NEMA 4, 12 & IP66.

CONTROL SYSTEMS

CONTROL SYSTEMS featuring AUTOMATIC SHUTDOWN DEVICES
With 24 V DC Relay

Amps	Volts	1 Heater, 1 Thermostat per application	2 Heaters, 2 Thermostats per application
30A Max	120	JBC11-100	JBC21-100
30A Max	208	JBC18-100	JBC28-100
30A Max	240	JBC12-100	JBC22-100
30A Max	400	JBC1A-100	JBC2A-100
30A Max	480	JBC14-100	JBC24-100
30A Max	575	JBC15-100	JBC25-100



Model JBC14-100

See wiring schematic page 31



Model JBC24-100

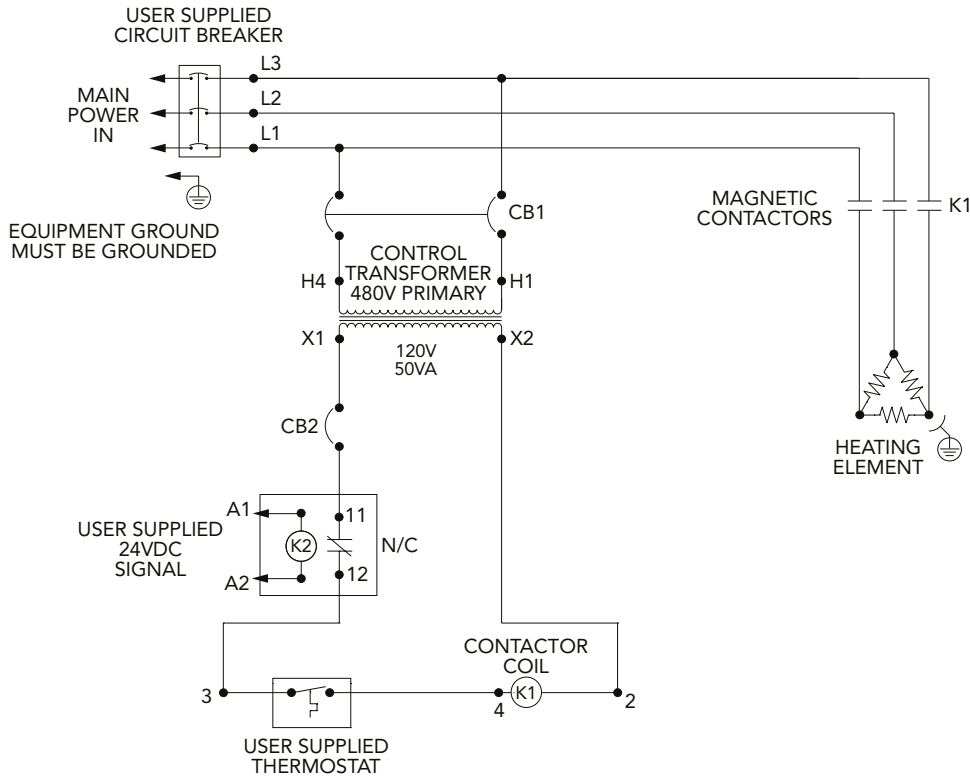
See wiring schematic page 31

All HOTSTART heaters with thermostat, operating on three phase current (at any voltage), require the use of a control system with a 3-pole contactor. All HOTSTART heaters with thermostat, operating over 480 V (single or three phase) require a control system to reduce the primary voltage to 120 V for the control circuit. For increased thermostat life, use a control system on all heaters above 277 V either single or three phase.

All control boxes can be used with either single or three phase heaters. Control boxes are available in Hazardous Location models - contact factory for part number.

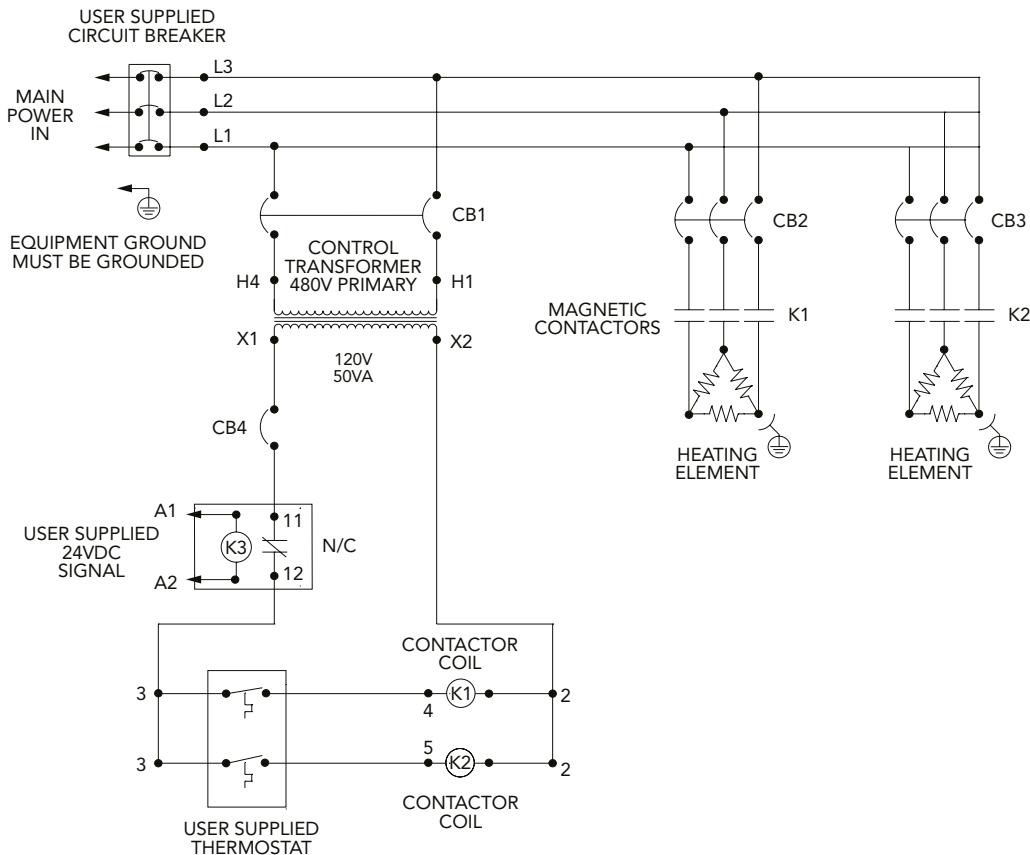
For heater protection and power savings, HOTSTART recommends de-energizing the heater when engine is running. Control boxes are supplied with a 24 V relay to de-energize the heater upon engine start-up.

Wiring Schematic for JBC14-100



To control one 480 V heater at maximum 30 amps on manual start engine.

Wiring Schematic for JBC24-100



To control two 480 V heaters at maximum 30 amps on automatic start engines.

Control Systems



Model JBC14-100



Model JBC24-100

POWER DISTRIBUTION BOX

Use to simplify wiring on equipment when a variety of heaters and controls are required. All models have ten, 25 Amp terminal blocks. Power Distribution Boxes are rated NEMA 4 and IP66/67



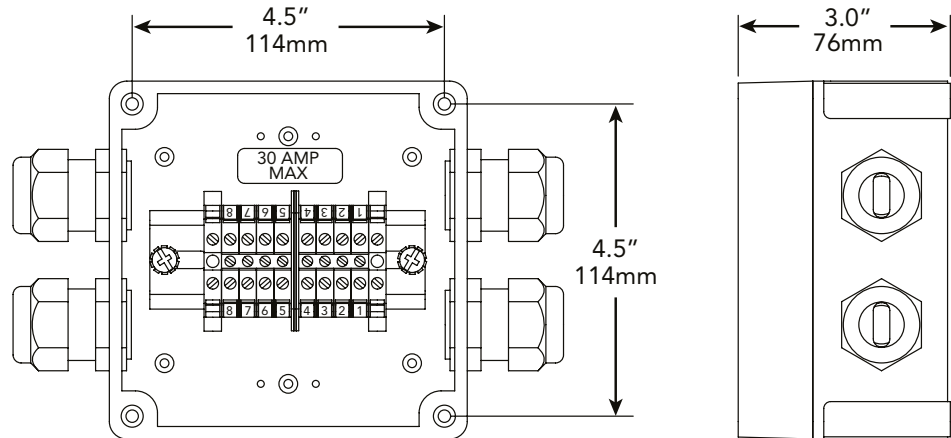
PDB-000



A6553-2

Part Number	Number of Openings
PDB-000	8*

*Box comes assembled with 4 strain relief connectors. For additional connectors, order part# A6553-2.



OIL PRESSURE SWITCH

For automatic cut-off of heaters when engine starts.

Maximum Current Capacity:
 120 V/208 V/240 V/277 V — 25 Amps
 380 V/480 V/575 V — 15 Amps
 Two pole single throw

To prevent overheating of the heating element on standby equipment and automatic start engines, HOTSTART recommends turning the coolant heater off when the engine is running. A pressure switch that senses engine oil pressure is utilized to shut the heater off on increase of oil pressure and to turn the heater on when engine oil pressure drops.



NEMA 1

Part Number	Enclosure Type
PS252	Dry Locations
PS252R	Dry Locations (Reverse Action)
PS252WT	Wet Locations
PS252EP	Hazardous Locations