



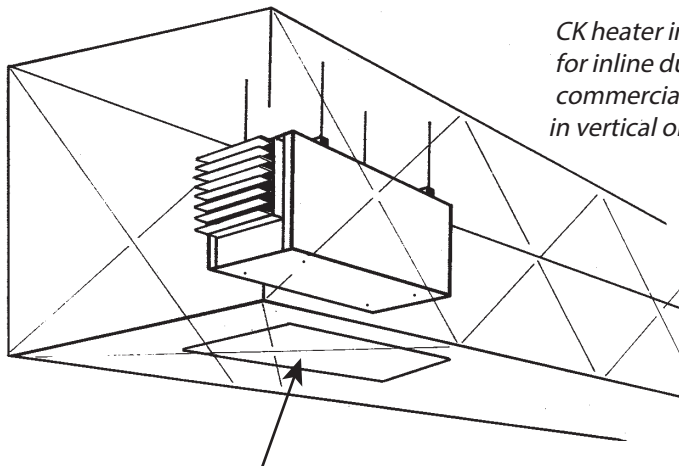
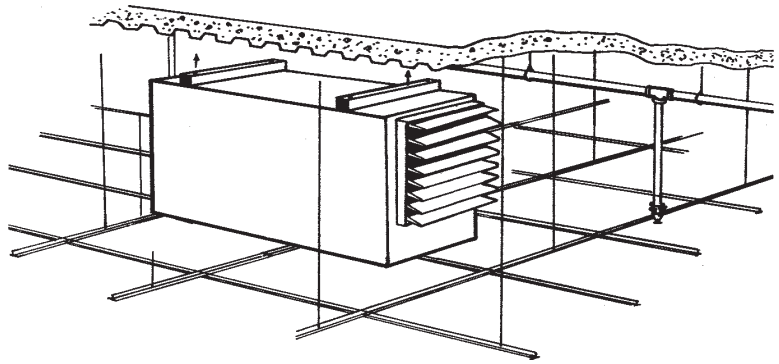
# Electric CK Plenum Heater

## Plenum Heater

The Model CK Series is a special application heater that is approved for use in concealed areas of a building. This heater may be installed in areas that are not readily available for a person to see, such as the area between a concrete ceiling and a drop-tile ceiling, in plenum open or ducted system and can be used for constant environmental temperature control and freeze protection for sprinkler systems in concealed areas.

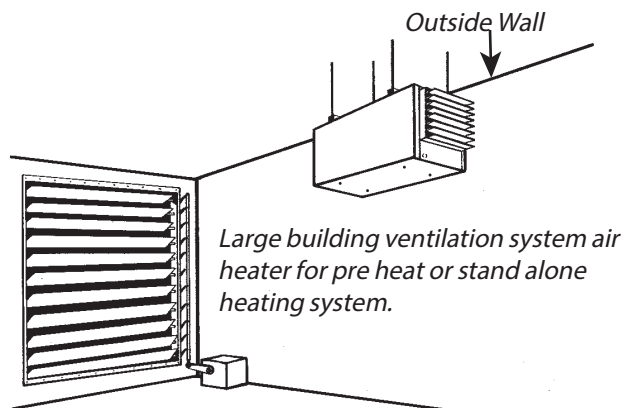
The unit can be mounted vertically or horizontally.

It is also suitable for use as a special purpose unit heater where the environmental requirements are dirty, dusty, moist or mildly corrosive.



*CK heater installed inside a plenum area for inline ducted air and heat boost in large commercial HVAC systems can be mounted in vertical or horizontal ducting.*

*Access opening must be provided to the heater.*



*Large building ventilation system air heater for pre heat or stand alone heating system.*

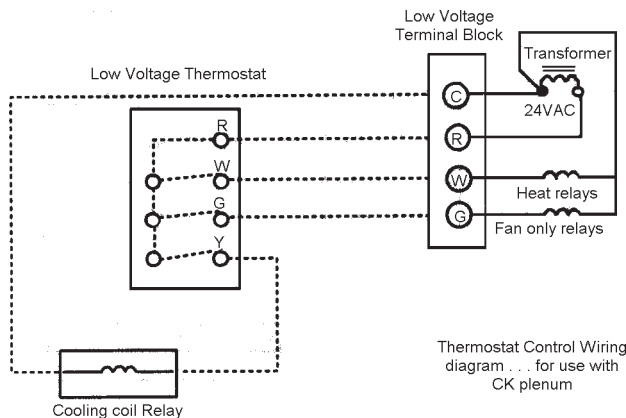
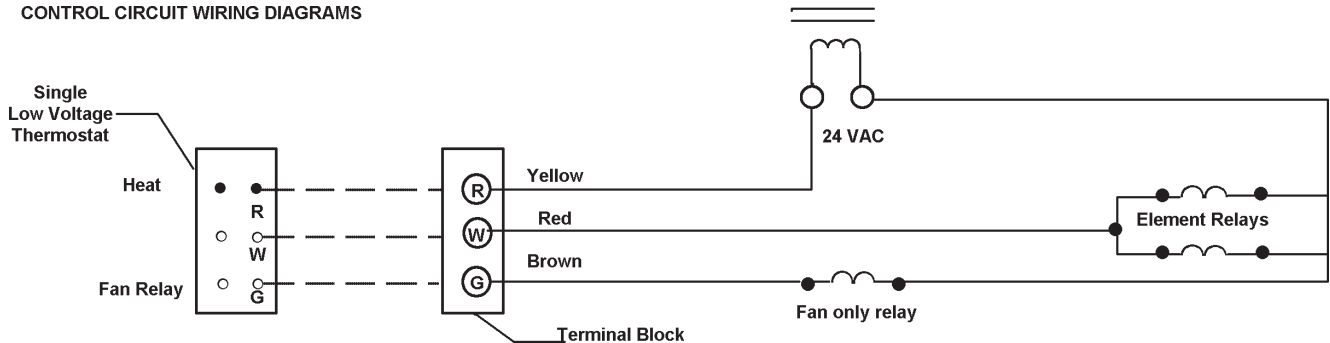
Options
2 S stage Control for single or three phase models
Modulating thermostat for SSR control
Inbuilt thermostat- Nema 4X
Inbuilt thermostat - 2 stage Nema 4X
Duct sensor for modulating thermostat
Motor substitution to increase or decrease CFM, standard 1/4 and 1/2 HP
Disconnect S switches- 30 through 100 Amp, 3 Pole
Solid State Relays- 25, 45 and 75 Amp
No diffuser for inline duct installation

**MODEL CK PLENUM INSTALLATION INSTRUCTIONS**  
**TESTED AND APPROVED BY ETL TESTING LABORATORIES No 500505**

**CAUTION:** Turn off power source for the heater before attempting installation, maintenance or repairs. Lock, tape or tag circuit breaker or fuse so that power cannot be turned on by accident. Failure to do so could result in personal injury or shock.

**INSPECT HEATER:** Remove heater from carton and check to be sure blower wheel is free-turning, and that element assemblies are in place. Be sure filter is in proper position and not torn or damaged.

**CONTROL CIRCUIT WIRING DIAGRAMS**



**Control Wiring:** Connect thermostat to terminals R and W for heating, and to R and G for cool air only. This can be done with a single stage heat-cool thermostat or a single stage heat only thermostat and a separate fan only switch to control the fan-relay (optional). Some models have two stage operation (optional) and are provided with terminals W1 and W2. If a single stage thermostat is used it should be connected to terminals R and W1 and a jumper wire installed from terminals W1 to W2; see enclosed control circuit wiring diagram.

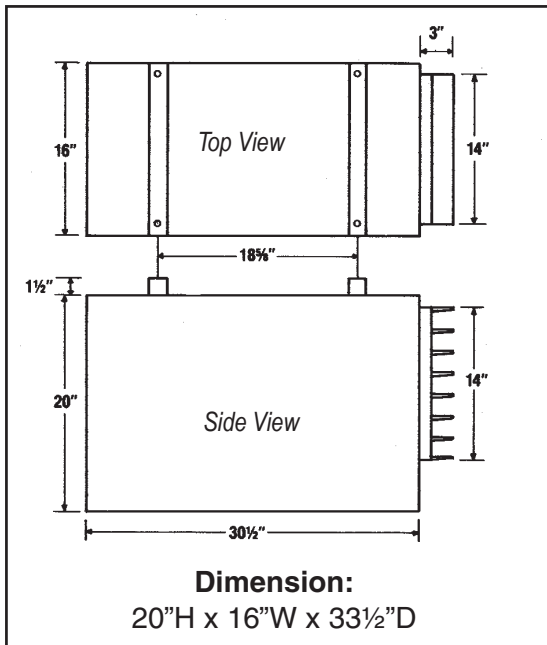
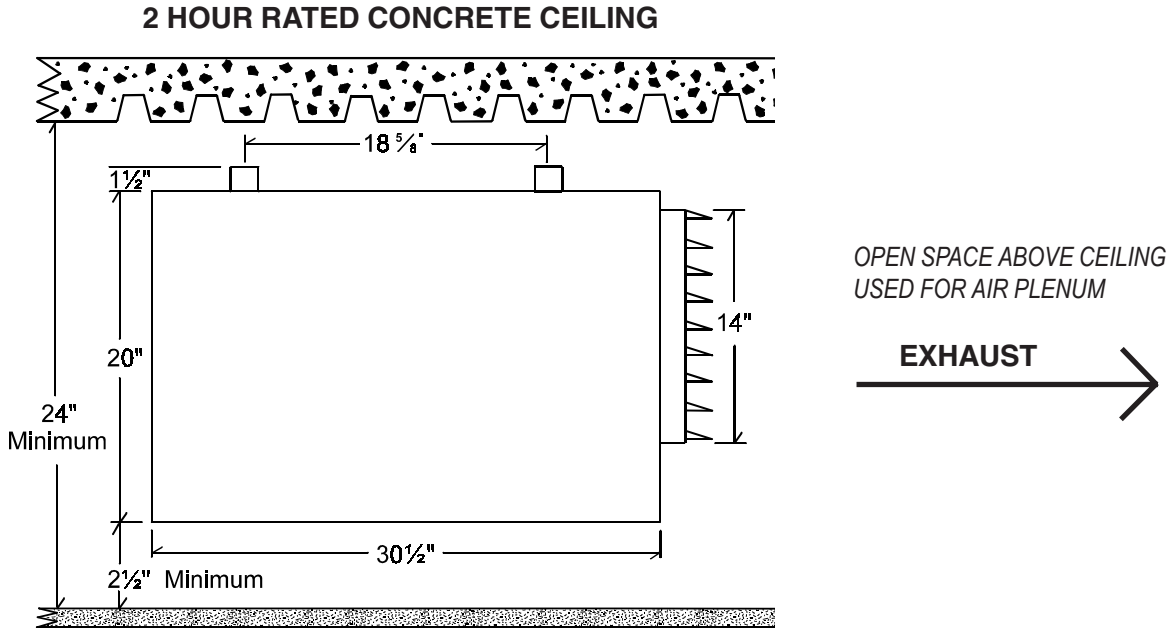
The model CK Air Heater plenum installation is a special application heater for use in the space created between a finished concrete ceiling and a drop type t-bar ceiling, an area normally hidden from view.

The heater is mounted horizontally with the integral suspension bracket provided in an area where service access can be readily maintained.

Safety screens are provided at both the air intake and discharge aperture. Fixed air directional louvers are standard.

A 24 volt control thermostat with a maximum temperature setting of 100° F will prevent operation of the unit should the ambient rise above 100° F. - the maximum ambient for which the heater is intended to operate.

**MOUNTING:** When the model CK unit is to be used in a return air plenum, the heater is to be mounted, as shown, in a vertical space of not less than 24" allowing for at least 1½" of clearance along the uppermost portion of the heater and a minimum of 2½" along the bottom of the heater. ½" diameter mounting holes are provided as shown in dimensional diagram. Do not store combustible materials in the immediate area in which the heater is desired to operate.

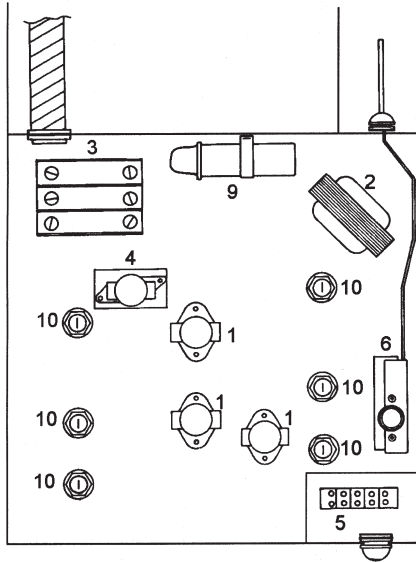


**Maintenance & Warranty**

The high quality and superior design of this unit will enable years of maintenance free performance. The filter should be replaced at a minimum of once a year depending upon the environment the heater is located in, some environments may require 2 to 3 times a year.

The CK Plenum heater carries a 5 year extended warranty for the heating elements only. All other components are covered for one year. The warranty requires that the owner, or his agent, install the equipment in accordance with the National Electrical Code, any other applicable heating or electrical codes, and the manufacturer's installation instructions.

# CK Plenum Heater Replacement Parts List

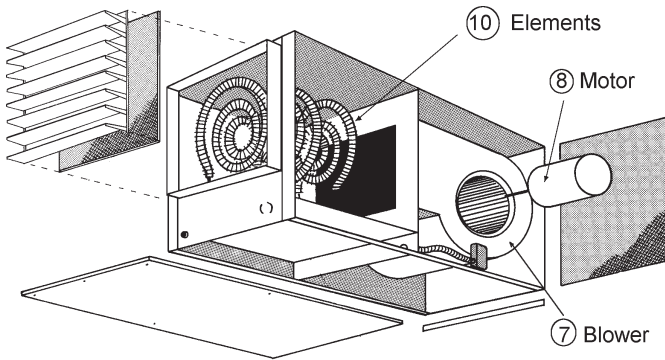


## CK Plenum Heater Replacement Parts

ITEM	Stock Order #	DESCRIPTION	WT.
1	60T11-313198	Auto Limit Control 175°	.04
2	4000-51-E07AE15	Low Voltage Transformer 40VA 120/24	1.48
	4000-09-E07K999	Low Voltage Transformer 40VA 208-240/24	
	4000-03-E07J999	Low Voltage Transformer 40VA 277/24	
	4000-51-E07K999	Low Voltage Transformer 40VA 380/24	
	4000-04-E07J999	Low Voltage Transformer 40VA 480/24	
3	42CF35AJANW	Contactora 50 Amp 3 Pole 24V Coil	1.25
	42BF35AJANW	Contactora 40 Amp 3 Pole 24V Coil	
4	15SH1-309571	Fan Delay Switch	.10
5	ELD-5-034	Low Voltage Terminal Block	.04
6	275-3228-00	Air Intake Temperature Control	.30
	R8222	Dual Speed Fan Relay	.36

## Replacement Motors & Blowers

7	90-7R-DD-.50PP	Blower - Small use with 1/4 HP Motor	10.8
	100-8T-DD-.50PP	Blower - Large use with 1/2 HP Motor	11.8
	120-8T-DD-.50PP	Blower - Large use with 1/2 HP Motor	15.1
8	FE1026S	1/4 HP Motor 240V	9.5
	FEH1026S	1/4 HP Motor 480V	
	FE1056S	1/2 HP Motor 240V	13.6
	FEH1056S	1/2 HP Motor 480V	
9	DAO-3GJ005	Capacitor 5MF 370V	.24
	DAO-3GJ007.5	Capacitor 7.5MF 370V	.30
	DAO-3GJ010	Capacitor 10MF 370V	.30



Element KW	Wt.	208 Volt Part #	240 Volt Part #	480 Volt Part #	
1.0	3.8		ELE-1KW240V	ELE-1KW480V	
1.6				ELE-1.6KW480V	
2.0			ELE-2KW240V	ELE-2KW480V	
2.5			ELE-2.5KW240V	ELE-2.5KW480V	
3.0			ELE-3KW240V	ELE-3KW480V	
3.3			ELE-3.3KW240V	ELE-3.3KW480V	
4.0			ELE-4KW240V	ELE-4KW480V	
4.16			ELE-4.16KW240V	ELE-4.16KW480V	
5.0			ELE-5KW208V	ELE-5KW240V	ELE-5KW480V
6.0				ELE-6KW240V	ELE-6KW480V
7.0	4.6		ELE-7KW240V	ELE-7KW480V	
8.0			ELE-8KW240V	ELE-8KW480V	
8.33			ELE-8.33KW240V	ELE-8.33KW480V	
10.0		5.5	ELE-10KW208V	ELE-10KW240V	ELE-10KW480V