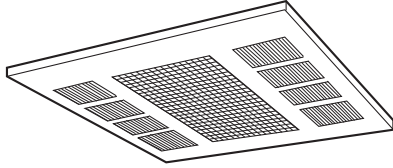
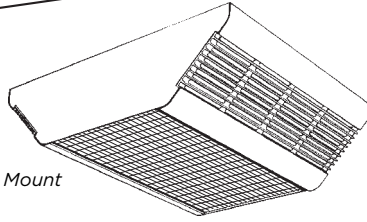


**COMMERCIAL DOWNFLOW
CEILING HEATER**



Recessed Mount



Surface Mount



CAPACITIES

4KW: Field convertible to 3KW or 2KW

5KW: Field convertible to 3.8KW or 2.5KW

208V, 1Ø or 3Ø, 240V, 1Ø or 3Ø 277V, 1Ø
Thermostat Range: 45°-90° F
Air Movement: 300 CFM

See Selection Chart for all Options

JOB NAME: _____

LOCATION: _____

ARCHITECT: _____

ENGINEER: _____

CONTRACTOR: _____

SUBMITTED BY: _____ DATE: _____

| TAG/ITEM | QTY. | CATALOG NUMBER | HEATER | | | AMPS | CONTROL CKT. VOLTS | MOTOR RPM | AIR FLOW | | BUILT-IN CNTRL. |
|----------|------|----------------|--------|-------|---|------|--------------------------|--------------|----------|------------|--------------------|
| | | | KW | VOLTS | Ø | | | | CFM | F° RISE | |
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| ACCESSORIES AND CONTROLS | TAG/ITEM | QTY. | CATALOG NUMBER | DESCRIPTION |
|--------------------------------|----------|------|----------------|-------------|
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| SUBMITTED BY: | DATE |
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| APPROVED BY: | DATE |
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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 Berko®, a Marley Engineered Products® Brand, Bennettsville, SC. Heater shall be cULus 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 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 warrantied 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 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 Beige or White by a baked enamel process.

*Berko reserves the right to change specifications without prior notice

Models & Specifications:

| ITEM INFORMATION | | | ELECTRICAL DATA | | | | | |
|------------------|--------------|---------------------|-----------------|---------------|----------------|-------|-------|----------|
| CATALOG NO. | UPC | MOUNTING | KW | BTU/HR. | AMPS | VOLTS | PHASE | SHIP WT. |
| FFCH548 | 685360026527 | Heater Section Only | 4/3/2 | 13.7/10.2/6.8 | 19.2/14.2/9.6 | 208 | 1-3 | 27 lbs |
| FFCH542 | 685360026503 | Heater Section Only | 4/3/2 | 13.7/10.2/6.8 | 16.7/12.5/8.3 | 240 | 1-3 | 27 lbs |
| FFCH547 | 685360026510 | Heater Section Only | 4/3/2 | 13.7/10.2/6.8 | 14.4/10.8/7.2 | 277 | 1 | 27 lbs |
| FFCH558 | 685360026558 | Heater Section Only | 5/3.8/2.5 | 17.1/13/8.5 | 24/18.3/12 | 208 | 1-3 | 27 lbs |
| FFCH552 | 685360026534 | Heater Section Only | 5/3.8/2.5 | 17.1/13/8.5 | 20.8/15.8/10.4 | 240 | 1-3 | 27 lbs |
| FFCH557 | 685360026541 | Heater Section Only | 5/3.8/2.5 | 17.1/13/8.5 | 18.1/13.7/9 | 277 | 1 | 27 lbs |

Models & Specifications – Packaged Options:

| ITEM INFORMATION | | | ELECTRICAL DATA | | | | | |
|------------------|--------------|----------------|-----------------|---------------|----------------|-------|-------|----------|
| CATALOG NO. | UPC | MOUNTING | KW | BTU/HR. | AMPS | VOLTS | PHASE | SHIP WT. |
| FFCH542RE | 685360186054 | Recessed Mount | 4/3/2 | 13.7/10.2/6.8 | 16.7/12.5/8.3 | 240 | 1-3 | 37 lbs |
| FFCH542SE | 685360186061 | Surface Mount | 4/3/2 | 13.7/10.2/6.8 | 16.7/12.5/8.3 | 240 | 1-3 | 27 lbs |
| FFCH547RE | 685360174341 | Recessed Mount | 4/3/2 | 13.7/10.2/6.8 | 14.4/10.8/7.2 | 277 | 1 | 37 lbs |
| FFCH547SE | 685360174358 | Surface Mount | 4/3/2 | 13.7/10.2/6.8 | 14.4/10.8/7.2 | 277 | 1 | 27 lbs |
| FFCH548RE | 685360174303 | Recessed Mount | 4/3/2 | 13.7/10.2/6.8 | 19.2/14.2/9.6 | 208 | 1-3 | 37 lbs |
| FFCH548SE | 685360174310 | Surface Mount | 4/3/2 | 13.7/10.2/6.8 | 19.2/14.2/9.6 | 208 | 1-3 | 27 lbs |
| FFCH552RE | 685360174389 | Recessed Mount | 5/3.8/2.5 | 17.1/13/8.5 | 20.8/15.8/10.4 | 240 | 1-3 | 37 lbs |
| FFCH552SE | 685360174396 | Surface Mount | 5/3.8/2.5 | 17.1/13/8.5 | 20.8/15.8/10.4 | 240 | 1-3 | 27 lbs |
| FFCH557RE | 685360174365 | Recessed Mount | 5/3.8/2.5 | 17.1/13/8.5 | 18.1/13.7/9 | 277 | 1 | 37 lbs |
| FFCH557SE | 685360174372 | Surface Mount | 5/3.8/2.5 | 17.1/13/8.5 | 18.1/13.7/9 | 277 | 1 | 27 lbs |
| FFCH558RE | 685360174327 | Recessed Mount | 5/3.8/2.5 | 17.1/13/8.5 | 24/18.3/12 | 208 | 1-3 | 37 lbs |
| FFCH558SE | 685360174334 | Surface Mount | 5/3.8/2.5 | 17.1/13/8.5 | 24/18.3/12 | 208 | 1-3 | 27 lbs |

NOTE: Factory-wired for highest wattage, field-convertible to lower wattages. Factory-wired 1-PH, field convertible to 3-PH dual-phase units, maximum amp draw is listed. Amperage shown is for single phase.

Optional Accessories – Electronic / Control Options:

| CATALOG NO. | UPC | DESCRIPTION | COLOR | SHIP WT. |
|-------------|--------------|---|-------|----------|
| FFCHT | 685360026459 | Integral thermostat SPST — Range 45 to 95°F | — | 1 lbs |
| FFCHTR4 | 685360026473 | Relay (Time Delay 45–60 sec. to close when energized) requires 24V supply from remote source | — | 1 lbs |
| FFCHTR4 | 685360026473 | Relay (Time Delay 45–60 sec. to close when energized) requires 120V supply from remote source | — | 1 lbs |
| FFCHDS | 685360026381 | Disconnect Switch (3-Pole) 30 amps, 600 volts, 3Ø, 60 Hz | — | 1 lbs |
| FFCHTR4* | 685360026473 | 208/240V Primary Transformer/24V sec. and 24V holding coil control relay | — | 1 lbs |
| FFCHTR7* | 685360026480 | 277V Primary Transformer/24V sec. and 24V holding coil control relay | — | 1 lbs |

For factory installation of above controls, additional charges apply.

*Optional Power Relays or Integral Thermostats cannot be used when the Transformer Relay Option is chosen

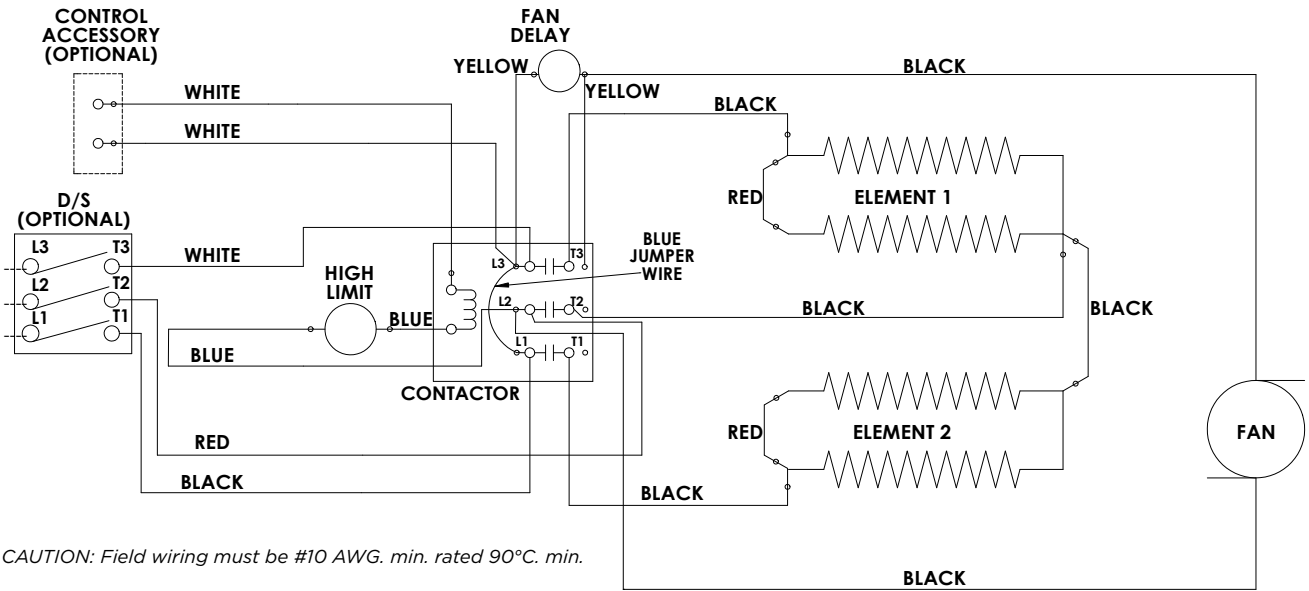
For easy BMS integration, heater, relay, and SmartSeries Plus are needed

Optional Accessories – Mounting Options:

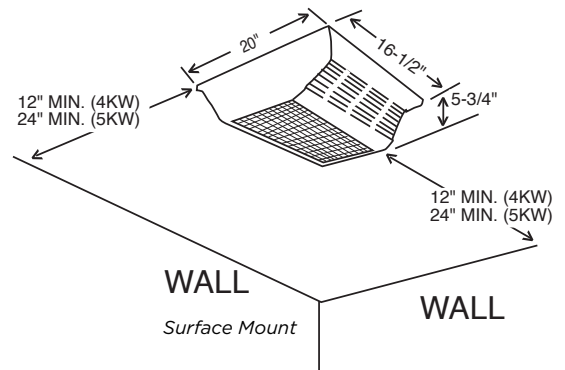
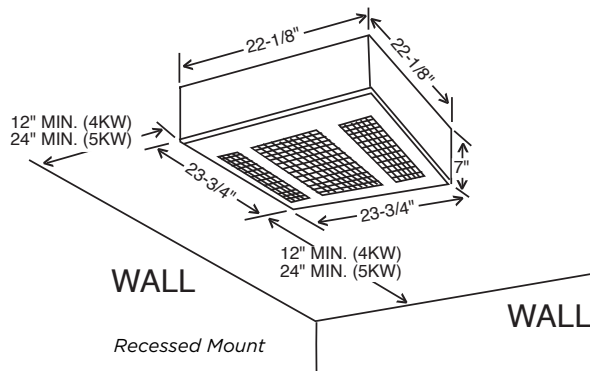
| CATALOG NO. | UPC | DESCRIPTION | COLOR | SHIP WT. |
|-------------|--------------|--|-------|----------|
| FFCHSE | 685360026435 | Surface-mounted enclosure — to be used with above heater section. 20" L x 16 ½" W x 5 ¾" D | Beige | 10 lbs |
| FFCHRE | 685360026404 | Recessed-mounted enclosure — to be used with above heater section. 23 ¾" L x 23 ¾" W x 7" D | Beige | 18 lbs |
| FFCHSENW | 685360149625 | Surface-mounted — to be used with above heater section. 20" L x 16 ½" W x 5 ¾" D | White | 10 lbs |
| FFCHRENW | 685360149646 | Recessed-mounted — to be used with above heater section. 23 ¾" L x 23 ¾" W x 7" D | White | 18 lbs |
| FFCHTK | 685360026466 | Trim Ring for mounting on permanent ceiling (cannot be factory installed) | — | 1 lbs |
| FFCHRFK | 685360171555 | Mounting Bracket Retrofit Kit | — | 2.5 lbs |

Approvals: _____

Electrical Wiring, Standard Factory Wired Diagram:



Dimensions and Clearances:



No matter the industry or application, Marley Engineered Products has a robust portfolio of innovative, reliable, high-performance comfort heating and ventilation solutions for all your heating needs.

For more information or assistance on your next project, contact Technical Services at 800-642-4328

Scan the QR code to access additional specs and features



Approvals: _____