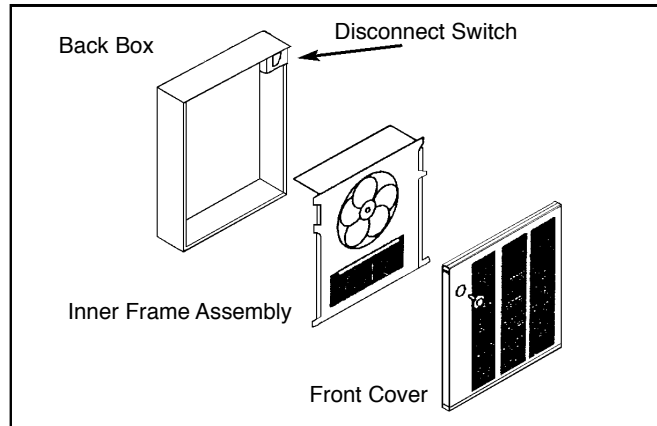


FRA SERIES FAN FORCED WALL HEATERS

- **HIGH CAPACITY - UP TO 4800 WATTS**
- **THREE PIECE DESIGN**
- **SLIM SURFACE OR RECESSED MOUNTING**
- **EASY TO INSTALL AND SERVICE**
- **CONTEMPORARY STYLING**
- **TWO POLE DISCONNECT SWITCH STANDARD**
- **BUILT-IN THERMOSTAT, THERMAL CUTOUT FAN DELAY**



APPLICATIONS

Berko's high-capacity, heavy duty fan forced wall heaters are designed for use in residential, commercial or industrial areas requiring electric fan forced heaters in 1500 to 4800 watt capacities. They perform exceptionally well in such applications as motels, entryways, playrooms, basements, workshops, garages, stores, and similar large areas.

FEATURES

HIGH CAPACITY

Models from 1500 to 4800 watts (5120 to 16382 BTU/hr) provide outstanding performance. The FRA Series is ideal for high-heat-loss areas that other heaters cannot handle.

ONE PHYSICAL SIZE -

ONE MOUNTING POSITION

The mounting position for the FRA heater is in the wall, vertical, with a heavy gauge steel louvered front cover providing a floor-flow discharge. The basic unit is designed for recessed mounting, however, it can also be installed as a surface unit or semi-recessed. For surface applications an optional surface mounting frame, 3-7/8" deep is used. The frame, Catalog No. FRASM, built to house the complete heater is ordered separately. Semi-recessed applications in shallow walls is also possible by making use of the semi-recessed frames (ordered separately). The

FRAS-1 is 1" deep, allowing the heater to extend into the space 2" while the FRAS-2 is 2" deep allowing for a 3" extension of the heater out of the wall.

GRID PATTERN ELEMENT FINIS

Rugged steel fins are copper-brazed to the low watt density steel sheathed tubular heating elements which are arranged in a uniform grid pattern. The grid covers the entire discharge area, resulting in uniform heating of all discharge air, lower operating temperatures and prolonged element life.

BUILT-IN THERMOSTAT

Room temperature is maintained automatically by a sensitive, built-in, snap action thermostat. A double pole disconnect switch is mounted in the back box to provide a disconnect means.

TAMPER RESISTANT AND TAMPER PROOF INSTALLATION

A plug-button is provided with the heater to snap into the hole in the front cover in place of the thermostat control knob for tamper resistant installations. An optional front cover without a hole for the thermostat control knob (a special order item) provides tamper proof installation. The front cover must be removed to adjust the thermostat.

BUILT-IN FAN DELAY

When the thermostat calls for heat, fan action is delayed momentarily until the heating element is warm. When the

thermostat is satisfied, the fan continues to operate until the heating element is cool. This action prevents circulation of cold air and avoids exposing the element to residual heat, thus providing a higher comfort level and prolonged element life.

BUILT-IN THERMAL CUTOUT

A thermal cutout shuts off the heater in the event of overheating.

CONTEMPORARY STYLING

The front cover incorporates space age high impact plastics and heavy gauge steel to give the FRA a contemporary look with no exposed screw heads.

FLOOR FLOW DISCHARGE

The louvers formed in the heavy gauge front cover direct the warm air discharge to the floor where it is needed most. From there it rises gradually, minimizing temperature stratification.

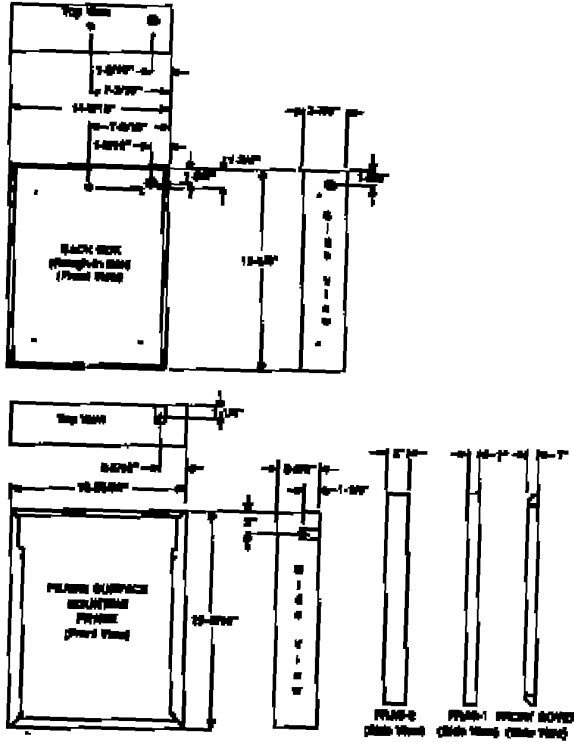
FAN OPERATION

The five-blade, aluminum fan and the rugged, totally enclosed motor achieve excellent air throw.

FINISH

All sheet metal parts, except the back box, are phosphatized, then painted by a baked enamel painting process. The front cover is finished in Off-White to compliment any decor.

DIMENSIONS



FRA (1.5KW - 4.8KW, 208, 240, & 277V)

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS*

The heating equipment shall include an electric automatic FRA Series fan-forced air heater suitable for large area heating as manufactured by Berko, A Marley Engineered Products Brand, Bennettsville, SC. Heaters shall be UL Listed. The heater shall be designed for wall recess or surface mounting. For surface mounting a Berko FRASM surface mounting frame shall be used. For semi-recessed applications a Berko FRAS-1 or FRAS-2 shall be used. Heaters shall be UL Listed.

HEATER ASSEMBLY: The heater assembly which fits into the back shall consist of a fan panel upon which is mounted all of the operational parts of the heater.

HEATING ELEMENT: The heating element shall be guaranteed for five years and shall be of non-glowing design consisting of 80/20 Ni-Ch resistance wire enclosed in a steel sheath to which steel plate fins are brazed. The element shall cover the entire air discharge area to ensure uniform heating of all discharge air.

FAN AND FAN MOTOR: The fan shall be five-bladed aluminum. The fan motor shall be totally enclosed.

FAN DELAY SWITCH: Fan delay shall be of bi-metallic, snap-action type and shall activate fan after heating element reaches operating temperature and continue to operate until the heating element is cool.

THERMOSTAT: Thermostat shall be of the bi-metallic, snap-action type with enclosed contacts.

THERMAL CUTOUT: A thermal cutout shall be built into the system to shut off the heater in the event of overheating.

DISCONNECT SWITCH: A double-pole, single throw disconnect switch shall be mounted on the back box to provide positive disconnect.

BACK BOX: The back box shall be designed for duty as a recessed rough-in box in either masonry or frame installations. The back box shall be commercial grade galvanized steel and shall contain knockouts through which power leads are brought.

FRONT COVER: The louvered front cover shall be of commercial grade steel finished in Navajo White. It shall attach to the fan deck via snaps in the high impact plastic trim pieces and shall have no exposed screw heads.

TAMPER-RESISTANT INSTALLATION: Optional front cover without the hole for the thermostat knob provides full tamper-resistant installation.

FINISH: All sheet metal parts, except the back box shall be phosphatized, then completely painted by a baked enamel painting process.

* Berko reserves the right to change specifications without prior notice

Thermostat Range: 40 - 90° F
Air Movement: 100 CFM

MOUNTING LIMITATIONS:

- For wall mounting - Do not install back box closer than 8 inches from floor or adjacent wall.
- Do not install heater behind towel rack, behind door, in floor, in closet, in ceiling, or where air flow may be obstructed.

SELECTION CHART

CATALOG NUMBER (Amps at Rated Wattage)

SELECTION CHART

CATALOG NO.	VOLTS	PH.	WATTS	BTU/HR.	AMPS.
FRA-3027*	277	1	3000/1500	10,239/5120	10.8/5.4
FRA-4020*	208	1	4000/2000	13,652/6826	19.2/9.6
FRA-40203	208	3	4000	13,652	11.1
FRA-4024*	240/208	1	4000/3000	13,652/10,239	16.7/14.45
			2000/1500	6826/5120	8.3/7.2
FRA-40243	240/208	3	4000/3000	13,652/10,239	9.7
FRA-4027*	277/240	1	4000/3000	13,652/10,239	14.4/12.5
			2000/1500	6826/5120	7.2/6.3
FRA-4820	208	1	4800	16,382	23.1
FRA-48203	208	3	4800	16,382	13.4
FRA-4824	240/208	1	4800/3600	16,382/12,287	20.0/17.3
FRA-48243	240	3	4800	16,382	11.6
FRA-4827	277/240	1	4800/3600	16,382/12,287	17.3/15.0

*Heaters shipped at higher wattage. Units can be field converted to half wattage.

ACCESSORIES AND CONTROLS

CATALOG NO.	DESCRIPTION
FRAFCTP	Tamper Proof Front Cover (Cover must be removed to adjust thermostat).
FRASM	Surface Mounting Frame
FRAS-1	1" Semi-Recessed Frame
FRAS-2	2" Semi-Recessed Frame

Distributed By:

BERKO[®]
A Marley Engineered Products Brand
470 Beauty Spot Rd. E, Bennettsville, SC 29512

FILE # E21609

