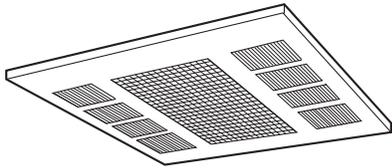


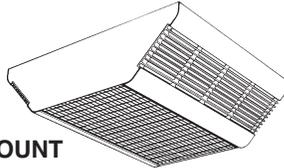


470 Beauty Spot Rd. E, Bennettsville, SC 29512

CDF 500 SERIES FAN FORCED CEILING MOUNTED HEATER SUBMITTAL SHEET



RECESSED MOUNT



SURFACE MOUNT



CAPACITIES	
4KW	Field Convertible to 3KW or 2KW 208V, 1Ø or 3Ø, 240V, 1Ø or 3Ø 277V, 1Ø
5KW	Field convertible to 3.8KW or 2.5KW 208V, 1Ø or 3Ø; 240V, 1Ø or 3Ø; 277V, 1Ø

CDF 500 SERIES - CEILING MOUNTED HEATER

ITEM	QTY.	CATALOG NUMBER	TAG	HEATER			AMPS	CONTROL CKT. VOLTS	MOTOR RPM	AIR FLOW		BUILT-IN CONTROLS
				KW	VOLTS	PHASE Ø				CFM	F RISE	

ACCESSORIES AND CONTROLS

ITEM	QTY.	CAT. NO.	TAG	DESCRIPTION

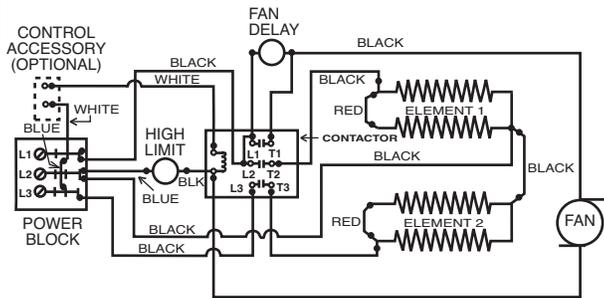
SUBMITTED BY:	DATE:

APPROVED BY:	DATE:



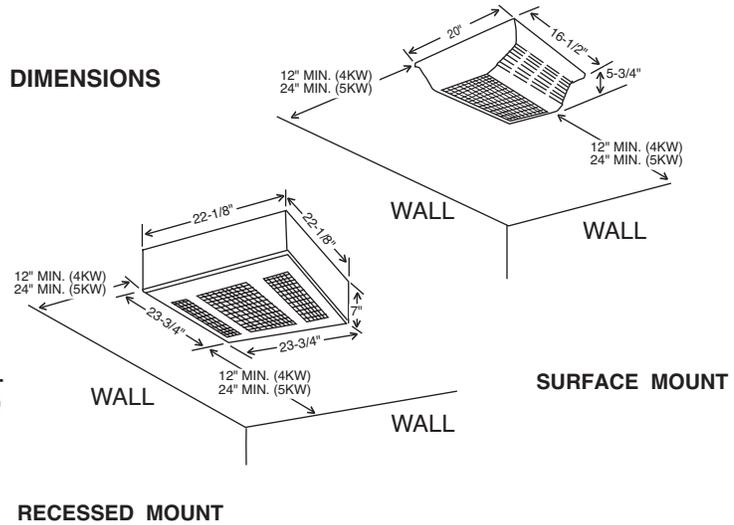
470 Beauty Spot Rd. E, Bennettsville SC 29512

ELECTRICAL WIRING Standard Factory Wired Diagram



CAUTION: Field wiring must be #10 AWG. min. rated 90°C. min.

DIMENSIONS



ARCHITECT'S AND ENGINEER'S SPECIFICATIONS*

The heating equipment shall include an electric, ceiling-mounted type CDF Series 500 fan-forced air heater suitable for large area heating as manufactured by QMark, a Marley Engineered Products Brand, Bennettsville, SC. Heater shall be UL listed.

The heater shall be designed for surface, recess, or T-Bar mounting. For surface mounting, a QMark CDF-SE surface enclosure shall be used. For T-Bar mounting, a QMark CDF-RE recess enclosure shall be used. For recessed mounting in a permanent ceiling, a QMark CDF-RE recess enclosure and CDF-TK trim kit shall be used.

The heaters shall be factory wired for single-phase operation and field convertible to three-phase operation by removing one jumper wire.

The heaters should be factory wired for full wattage and field convertible to 75% or 50% wattage by the removal of one or two wires respectively.

HEATER SECTION - The heater section shall consist of a 20 gauge steel chassis on which are mounted the heating elements, fan motor and blade, fan control, thermal cutout, and 3-pole contactor. Heater section shall be completely prewired.

HEATER ELEMENTS - The heating elements shall be guaranteed for five years and shall be of non-glowing design consisting of 80/20 NiCh resistance wire, enclosed in a steel sheath, to which steel plate fins are brazed. The elements shall cover the entire air intake area to ensure uniform heating of all discharged air.

MOTOR AND CONTROLS - The fan motor shall be impedance-protected, permanently lubricated, and with totally-enclosed rotor. Fan control shall be bi-metallic, snap-action type and shall activate the fan immediately and continue to operate the fan after the thermostat is

satisfied and until all heated air has been discharged. Thermal cutout shall be bi-metallic snap-action type designed to automatically shut off the heater in the event of overheating and reactivate the heater when temperature returns to normal.

OPERATIONAL CONTROLS - Thermostat, disconnect switch, and all interlock relays shall be installed within the heater enclosure.

RECESS ENCLOSURE - The back box shall be designed for duty as a recessed rough-in box in masonry, T-Bar, or frame ceiling construction. The back box shall be 20 gauge galvanized steel and shall contain knockouts through which field wiring leads are brought. Enclosures to recess into a maximum 7 inches of ceiling space.

The louvered recess faceplate shall be of 20 gauge cold rolled steel, phosphatized, then electrostatically painted Navajo white by a baked enamel process.

SURFACE ENCLOSURE - The surface mounting plate shall be designed for duty as a rough-in box on masonry, T-Bar, or frame ceiling construction. The surface mounting plate shall be 20 gauge galvanized steel and shall contain knockouts through which field wiring leads are brought. Enclosure to extend a maximum of 6 inches into the heated space.

The louvered surface wrapper shall be contoured aluminum extrusion and 20 gauge sheet metal combination with rounded corners. The surface wrapper shall be electrostatically painted Navajo white by a baked enamel process.

*QMark reserves the right to change specifications without prior notice.

SPECIFICATIONS:

CAT. NO.	MOUNTING	KW ¹	BTU/HR (000)	MOTOR RPM	VOLTS	PHASE ²	AMPS ³	CFM	F T
CDF-548	HEATER	4/3/2	13.7/10.2/6.8	1400	208	1 - 3	19.2/14.4/9.6	300	42
CDF-542	SECTION				240	1 - 3	16.7/12.5/8.3		
CDF-547	ONLY				277	1	14.4/10.8/7.2		
CDF-558	HEATER	5/3.8/2.5	17.1/13.0/8.5	1400	208	1 - 3	24.0/18.3/12.9	300	45
CDF-552	SECTION				240	1 - 3	20.8/15.8/10.4		
CDF-557	ONLY				277	1	18.1/13.7/9.0		
CDF-SE	Surface Mounting Enclosure only - To be used with above heater sections. Dimensions: 20"L x 16-1/2"W x 5-3/4"D.								
CDF-RE	Recess Mounting Enclosure only - To be used with above heater sections. Dimensions: 23-3/4"L x 23-3/4"W x 7"D.								
CDFSENW	Surface mounted Northern White - To Be Used With Above Heater Section. Dimensions: 20"L x 16 1/2"W x 5 3/4"D.								
CDFRENW	Recessed mounted Northern White - To Be Used With Above Heater Sections. Dimensions: 23 3/4"L x 23 3/4"W x 7"D.								
OPTIONAL ACCESSORIES					FIELD INSTALLED KITS				
CDF-T ⁴	Thermostat SPST. Range 45 to 95 Degrees F.								
CDF-24R	Relay (Time Delay 45 - 60 sec. to close when energized) requires 24 volt supply from remote source.								
CDF-R12	Relay (Time Delay 45 - 60 sec. to close when energized) requires 120 volt supply from remote source.								
CDF-DS	Power Disconnect Switch (3-Pole) 30 amps, 600 volts, 3 phase, 60 Hz.								
CDF-TK	Trim Ring for mounting on permanent ceiling (cannot be factory installed).								
CDF-TR4	208 240 Primary Transformer/24V sec. and 24V holding coil control relay.								
CDF-TR7	277V Primary Transformer/24V sec. and 24V holding coil control relay.								

¹Factory wired for highest wattage, field convertible to lower wattages.

²Factory wired 1 Phase, field convertible to 3 Phase.

³On dual-phase units, maximum amp draw is listed.

⁴CDF-T, CDF-PE mount in same location - only one can be used for any application.