

6300 Series Multiple Angle Cabinet Unit Heater

Product Specifications



The electric cabinet unit heater is designed for mounting in any position, fully recessed, semi-recessed or surface mounted. All capacities, voltages, physical sizes, grille arrangements and options shall be as specified on the plans. All units must be field convertible to the following:

1. For control by a field supplied remote thermostat.
2. Load management control with an external dry switch.
When closed unit operates under control of either the internal or the external thermostat. When open, unit turns off.
3. Any grille arrangement.

CABINET & CONSTRUCTION: The cabinet shall be constructed of heavy duty 16 gauge Zinc coated steel. The heater shall have a removable front door for easy access to the control panel, elements, motor-blower assembly, filters and all internal components. The grill configuration must be easily field convertible to any air flow configuration (by removal of no more than four fasteners). The cabinet shall have a textured finish of two coats of powder coat epoxy and be suitable for use with optional kick space base. Made in U.S.A.

HEATING ELEMENTS: The heating elements shall be warranted for 1 year and shall be non-glowing design consisting of special high temperature resistance wire enclosed in an incoloy sheath to which steel fins are furnace brazed. The heating elements shall be located directly in front of the blower discharge air for uniform heating. They shall be mounted with a single anchor at one end to minimize effects of thermal expansion and contraction.

SAFETY CUTOFF: Thermal safety limits shall be built into the system to automatically shut off heater in event of overheating due to any cause. The safety cutouts shall be of two types:

- A. The primary limit shall be an automatic capillary type to sense the heat along the full length of the heating elements. It shall de-energize the heaters by opening the coil circuit on the heating contactors.
- B. The secondary limit shall be a manual reset thermal device to interrupt power to the heating elements.

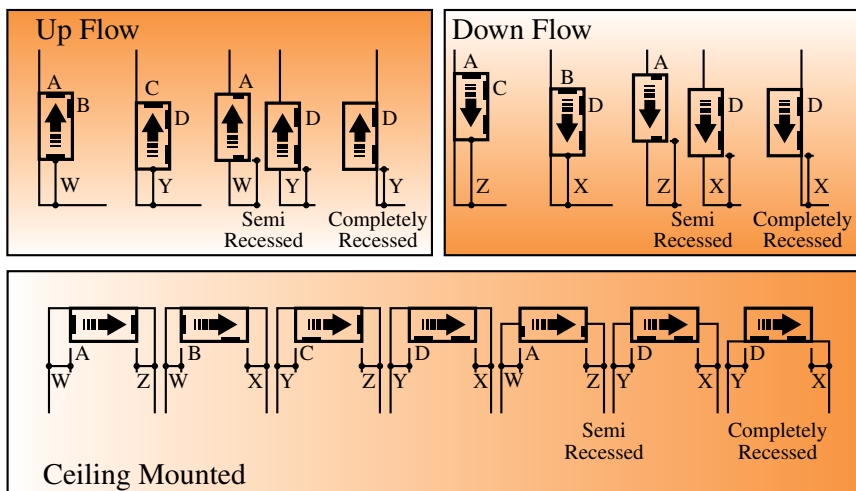
MOTOR AND BLOWER ASSEMBLY: The motors and blowers shall be direct drive and resiliently mounted on rigid heavy gauge frame for quiet operation and long life. The motor shall be two-speed, shaded pole type, rated for the voltage (480 to 600 Volts are single speed only). Each shall have built-in automatic reset overload protection and are life time lubricated. The motor shall be vented and mounted in the air stream to provide maximum cooling of the motor.

HIGH AND LOW HEAT RANGES: All units will be supplied as standard with a switch for selecting full heat at high fan speed or reduced heat at low fan speed (On 480 & 600 Volt units the switch changes the heat but not the fan speed).

OVER CURRENT PROTECTION: Circuit breakers shall be provided for branch circuit protection where required by NEC. Circuit breakers are optional on all other heaters.

TEMPERATURE CONTROL: Integral factory installed thermostat shall be tamper resistant, linear capillary type. Optional setback thermostat available.

Mounting Configurations



KEY: W = 6" minimum, X = 12" minimum, Y = 0" or greater, Z = 24" minimum

NOTE: Semi-recessed units are to be recessed at a maximum of 3 1/2" unless grill configuration is front in and front out.

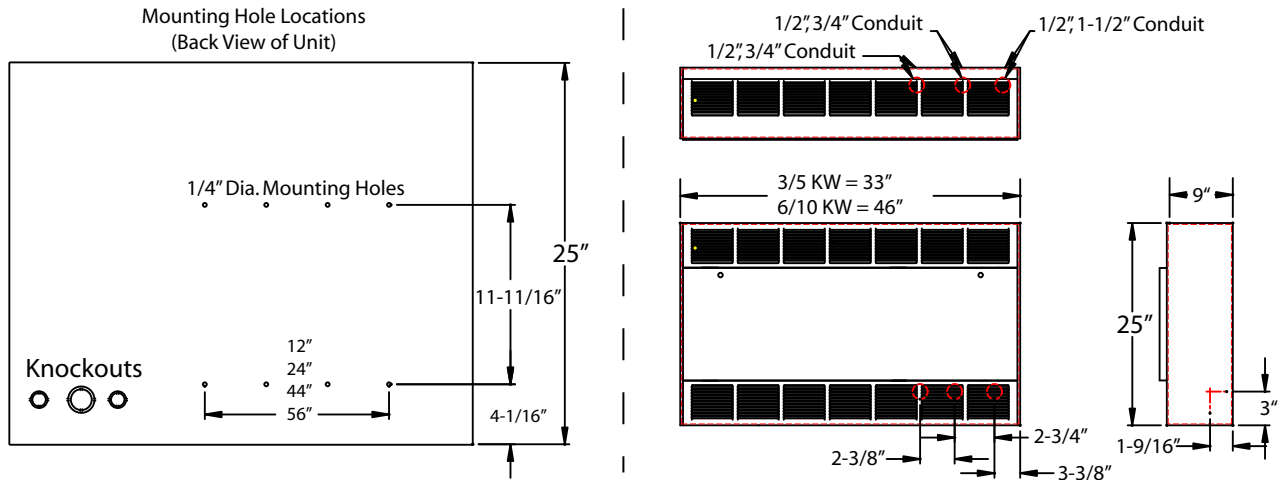
MOUNTING CLEARANCES: Proper clearances are indicated for each mounting configuration on all positions. Minimum clearance from side of unit to the wall is zero inches. Mounting inches are provided in the back of the cabinet, accessible through the blower compartment, if necessary, remove blower deck if additional mounting screws or bolts are desired. Blower deck may be slipped forward by loosening four screws at the front to provide access to mounting holes.

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Product Features (2-24 KW; All Voltages)

- For commercial and institutional application such as stores, schools, offices, transportation terminals, churches, entranceways.
- Wall or ceiling mount; surface, semi-recessed or fully recessed.
- (8) air inlet and outlet configurations.
- Capacities from 2-24 KW with 230 to 1,000 CFM
- Motors are two speed, shaded pole, resilient mounted, direct drive. High/low heat and blower speed offer versatility.
- ETL Listed.
- Beige powder coated finish
- Choice of eight standard control options include unit or wall mounted 120 or 24V thermostats, with or without built-in control transformers, setback thermostat option
- Industrial type finned tubular elements.
- Easily removable fan and element decks for simplified maintenance.
- Full length thermal protection.
- Limited warranty-one year.
- Optional locking front cover

Product Dimensions



Stocked Models & Features

HEATER LENGTH	MFG CATALOG NUMBER	MFG MODEL NUMBER	HIGH				LOW				VOLTS	PHASE	WT. (LBS)
			KW	BTUs	AMPS	CFM	KW	BTU's	AMPS	CFM			
33"	06671402	6333D052033B30D0F	5	17065	25.0 / 17.6	250	3	10239	15.4 / 9.2	230	208	1-3*	99
	06671502	6333D052433B30D0F			21.8 / 15.4				13.5 / 8.2		240	1-3*	
	06670802	6333D054833B30D0F			7.8				4.6		480	3	
46"	06671902	6346D102433B30D0F	10	34130	43.6 / 30.7	500	6	20478	26.9 / 16.2	460	240	1-3*	130
	06672002	6346D104833B30D0F			15.4				8.1		480	3	
International Models													
33"	04736202	6333D053834B30D0F1	5	17065	7.6	250	3	10239	4.56	230	380	3 (4-Wire)	99
	04736302	6333D054134B30D0F1			6.97				4.18		415		
46"	04736402	6346D103834B30D0F1	10	34130	15.2	500	6	20478	9.12	460	380		130
	04736502	6346D104134B30D0F1			13.94				8.36		415		

*Factory wired for 3-phase, field convertible to 1-phase.

- 01 / 3 phase field convertible with 24 Volt control circuit.
- 0 Disconnect switch, dust filter, & high low operation.
- 0 Built-in thermostat and field convertible for remote thermostat.

Accessories

MFG CATALOG NUMBER	MFG MODEL NUMBER	SIZE	DESCRIPTION
DUCT COLLAR			
04415602	DC-33	33"	The same model is used for the inlet or outlet. If duct collars are required for both inlet & outlet then 2 must be ordered.
04415702	DC-46	46"	
04415802	DC-66	66"	
04415902	DC-79	79"	
RECESSING TRIM FRAMES			
04537802	TF-33	33"	Recessing Trim Frames should be ordered to "trim-out" any recessed or semi-recessed installation.
04537902	TF-46	46"	
04538002	TF-66	66"	
04538102	TF-79	79"	

MFG CATALOG NUMBER	MFG MODEL NUMBER	SIZE
Fresh Air Make-Up Intake Flange & Kickbase		
07715802	FAM33	33"
07715902	FAM46	46"
07716002	FAM66	66"
07716102	FAM79	79"
Kickbase (Pedestal) ONLY		
07715402	KB33	33"
07715502	KB46	46"
07715602	KB66	66"
07715702	KB79	79"

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Locking Cover Option



SD Setback Thermostat Option

6300 SD Series Features

- Multi-stage operation-only using the heat you need, when you need it
- 65 second delay between stages
- Sensor has a 94 degree angular range and a 16' linear range
- 50-90 degree thermostat range
- Setback capability up to 12 degrees - field set. Achieves energy savings when area not occupied and heat not needed
- Purge cycle of 90 seconds allows residual heat to be exhausted from heater
- Factory pre-programmed for system type/voltage
- Easy steps to set thermostat and setback feature
- Occupancy sensor defaults to economy mode after one hour, up to 12 degree setback
- Sensor has a 94 degree angular range and a 16' linear range

LENGTH	KW		Elements per Heat Deck		CFM		1-PHASE UNITS - AMPS (HIGH)				3-PHASE UNITS - AMPS (HIGH)			
	High	Low	Left	Right	High	Low	208V	240V	277V	600V	208V	240V	480V	600V
													3-WIRE	
33"	2	1	2		250	230	10.6	9.3	8.12	3.8	9.2	8.1	4.1	3.3
	3	2	3				15.4	13.5	11.7	5.5	9.2	8.1	4.1	3.4
	4	2	4				20.2	16.7	15.3	7.2	13.4	11.8	6	6.22
	5	3	5				25	21.8	19	8	17.6	15.4	7.8	5.5
	6	3	6				29.9	26	22.6	10.5	17.6	15.4	7.8	6.3
46"	4	2	2		500	460	21.1	18.6	16	7.46	18.7	16.2	8.1	6.5
	6	4	3				30.8	26.9	23.1	10.79	18.4	16.2	8.1	6.5
	8	4	4				40.4	35.2	30.5	14.12	26.7	23.4	11.7	9.4
	10	6	5				50	43.6	37.7	17.5	35.1	30.7	15.4	12.3
	12	6	6				59.6	51.9	44.9	20.8	35.1	30.7	15.4	12.3
66"	6	3	2	2	750	690	31.8	27.9	24.1	11.3	27.6	24.3	12.3	9.8
	9	6	3	3			46.2	40.4	35	16.3	27.6	24.3	12.3	9.9
	12	6	4	4			60.6	52.9	45.8	21.3	40.1	35.2	17.7	15.6
	15	9	5	5			75	65.4	56.7	25.5	52.6	46.1	23.1	15.7
	18	9	6	6			89.4	77.9	67.5	31.3	52.6	46.1	23.1	18.5
79"	8	4	2	2	1000	920	42.3	37.1	32	14.9	36.7	32.3	16.2	13
	12	8	3	3			61.5	53.8	46.5	21.6	36.7	32.3	16.2	13
	16	8	4	4			80.7	70.5	61	28.2	53.4	46.8	23.5	18.8
	20	12	5	5			NA	87.1	75.4	34.9	70.1	61.4	30.7	24.6
	24	12	6	6			NA	NA	89.8	41.6	70.1	61.4	30.7	24.6

Note: Amps include motor Amp loads. Note: Please see page 60 for custom color availability - add 10% to net heater cost.
 Note: Products listed in this section are custom built and subject to 100% cancellation/restocking charges.

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Custom Specified Models

HOW TO DESIGNATE A MODEL:

63	46	D	08	24	1	2	B3	S	D	O	F
Series Number	Cabinet Size 33=33" 46=46" 66=66" 79=79"	Air Flow Configuration A = Bottom in / Top out B = Bottom in / Front out C = Front in / Top out D = Front in / Front out	Element KW 2KW through 24KW See model chart for length and KW options.	Element Voltage 20 = 208V 24 = 240V 27 = 277V 41 = 415V 48 = 480V 57 = 600V	Phase 1 = Single Phase 3 = Three Phase	Number of Wires in Electrical Service 2 or 3	Control Options B3, B4, B5, B6 SD - Setback (see control options chart)	Summer Fan Switch S = Included O = Not Included	Disconnect Option C = Circuit Breaker D = Disconnect Switch O = None	Motor Fusing Option M = Required O = Not Required	Disposable Filter Option F = Required O = Not Required L - Locking Front Cover
Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12

Control Option (Step 8 on Model Designator)

SUFFIX	DESCRIPTION
B3	In-Built 1-Stage Stat and Relays which are operated by an internal 24 Volt source. (40 °F-110 °F)
B4*	In-Built 1-Stage Stat and Relays which are operated by an internal 120 Volt source. (40 °F-110 °F)
B5	In-Built 2-Stage Stat & Relays which are operated by an internal 24 Volt source. (40 °F-110 °F)
B6*	In-Built 2-Stage Stat and Relays which are operated by an internal 120 Volt source. (40 °F-110 °F)
SD	Setback Thermostat

*Motor fusing included for units with 120V internal or external control source.

Disconnect Option "C" Circuit Breaker (Step 10 on Model Designator)

KW	SINGLE PHASE				THREE PHASE			
	208V	240V	277V	600V	208V	340V	480V	600V
2								
3								
4								
5								
6								
8								
10								
12								
15								
16								
18								
20	N/A							
24	N/A	N/A						936

Circuit breakers shown in shaded areas are required by NEC because unit exceeds 48 Amps, all others listed are optional unless otherwise stated.

Disconnect Option "D" Disconnect Switch (Step 10 on Model Designator)

KW	SINGLE PHASE				THREE PHASE			
	208V	240V	277V	600V	208V	340V	480V	600V
2								
3								
4								
5								
6								
8								
10	N/A							
12	N/A	N/A						
15	N/A	N/A	N/A		N/A			
16	N/A	N/A	N/A		N/A			
18	N/A	N/A	N/A		N/A			
20	N/A	N/A	N/A		N/A	N/A		
24	N/A	N/A	N/A		N/A	N/A		

Disconnect option is not available on heaters with circuit breakers.

Fan Switch & Motor Fusing (Steps 9 & 11 on Model Designator)

SUFFIX	DESCRIPTION
S	Summer Fan Switch
M	Motor Fusing (when not provided by control option)

Filter Option (Step 12 on Model Designator)

SUFFIX	SIZE	Qty. REQ'D	FILTER TYPE
F	33"	1	Replaceable
	46"	1	
	66"	2	
	79"	2	
W	33"	1	Washable
	46"	1	
	66"	2	
	79"	2	
L	Locking Cover		