3000 Series Fan Forced Ceiling Heater

(Income of the second	Standard Models						
. Milling	Wł	IITE	SELECTABLE		MAX	MAX	
All and the second	UPC 686334	MODEL		ATION WATTAG		VOLTS	MAX AMPS
maddel 11 Million	948821	E3035DWBW	75	50 or 1500	5120	120	13
UNTERTER.	948838	E3038DWBW	90	00 or 1800	6143	120	15
	948883	H3032DWBW	750 or 100	00 - 1500 or 200	0 6826	208 / 240	8
Manufactured in U.S.A.	948906	G3032DWBW		2000	6826	277	7
Selectable Wattages, Back Cans, And P • Wattage selectable at time of installation - models shipped v				Field Install	ed Acce	essories	
 Fan purge circuit (requires 4 wire supply when remote sing with the unit) 	rmostat is used	UPC 686334	MODEL	DES	SCRIPTION	I	
 Models may not be used with remote double pole thermostat 				30R	24 VOLT RELAY		
Drywall depth embossments on back can				30R2	120 VOLT RELAY		
Powder coated 18 Gauge steel front				30R8	208/240 VOLT RELAY		LAY
Manual reset thermal limitSteel block fin element			951494	30R7	277	VOLT REL	AY

- Propeller style fan blade 1060 RPM / 100 CFM
- Weight 6 lbs.
- Optional field installed control voltage relays available
- Rough in dimensions 9 1/4" Wide 12 1/8" High 3 5/8" Deep
- 9 25/32" Wide 13" High ٠ Grill dimensions:

UPC 686334	MODEL	DESCRIPTION
996846	30R	24 VOLT RELAY
996853 30R2 120 VOLT		120 VOLT RELAY
951500	30R8	208/240 VOLT RELAY
951494	30R7	277 VOLT RELAY
996976	303EX8RW	1" EXTENDER
996969	303EX16RW	2" EXTENDER
996952	303EX32RW	4" SURFACE MOUNT FRAME
460033	TB3000	T-BAR FRAME

3380 Series Commercial Fan Forced Ceiling Heater

Product Specifications

Furnish and install Electric Forced Air Heaters, Series 3380 where specified. The heaters shall be constructed of a heavy gauge steel housing. The roughin dimensions are 19-3/16" wide x 4" deep. The finish shall be baked-on powder coat in Ceiling White color. The units shall be available in ratings from 1500 through 4800 Watts with an optional factory installed single pole thermostat.

The heaters shall have a low speed 600-RPM motor, which drives a vane axial blower to deliver a quite 175 CFM's of down flow air. The heating element shall be of the block finned type with large, parallel steel fins for quick heat transfer. Unit shall have as standard, a manual reset capillary type limit control, for added safety. Unit weight 22 pounds.



Manufactured in U.S.A.

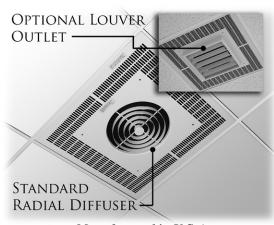
I eutities & Standard Wodels									
Recess, Surface, Or "T" Bar Mounting	UPC# 686334	MODEL	KW	BTU'S	VOLTS	РН	AMPS	TEMP RISE	
• Fan purge circuit (requires 4 wire supply when	366489	E3383D-RP	1.5	5120	120		12.5	27 °F	
remote wall thermostat is used with the unit)	366298	F3386D-RP	4.0	13600	208		19.2	72 °F	
Disconnect switchWhite powder coated 18 Gauge steel grill	366304	F3387D-RP	4.8	16382	208		23.1	76 °F	
 Manual reset thermal limit 	366342	HF3384D-RP	2.0 / 1.5	6826/5120	240/208		8.3/7.2	36 °F	
Steel block fin element	366359	HF3385D-RP	3.0 / 2.3	10200/7679	240/208	1	12.5/10.8	54 °F	
• Vane axial fan blade:	366366	HF3386D-RP	4.0 / 3.0	13600/10200	240/208		16.8/14.4	72 °F	
1.5KW - 4.0KW units: 700 RPM motor; 175 CFM 4.8KW units: 900 RPM motor; 200	366373	H3387D-RP	4.8	16382	240		20	76 °F	
CFM 4.0KW units. 900 KHW motor, 200	366502	G3383D-RP	1.5	5120	277		5.4	27 °F	
Rough in dimensions:	366410	G3384D-RP	2.0	6826	277		7.2	36 °F	
14 3716" wide x 19 5/16" high x 4" deep • Grill dimensions:	366427	G3385D-RP	3.0	10200	277		10.8	54 °F	
¹ 5 3/8" wide x 20 9/64" high	366434	G3386D-RP	4.0	13600	277		14.4	72 °F	
Optional factory installed thermostat	366441	G3387D-RP	4.8	16382	277		17.3	76 °F	

Features & Standard Models

Accessories

UPC 686334	MODEL	DESCRIPTION	WT.
377850	BOX3310	Additional Back Can	10 lbs
366465	3380EX33	Surface Mounting Adapter	1 lb
366458	TB3380	2X2 T-Bar Mounting Kit	7 lbs
Thermostat- Add suffix T to model		Factory installed single pole, positive off. Range-60° F-105°	' F

3480 Series Commercial Fan Forced Recessed Mounted Ceiling Heater



Manufactured in U.S.A.

Notes

Optional controls must be factory installed. Field installation is not acceptable and violates Listing and factory warranty.

Wall mounted control panels may control multiple units but cannot be used if in-built controls are selected.

480V units include 24V transformer and relay as standard (A1) -only TS option control section can be added. Depth dimension of all 480V models is 10-7/8"

Degree F air rise is measured at 710 F.P.M. and 425 CFM. Throw designed for 8 to 12 foot ceilings. db RE 10^{-12} Watt=63.9

Unit Weight: 50 lbs.

Recommended Remote Thermostats:								
Line Voltage:	Single Phase 208-240V	ET5DS						
C	Single Phase 277V	ET5SS						
	Three Phase	TW1512						
Low Voltage:		UT1001						

Low Voltage

Product Specifications

Contractor shall supply and install heavy duty ceiling mounted forced air electric heater(s) of the wattage, voltage and phase as indicated on the plans. The heater shall be so designed to provide an even distribution of heated air to the space to be heated by drawing return air in the periphery of the heater, across and through the element and be discharged from the center section of the heater by means of an electric motor and axial flow fan blade.

Heaters shall be recessed type and mounted flush with the finished ceiling. The return grille assembly shall be constructed of a one piece heavy gauge steel with 1/4" slots for return air and concentric rings for uniform air discharge. Grille assembly shall be attached to chassis by tamper-resistant (allen head) machine screws. All parts of enclosure shall be heavy Gauge steel, zinc coated both sides and finished in neutral off white powder coat paint.

Enclosure shall be constructed of 1/6" x 3/8" rounded edge horizontal steel louvers which shall be spaced for maximum opening of 5/16". Louvers shall be welded at every intersection to evenly spaced 1/8" diameter vertical members. Discharge grille to have concentric rings for uniform air discharge. Grille assembly shall be attached to chassis by tamper-resistant (allen head) machine screws. All part of enclosure shall be heavy gauge steel, Zinc coated both sides and finished in neutral off white colored powder coat finish.

Motor shall be permanent lubricated, unit bearing, totally enclosed, impedance protection. Motors shall operate at no more than 1300 RPM and shall be same voltage as the heater.

Heaters shall have a rating of 425 CFM at 710 F.P.M. with a maximum temperature rise of 44°F and 63.9 DB RE 10¹² Watt.

Element assemblies shall consist of two or three corrosion resistant steel sheathed type elements mechanically bonded to common corrosion resistant steel fins. Each sheathed element shall consist of helically coiled Nickel Chromium alloy resistant wire completely embedded in and surrounded by magnesium oxide, enclosed and wedged into corrosion resistant steel sheaths. Elements shall have 2" cold conductor pins extending into sheath and shall have a density of no more than 60 Watts per inch.

Heaters shall be equipped with a "manual reset" thermal overload which disconnects elements and motor in the event normal operating temperatures are exceeded. For safety, if opened due to abnormal temperature, thermal overload shall remain open until manually 3/8" FLANGEreset. Automatic reset thermal overloads which allow the element to continue to cycle under abnormal conditions will not be accepted. Heaters shall be ETL listed.

Features

- White powder coated 20 Gauge grill.
- 208V, 240V, & 277V units have manual reset thermal limit.
- 480V units have manual reset thermal limit, 24V control transformer, and 24V relay (A1 suffix).
- Enclosed steel fin sheath element.



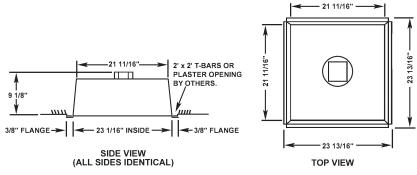
• Rough in dimensions: 23-1/16" sq. x 9-1/8" deep. Standard Models

UPC# 686344	MODEL	KW	BTU'S	VOLTS	PH	AMPS	TEMP RISE
367653	F3482			208	1	9.6	
367677	H3482	2	6826	240	1	8.3	15 °F
367660	G3482		0820	277		7.2	15 F
318471	P3482A1	1		480	1	4.2	
470186	J3482			208		5.6	
470209	K3482	2	6826	240	3	4.8	15 °F
470247	Y3482A1			480	1	2.4	
367684	F3483			208		14.4	
367707	H3483	3		240	1	12.5	
367691	G3483	3		277		10.8	
318488	P3483A1		10200	480	1	6.3	22 °F
470193	J3483			208		8.3	
470216	K3483	3		240	3	7.2	
470254	Y3483A1			480		3.6	
367714	F3484			208		19.2	
367738	H3484	4		240	1	16.8	
367721	G3484	4		277		14.4	
318501	P3484A1		13600	480		8.3	30 °F
367745	J3484			208	3	11.1	
367752	K3484	4		240		9.7	
318587	Y3484A1			480]	4.8	
367769	F3485			208		24.1	
367783	H3485	5		240		20.8	
367776	G3485			277	1	18.1	
318549	P3485A1		17000	480		10.4	37 °F
367790	J3485			208		13.9	
367806	K3485	5		240	3	12.1	
318402	Y3485A1			480		6.1	
366106	PT3480		Rece	ss Frame -	Weight	5 lbs.	

Factory Installed Control Sections

SUFFIX	DESCRIPTION
A1	Transformer with 24V Secondary and 24V Relay
S	Disconnect Switch
TA1S	Thermostat / Transformer / Disconnect Switch
TA1	Single Pole Thermostat and Transformer with 24V Secondary and 24V Relay
A1S	Transformer with 24V Secondary and 24V Relay and Disconnect Switch
T2	Double Pole Thermostat
T2S	Double Pole Thermostat and Disconnect Switch
R	Relay Control Voltage Same as Heater (control voltage field supplied)
R1	Relay 24V Control Voltage (control voltage field supplied)
R2	Relay 120V Control Voltage (control voltage field supplied)

Product Dimensions



3470 Series Commercial Fan Forced Surface Mounted Ceiling Heater

Product Specifications

Contractor shall supply and install heavy duty ceiling mounted forced air electric heater(s) of the wattage, voltage and phase as indicated on the plans. The heater shall so be designed to provide an even distribution of heated air to the space to be heated by drawing return air in the periphery of the heater, across and through the element and be discharged from the center section of the heater by mean of an electric motor and axial flow fan blade.

Motor: Motor shall be permanent lubricated, unit bearing, totally enclosed shaded pole type with impedance protection. Motors shall operate at no more than 1300 RPM and shall be same voltage as the heater.

Performance: Heaters shall have a rating of 425 CFM at 710 F.P.M. with a maximum temperature rise of 44°F and 63.9 DB RE 10^{12} Watt.

Element: Element assemblies shall consist of two or three corrosion resistant steel sheathed type elements mechanically bonded to common corrosion resistant steel fins. Each sheathed element shall consist of helically coiled Nickel Chromium alloy resistant wire completely embedded in and surrounded by Magnesium Oxide, enclosed and wedged into corrosion resistant steel sheaths. Elements shall have 2" cold conductor pins extending into sheath and shall have a density of no more than 60 watts per inch.

Thermal Overload: Heaters shall be equipped with a "manual reset" thermal overload which disconnects elements and motor in the event normal operating temperatures are exceeded. For safety, if opened due to abnormal temperature, thermal overload shall remain open until manually reset. Automatic reset thermal overloads which allow the element to continue to cycle under abnormal conditions will not be accepted.

Approval: Heaters shall be ETL listed.

Commercial and Institutional Applications: Use in - vestibules, entrance ways, lobbies, restrooms and small office and guard building applications.

Standard Models								
UPC# 686334	MODEL	KW	BTU'S	VOLTS	РН	AMPS	TEMP RISE	
367516	F3472			208		9.6		
367530	H3472	2	6826	240	1	8.3		
367523	G3472	2	0820	277	1	7.2		
324335	P3472A1			480		4.2	15 °F	
470155	J3472			208		5.6		
470162	K3472	2	6826	240	3	4.8		
470223	Y3472A1			480		2.4		
367547	F3473			208		14.4		
367561	H3473	3	10200	240	1	12.5		
367554	G3473	3	10200	277	1	10.8	22 °F	
324342	P3473A1			480		6.3		
323864	J3473		10200	208	3	8.3		
470179	K3473	3		240		7.2		
470230	Y3473A1			480		3.6		
367578	F3474			208	1	19.2	30 °F	
367592	H3474			240		16.8		
367585	G3474			277		14.4		
324359	P3474A1	4	13600	480		8.3		
367608	J3474			208		11.1		
367837	K3474			240	3	9.7		
324366	Y3474A1			480		4.8		
367615	F3475			208		24.1		
367639	H3475			240	1	20.8		
367622	G3475			277	1	18.1		
324373	P3475A1	5	17000	480		10.4	37 °F	
367646	J3475			208		13.9		
367844	K3475			240	3	12.1		
324380	Y3475A1			480		6.1		

Standard Models

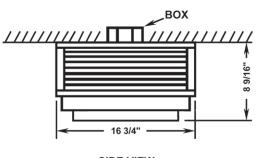
Factory Installed Control Sections

SUFFIX	UNITS	DESCRIPTION
TS	1-Phase	Single Pole Thermostat - range 50°-90°F and Disconnect Switch
TA1S	3-Phase	Single Pole Thermostat - range 50°-90°F & Transformer with 24V Secondary and 24V Relay & Disconnect Switch
A1S	1 or 3 Phase	Transformer with 24V Secondary and 24V Relay and Disconnect Switch



Manufactured in U.S.A.

Product Dimensions



SIDE VIEW (ALL SIDES IDENTICAL)

UPC 686334	MODEL	VOLTS	CONTACTORS	BOX SIZE	
605700	AF3401-24	208		12" x 12" x 4 1/2"	
605793	AH3401-24	240	1 @ 35 AMPS		
605854	AG3401-24	277			
605748	AF3402-24	208	2 @ 35 AMPS		
605786	AH3402-24	240		15" x 15" x 4 1/2"	
605847	AG3402-24	277			
605731	AF3403-24	208			
605779	AH3403-24	240	3 @ 35 AMPS	18" x 18" x 4 1/2"	
605830	AG3403-24	277			

Wall Mounted Control Panels

Notes

Optional controls must be factory installed. Field installation is not acceptable and violates Listing and factory warranty.

Factory installed control sections add 2-5/16" to the height of the unit.

Wall mounted control panels may control multiple units but cannot be used if In-Built controls are selected.

480V units include 24V transformer and relay as standard (A1) - only TS option control section can be added. Depth dimension of all 480V models is 10-7/8"

Degree F air rise is measured at 710 F.P.M. and 425 CFM. Throw designed for 8 to 12 foot ceilings. db RE 10^{-12} Watt=63.9

Unit weight: 32 lbs.

	Recommended	Remote Thermostats:	
		Single Phase 208-240V	ET5DS
		Single Phase 277V	ET5SS
İ		Three Phase	TW1512

Low Voltage:

UT1001

Product Description

For Surface Or Recessed Installation, Radiant Ceiling Panels radiate energy like the solar radiation which warms us, heats people and things not the air With no merce



people and things, not the air. With no moving parts, these heating panels create gentle warmth and toasty comfort.

Radiant Ceiling Panels provide a low surface temperature and broad heat distribution. Clean, gentle comfortable heat that is ideal for offsetting perimeter heat loss or neutralizing downdrafts over glass. These versatile and flexible panels may be used virtually anywhere in homes, schools, hospitals, motels and a broad variety of other commercial or industrial installations. *Manufactured in U.S.A.*

Product Specifications

Construction:

Radiant Ceiling Panels shall be made of highest quality steel casing. Front panel shall be painted with textured powder coated finish. Electric Resistance graphite element is fixed between dielectric material and insulation. Two inches of insulation is compressed to one inch by back panel to minimize upward heat loss and radiant efficiency. Radiant panels shall have 36" pre-wired flexible cable for easy installation and wiring connections.

Installation:

CP Series shall be designated as 2x2 or 2x4 size. All panels are 1" thick. The size shall be nominal dimension to be manufactured to fit drop ceiling systems. Standard units will fit regular "T" Bar frame. For regular or trim line or other frame sizes, special construction is required. RCP Series shall be used in recess mounting applications. RCP Series shall be 2" less in width to recess between nominal 24" center ceiling joists. RCP Series shall be complete with recess frame for finished construction. Accessories:

Surface mounting frames shall be optional for surface mounting the CP Series, and are Aluminum mill finish. Frames can be painted white to match panel.

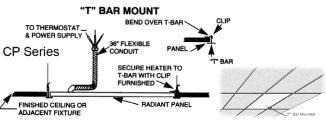
Options:

Silk-screening the exposed surface to match ceiling tiles is available, as well as silicone sealed metal parts for high humidity applications.

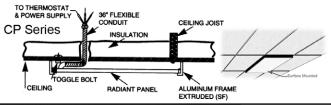
CP Series - "T" Bar & Surface Mounted

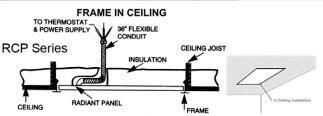
				-				
UPC	MODEL	WATTS	BTU's	AMPS	VOLTS	wт		
686334								
Dimensions: 2' x 4' (Nominal) x 1"								
458719	CP805			2	208			
458726	CP125	500	1707	4.2/2.1	120/240	20 lb.		
458733	CP705			2	277			
458740	CP807	750		4	208			
458757	CP127		2560	6.3/3.1	120/240	20 lb.		
458764	CP707			3	277			
	Dim	ensions:	2' x 2' (No	minal) x '	l"			
458771	CP802		250 853	1	208	13 lb.		
458788	CP122	250		2.1/1.0	120/240			
458795	CP702			0	277			
458801	CP803			2	208			
458818	CP123	375	1280	3.1/1.6	120/240	13 lb.		
458825	CP703			1	277			
459105	SF400 St	urface Fran	me for 2' x	4' Panels	(CP only)	10 lb.		
459099	SF2	00 Surface	Frame fo	r 2' x 2' Pa	inels	6 lb.		





FOR SURFACE MOUNTED UNITS USE STANDARD "T" BAR CEILING PANEL AND SURFACE MOUNTING FRAME.

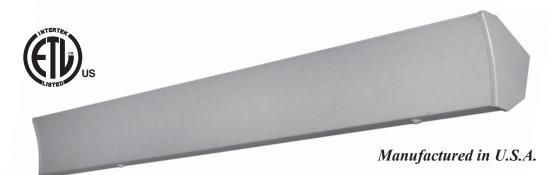




RCP Series - Frame in Ceiling Mounted

UPC 686334	MODEL	WATTS	BTU's	AMPS	VOLTS	WT
0	Dimension	s: 2' x 4' (Includin	ig Recessi	ng Frame)	
458832	RCP805			2	208	
458849	RCP125	500	1707	4.2/2.1	120/240	30 lb.
458856	RCP705			2	277	
458863	RCP807			4	208	
458870	RCP127	750	2560	6.3/3.1	120/240	30 lb.
458887	RCP707			3	277	
0	Dimension	s: 2' x 2' (Includin	ig Recessi	ng Frame)	
458894	RCP802			1	208	
458900	RCP122	250	853	2.1/1.0	120/240	19 lb.
458917	RCP702			0	277	
458924	RCP803			2	208	
458931	RCP123	375	1280	3.1/1.6	120/240	19 lb.
458948	RCP703			1	277	

CVX Series Radiant Cove Ceiling Heater



Product Description

Cove Heaters have a subtly contoured concave surface with a saw-tooth profile. The concave parabolic face plate performs a two-fold function: (1) it focuses the infrared rays and (2) directs the heat downward along cold perimeters and toward the center of the room. The sawtooth surface design increases the radiating surface area by 45%, thereby increasing the comfort level of the room faster and insuring more rapid recovery from heat losses.

Product Specifications

Furnish and install Electric Cove Heaters where specified. The heaters shall be constructed of .962" thick Aluminum. The heater surface shall be concave in contour and saw-tooth in profile. The finish shall be of powder coat white finish. The heaters shall be available in ratings from 450 through 1250 Watts, at 120, 240, 208 and 277 Volts. The heating element shall be of nichrome wire, embedded in Magnesium Oxide powder, enclosed and sealed in Aluminum metal tubing. The heater shall be listed byETL and the elements shall be supplied with a one year limited warranty.

Standard Models

UPC# 686334	MODEL	WATTS	BTU's	AMPS	VOLTS	LENGTH	WT.	UPC	MODEL	DESCRIPTION	WT.	
457583	CV4512X	450		4	120		7 lb.					
457590	CV45X	450	1536	2	240	42"		457927	CVCBX	Ceiling Bracket*	1/2 lb.	
457606	CV45YX	450		2.0	208	42		457866	CVB42X	42" Blank Section	6 lb.	
457613	CV4527X	450		2	277			457873	CVB60X	60" Blank Section	8 lb.	
457620	CV6012X	600	2048	5.0	120	60" 10		457880	CVB84X	84" Blank Section	12 lb.	
457637	CV60X	600		3	240		10 lb.					
457644	CV60YX	600		3	208	00	1015.	457912	CVSP	Aerosol Touch-up Paint	1 lb.	
457651	CV6027X	600		2 277		* Order 2 for units up to 72" Order 3 for units over 72"						
457668	CV7512X	750	2560	6	120		Order 3	for units of				
457675	CV75X	750		3	240	72"	13 lb.					
457682	CV75YX	750		3.6	208	12		*2-1/2" MIN. BRACKET				
457699	CV7527X	750		3	277							
457705	CV9012X	900	3072 8 4 3	8	120	84" 14 lb.	14 lb.		below ceiling.	IS A BREAK OFF E TOP SECTION	N	
457712	CV90X	900		4	240							
457729	CV90YX	900		4	208				Dimension			
457736	CV9027X	900		3	277				3/4			
457743	CV10012X	1000		8	120			6 FF	ET MIN ABOV			
457750	CV100X	1000	3413	4	240	96" 1	17 lb.		21 11111 71201	All KOs 1/2"		
457767	CV100YX	1000	3413	5	208							
457774	CV10027X	1000	4		277			TOP VIEW				
457781	CV11012X	1100	3754	9	120	108" 191			WALL LINE	3/4" SPACE	Ť.	
457798	CV110X	1100		5	240		19 lb.				BRACKET	
457804	CV110YX	1100		5	208			END MOUNTING BRACKETS CENTER MOUNTING BRACKET PROVIDED WITH HEATER OT REQUIRED ON 42" 60" & 72" MODELS				
457811	CV11027X	1100	4.0		277			Centerline 27/16"	1		•	
457828	CV12512X	1250	4266 5	10	120		21 lb.	Wiring KO			1/₀″ Cente ∔ Moun	
457835	CV125X	1250		5	240	120"						
457842	CV125YX	1250		6.0	208				II KOs ½" 2'			
457859	CV12527X	1250		5	277					I		

Accessories & Dimensions