

# Compact Fan Forced Cabinet Heater KCF Series



**Model Code:**

KCF 2/3/4 -24 20 -1 -R -T -DS1  
 A B C D E F G H

**A: Series**  
**B: Length**  
**C: 20 - 208V 24 - 240V  
 27 - 277V 48 - 480V**  
**D: Watts (20=2000 - 50=5000)**  
**E: -1 single phase -3 three phase**  
**F: Recess or Surface mount**  
**G: SP Stat**  
**H: Double Pole Disconnect Switch**

- Fan-Forced heat
- Aluminum fin element
- Squirrel cage blower
- 1 or 3-phase
- Standard color: almond
- Ceramic element
- 18 gauge cabinet
- Capillary tube limit
- Powder-coated
- 5-year limited warranty



## The KCF Series Cabinet Heater

The King heavy KCF cabinet heater can be placed almost anywhere. Typical uses are hall or entryways where a deep cabinet heater would be too intrusive. The slim design is great for schools, office, air terminals, auditoriums, apartments, restaurants, churches, factory's, theaters and other locations where a clean impact resistant 18 gauge construction and entry way or comfort heating is needed. The KCF uses the time tested ceramic core heating elements that King developed over 50 years ago and have a very long life. Available in a slim 4" surface mount or the recess in wall installation. A sub-base is available when installing close to the floor to fill the gap. Thermostats, Contactors and Disconnect switches are available as options. Textured powder coated finish in an almond color. KCF model adds quiet tangential fans in the bottom of the cabinet to help move the heated air out of the cabinet. KCF model is not for residential use unless you add the Manual reset limit option.

**Ordering Information** \*Add suffix -1 for single phase, -3 for three phase \*Add suffix -R for recessed mount, -S for surface mount

	MODEL	VOLTS	WATTS	(1ph) AMPS	(3ph)	BTUH(000)	#of BLOWERS	CFM	LENGTH	SHIP WEIGHT lbs
<b>208V</b>	KCF2-2010	208	1000	4.8	2.8	3.42	1	70	24"	35
	KCF2-2020	208	2000	9.6	5.6	6.8	1	70	24"	35
	KCF3-2030	208	3000	14.4	8.3	10.2	2	140	36"	45
	KCF4-2040	208	4000	19.2	11.1	13.6	3	210	48"	55
	KCF4-2050	208	5000	24	13.9	17	3	210	48"	55
<b>240V</b>	KCF2-2410	240	1000	4.2	2.4	3.4	1	70	24"	30
	KCF2-2420	240	2000	8.3	4.8	6.8	1	70	24"	35
	KCF3-2430	240	3000	12.5	7.2	10.2	2	140	36"	45
	KCF4-2440	240	4000	16.7	9.6	13.6	3	210	48"	55
	KCF4-2450	240	5000	20.8	12.0	17	3	210	48"	55
<b>277V</b>	KCF2-2710	277	1000	3.6	n/a	3.4	1	70	24"	30
	KCF2-2720	277	2000	7.2	n/a	6.8	1	70	24"	35
	KCF3-2730	277	3000	10.3	n/a	10.2	2	140	36"	45
	KCF4-2740	277	4000	14.4	n/a	13.6	3	210	48"	55
	KCF4-2750	277	5000	18	n/a	17	3	210	48"	55
<b>480V</b>	KCF2-4810	480	1000	2.1	1.2	3.4	1	70	24"	30
	KCF2-4820	480	2000	4.2	2.4	6.8	1	70	24"	35
	KCF3-4830	480	3000	6.5	3.6	10.2	2	140	36"	45
	KCF4-4840	480	4000	8.3	4.8	13.6	3	210	48"	55
	KCF4-4850	480	5000	10.4	6	17	3	210	48"	55

## Engineering Specifications

Contractor shall supply and install KCF Series cabinet heaters manufactured by King Electrical Mfg. Company. Heaters shall be of the wattage and voltage as indicated on the plans.

**Construction:** Heaters shall be constructed in 18 gauge galvanized Steel with epoxy powder-coated manufacturer's standard finish. A louvered front cover with intake and outlet grille will protect element area and provide ample air flow to dissipate heated air.

**Element:** The superior performance comes from the proven technology of the ceramic thermal storage heater core. A 7/8" diameter aluminum tube is filled with a special high density ceramic that stores the thermal energy. The oversized fins (4.875 in<sup>2</sup>) are made from durable (0.015" thick) high grade aluminum which produces better heat transfer than other elements. The benefit of the technology comes when the thermostat is turned off and the element continues to radiate heat. It also reduces temperature swings by heating and cooling more evenly. A fired refractory ceramic core with two large diameter Nickel Chromium

coils attached with high temperature stainless connectors and stranded Nickel wire, terminated in a junction box.

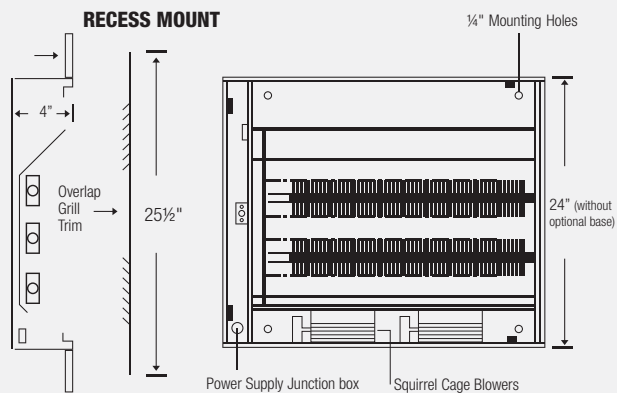
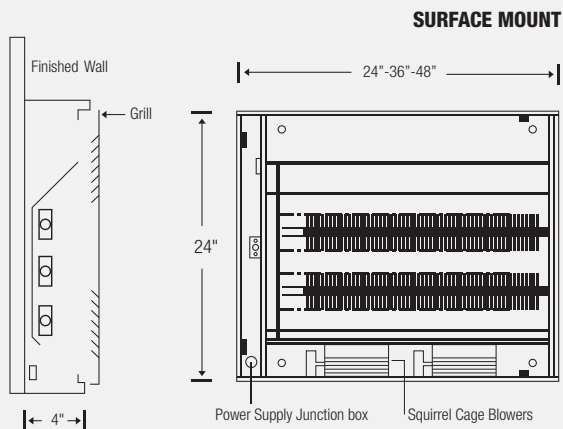
**Controls:** A built-in thermal cutout shall automatically shut off the heater in case of overheating. A built-in thermostat for temperature control will have a range from 40° - 95°F and be of the high accuracy capillary tube-type. Disconnect switch and contactors will be provided if necessary.

**Blower and Motor:** Up to 3 tangential cylindrical blowers, delivering 70 CFM each, shall be driven by a shaded pole, permanently lubricated, C-frame type motor with impedance protection and sealed bearings. Motors shall be the same voltage as the heater. All 480V units use 277V motors and contactors. This requires a neutral connection.

**Approvals:** cULus

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## Mounting Data

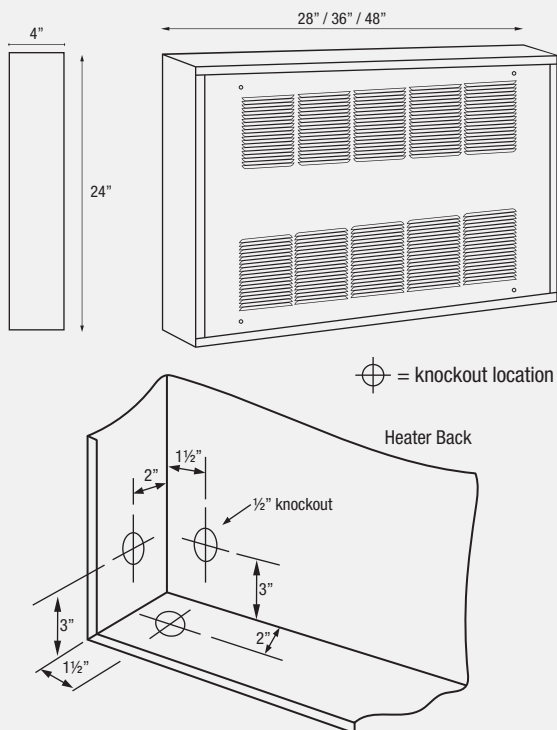


**MOUNTING NOTE:** 1" minimum mounting height from finished floor to allow clearance for the grill overlap.

## Control Options

- A line voltage terminal block can be provided for wiring to a remote line voltage thermostat.
- A power contactor with line voltage coil can be provided to remotely switch the heater.
- A power contactor and 24V transformer can be provided to remotely switch the heater.
- A 3-position switch can be provided for manual HEAT/FAN/OFF control.
- A 2-Pole Disconnect switch can be provided for 1-Phase heaters.
- A 3-Pole Disconnect can be provided for 3-Phase heaters.
- A floor sub-base can be provided for direct floor contact.
- A built-in 1-Pole thermostat can be provided for convenience.
- A built-in 2-Pole thermostat can be provided for convenience.
- A tamperproof built-in thermostat can be provided without a knob, temperature adjustments are made with a screw driver.

## Dimensional Data



## Control Options

ADD SUFFIX	DESCRIPTION
-RT	Line Voltage Terminal Block
-CX	Power Contactor
-RT24	24 Volt Contactor & Transformer
-3PS	3-Position Switch
-DS1	Double Pole Disconnect Switch (1-Phase)
-DS3	Three Pole Disconnect Switch (3-Phase)
-SB-24	Subbase - 24", 2" tall, 3" deep
-SB-36	Subbase - 36", 2" tall, 3" deep
-SB-48	Subbase - 48", 2" tall, 3" deep
-T	25 Amp Single Pole Thermostat w/Knob
-T2	25 Amp Double Pole Thermostat w/Knob
-TP	25 Amp Tamperproof (slotted shaft), single pole

## High Mass Ceramic Element

