

Oil Pressure Switches

For automatic cut-off of heaters when engine starts

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

To prevent overheating of the heating element on standby equipment and automatic start engines, Kim 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.

Kim Hotstart Model Number	Enclosure Type
PS252	Dry Locations
PS252R	Dry Locations (Reverse Action)
PS252WT	Wet Locations
PS252EP	Hazardous Locations

Control Components

PS252



Magnetic Contactors

30 AMPS	Kim Hotstart Model Number	Coil Voltage	
	DRY LOCATIONS		
3 POLE	MC330L	120V	
	MC330	240V	
	WET LOCATIONS		
	JBW11-000	120V	
	JBW12-000	240V	
	HAZARDOUS LOCATIONS		
JBE11-000	120V		
JBE12-000	240V		

Inrush Voltamps (VA) 35 VA
 Holding Voltamps (VA) 8 VA

60 AMPS	Kim Hotstart Model Number	Coil Voltage	
	DRY LOCATIONS		
3 POLE	MC360L	120V	
	MC360	240V	
	WET LOCATIONS		
	JBW11-060	120V	
	JBW12-060	240V	
	HAZARDOUS LOCATIONS		
JBE11-060	120V		
JBE12-060	240V		

Inrush Voltamps (VA) 92 VA
 Holding Voltamps (VA) 10 VA

MC330

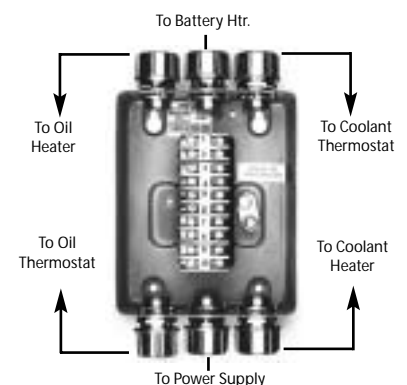


Junction Boxes

Use to simplify wiring on equipment when a variety of heaters and controls are required. All models have ten, 25 Amp terminal blocks.

Kim Hotstart Model Number			
Dry Locations	Wet or Damp Locations	Hazardous Locations	Number of Openings
AWPJ30-4	AWPJ30-4WT	AWPJ30-4ER	4
AWPJ30-5	AWPJ30-5WT	AWPJ30-5ER	5
AWPJ30-6	AWPJ30-6WT	AWPJ30-6ER	6
AWPJ30-7	AWPJ30-7WT	AWPJ30-7ER	7
AWPJ30-8	AWPJ30-8WT	AWPJ30-8ER	8
AWPJ30-9	AWPJ30-9WT	AWPJ30-9ER	9
AWPJ30-10	AWPJ30-10WT	AWPJ30-10ER	10

AWPJ30-6



Complete Control Systems

For heater protection and power savings Kim Hotstart recommends de-energizing the heater when engine is running. On automatic start engines this can be accomplished with a control system using an Oil Pressure Switch or a 24 Volt Relay.

Volts	Kim Hotstart Model Number MANUAL START ENGINES	Amps	Kim Hotstart Model Number AUTOMATIC START ENGINES	Volts						
Single Ø — One Heater and Thermostat Per Engine										
120V 208V 240V 277V	Use thermostat only. See pages 26 through 30.	25 Amps or Less	Use oil pressure switch (PS252) & thermostat. See pages 26-30 and page 31.	120V 208V 240V 277V						
Three Ø — One Heater and Thermostat Per Engine										
Volts	Manual Control Systems	Box Size	Automatic Control Systems				Volts			
			With 24 Volt Relay	Box Size	With Pressure Switch	Box Size				
120V 208V 240V 380V 480V 575V	JBW11-000 JBW18-000 JBW12-000 JBW13-000 JBW14-000 JBW15-000	A A A B B B	30 Amps Maximum	JBW11-100 JBW18-100 JBW12-100 JBW13-100 JBW14-100 JBW15-100	B B B B B B	JBW11-200 JBW18-200 JBW12-200 JBW13-200 JBW14-200 JBW15-200	C C C C C C	120V 208V 240V 380V 480V 575V		
120V 480V	JBW11-060 JBW14-060	A B		60 Amps Maximum	JBW11-160 JBW14-160	B B	JBW11-260 JBW14-260	C C	120V 480V	
Single Ø — Two Heaters and Two Thermostats Per Engine										
120V 208V 240V 277V	Use one thermostat with each heater. See pages 26 through 30.	25 Amps Per Heater or Less		Use one oil pressure switch (PS252) & thermostat with each heater. See pages 26 through 30 and page 31.				120V 208V 240V 277V		
380V 480V 575V	JBW23-000 JBW24-000 JBW25-000			D D D	JBW23-100 JBW24-100 JBW25-100	D D D	JBW23-200 JBW24-200 JBW25-200	D D D	380V 480V 575V	
120V 208V 240V 380V 480V 575V	JBW21-000 JBW28-000 JBW22-000 JBW23-000 JBW24-000 JBW25-000			C C C D D D	30 Amps Per Heater Maximum	JBW21-100 JBW28-100 JBW22-100 JBW23-100 JBW24-100 JBW25-100	D D D D D D	JBW21-200 JBW28-200 JBW22-200 JBW23-200 JBW24-200 JBW25-200	D D D D D D	120V 208V 240V 380V 480V 575V
Three Ø — Two Heaters and Two Thermostats Per Engine										
208V 240V 380V 480V 575V	JBW28-000 JBW22-000 JBW23-000 JBW24-000 JBW25-000		C C D D D	30 Amps Per Heater or Less		JBW28-100 JBW22-100 JBW23-100 JBW24-100 JBW25-100	D D D D D	JBW28-200 JBW22-200 JBW23-200 JBW24-200 JBW25-200	D D D D D	208V 240V 380V 480V 575V

All control boxes are available for Class 1 Group D hazardous locations, change prefix "JBW" to "JBE". Consult factory for price and availability.

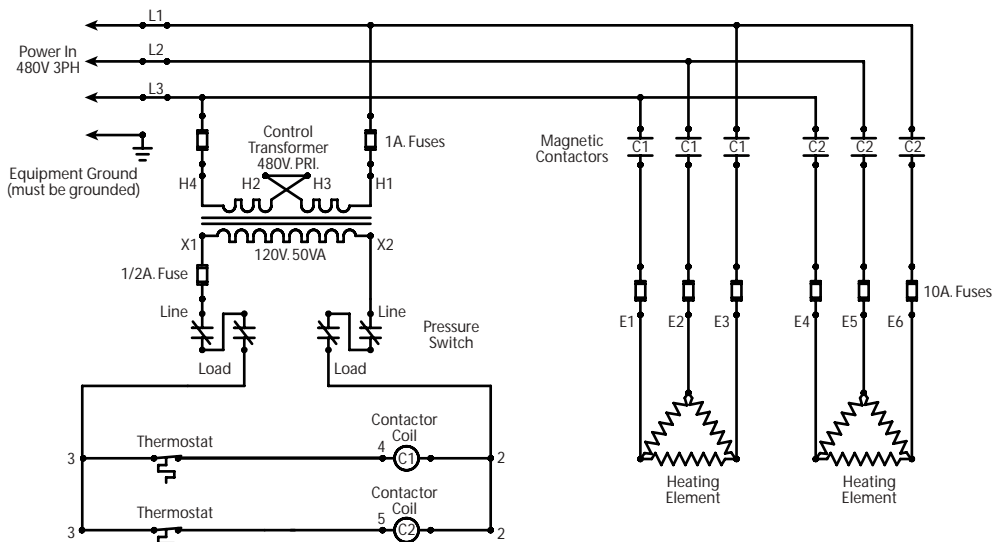
Box Size Code: A – 6 x 6 x 4, B – 8 x 8 x 4, C – 10 x 8 x 4, D – 12 x 10 x 5

All Kim Hotstart heaters with thermostats, designed to operate on 3-phase current (at any voltage), require the use of a control system with a 3-pole contactor. All Kim Hotstart heaters with thermostat designed to operate over 480 volt (1 phase or 3 phase) require a control system to reduce the primary voltage to 120 volts for the control circuit. For increased thermostat life, use a control system on all heaters above 277 volts either single or three phase.

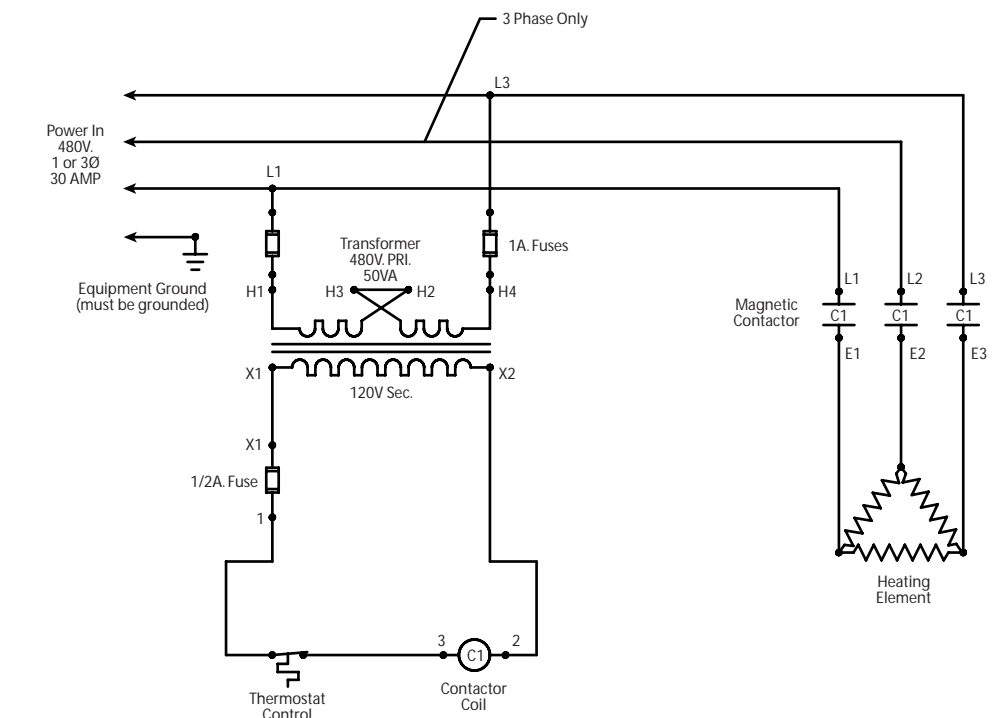
These control systems allow for quick electrical installation of all Kim Hotstart engine preheaters. They are designed as a time and labor saving component. They are especially useful on installations that require two coolant heaters or combinations of a coolant heater and oil heater/hydraulic heater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

All control boxes on this and preceding page are NEMA 12 & 13.

All control boxes are available for Class 1 Group D hazardous locations. Change prefix "JBW" to "JBE" and consult factory for price and availability.



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



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

Typical Control Box System Components



Model JBW24-200
With pressure switch
or
Model JBW24-100
With 24 volt relay



Model JBW14-000
No automatic control