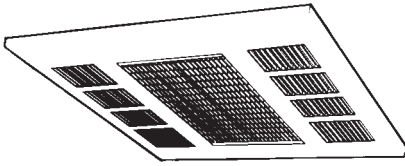




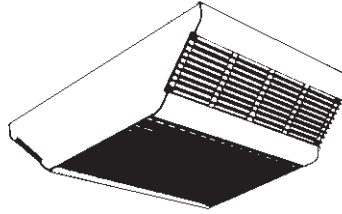
A Marley Engineered Products Brand

470 Beauty Spot Rd. E, Bennettsville, SC 29512

**FFCH  
FAN FORCED  
CEILING MOUNTED,  
HEATER, SERIES 500**



**RECESSED MOUNT**



**SURFACE MOUNT**



CAPACITIES	
<b>4KW</b> Field Convertible to 3KW or 2KFW 208V, 1Ø or 3Ø, 240V, 1Ø or 3Ø 277V, 1Ø	
<b>5KW</b> Field Convertible to 3.8KW or 2.5KW 208V, 1Ø or 3Ø; 240V, 1Ø or 3Ø; 277V, 1Ø	

**FFCH 500 SERIES - CEILING MOUNTED HEATER**

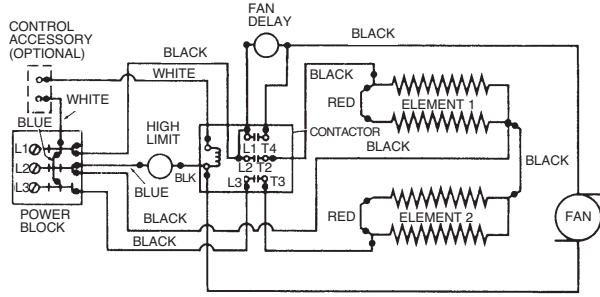
ITEM	QTY.	CATALOG NUMBER	TAG				AMPS	CONTROL CKT. VOLTS	MOTOR & RPM	HEATERAIR FLOW		BUILT-IN CONTROLS
				KW	VOLTS	Ø				CFM	°F RISE	

ACCESSORIES  
AND  
CONTROLS

ITEM	QTY.	CAT. NO.	TAG	DESCRIPTION

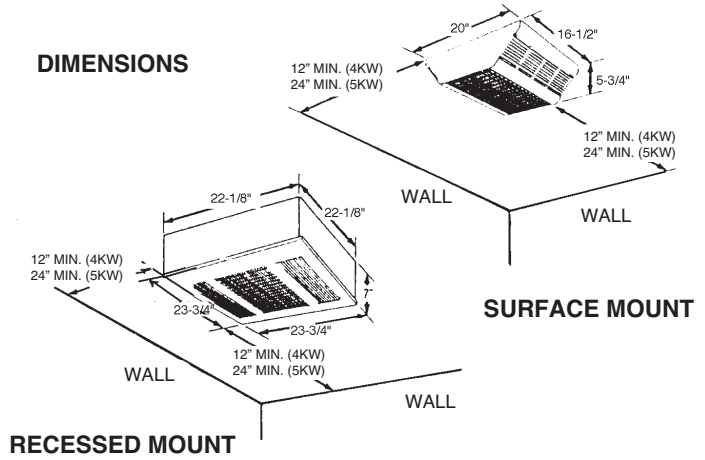
<b>SUBMITTED BY:</b>	<b>DATE:</b>	<b>APPROVED BY:</b>	<b>DATE:</b>

## ELECTRICAL WIRING Standard Factory Wired Diagram



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

## DIMENSIONS



## SPECIFICATIONS:

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

<sup>1</sup>Factory wired for highest wattage, field convertible to lower wattages. <sup>2</sup>Factory wired 1Ø, field convertible to 3Ø.

<sup>3</sup>On dual-phase units, maximum amp draw is listed. <sup>4</sup>FFCH-T, FFCH-PE mount in same location - only one can be used for any application.

## ARCHITECT'S & ENGINEER'S SPECIFICATIONS\*

The heating equipment shall include an electric, ceiling-mounted type FFCH Series 500 fan-forced air heater suitable for large area heating as manufactured by Berko, a Marley Engineered Products Brand, Bennettsville, SC. Heater shall be U.L. Listed.

The heater shall be designed for surface, recess or T-Bar mounting. For surface mounting a Berko FFCH-SE surface enclosure shall be used. For T-Bar mounting a Berko FFCH-RE recess enclosure shall be used. For recessed mounting in a permanent ceiling a Berko FFCH-RE recess enclosure and FFCH-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 single-phase operation 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 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 heater in the event of over-heating 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. Enclosure 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.