

*Slant/Fin*®

# MONITRON II

Cast-iron electric boiler



*A major answer to the changing heating-fuel situation.  
Hot water models in nine sizes from 8kW to 40kW  
(27,301 to 136,506 Btuh).*





# *Slant/Fin*<sup>®</sup> **MONITRON II**<sup>™</sup> ELECTRIC BOILER

**Compact, easy to install for new or “standby” installations**

**Monitron II combines the availability and dependability of electricity with the comfort and performance of conventional hydronic heating using baseboard, radiant or cast-iron radiators.**

**Monitron II as a replacement unit:** Works with virtually any existing hot water hydronic radiation system. Although rated in kilowatts, it is also clearly identified by BTU output.

**Monitron II as a standby unit:** Particularly suitable for commercial and industrial facilities, or office buildings which can't risk down-time with their existing heating equipment. If oil or gas is temporarily unavailable, the owner easily switches the heating system to the electric boiler.

**Monitron II as a primary heating unit offers:**

- The convenience of electricity and the comfort of hydronics.
- The elimination of a chimney.
- Competitive pricing with electric baseboard systems.
- Simple zoning by zone valves.

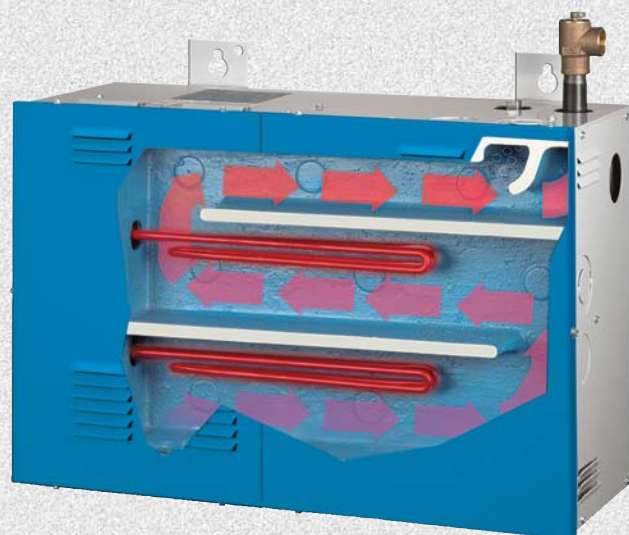
Monitron II by Slant/Fin is the electronic-age boiler designed to save energy for new or existing heating systems.

- One piece cast-iron heat exchanger
- Built in air eliminator
- Internal baffles improve heat transfer
- EM-10 electronic 4 stage boiler control

The EM-10 boiler temperature control is an efficient boiler operator with a digital LED display with backlight, a boiler pump output and an alarm.

Features:

- Set point operation
- Outdoor reset with DHW priority
- External control through BMS signal
- And much more



## Energy saving electronic control

### NORMAL OPERATIONS

When the thermostat calls for heat, the circulator turns on and the first electric heater bank is energized. The circulator continues operating until the room thermostat is satisfied.

### OPTIONAL MILD-WEATHER OPERATION

Mild-weather energy savings are made possible through the use of a warm weather shut-down feature of the control. This energy-saving feature is standard on Monitron II models EH-8M2 through EH-40M2.

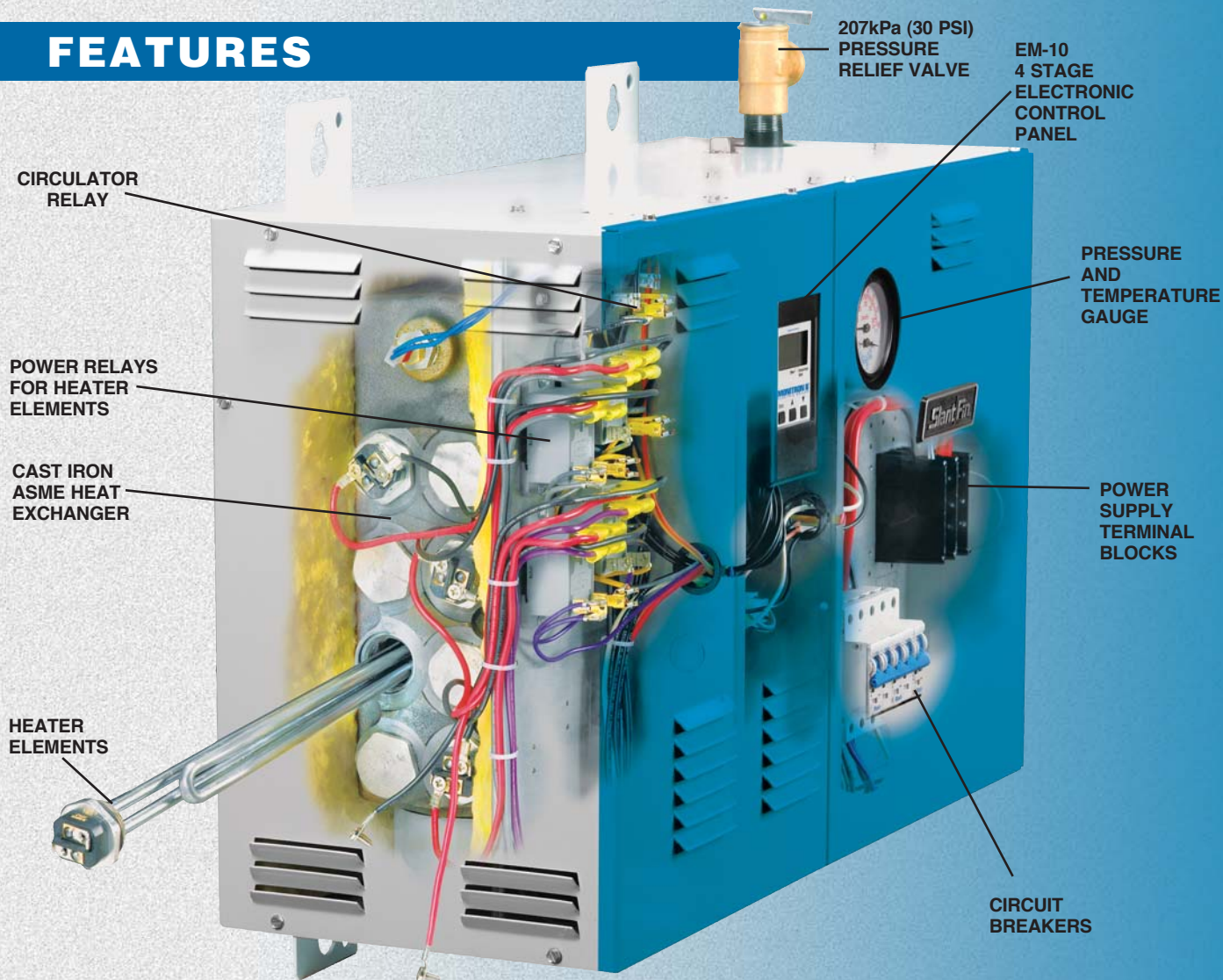
## Standard equipment

- Up to 4 stage EM-10 electronic boiler control
- Pressure and temperature gauge
- Safety relief valve (unmounted)
- Circulator relay and heater power relays
- Circuit breaker (one or two heaters per breaker)
- Drain cock, 19mm (¾") (packed separately)
- Built-in air separator

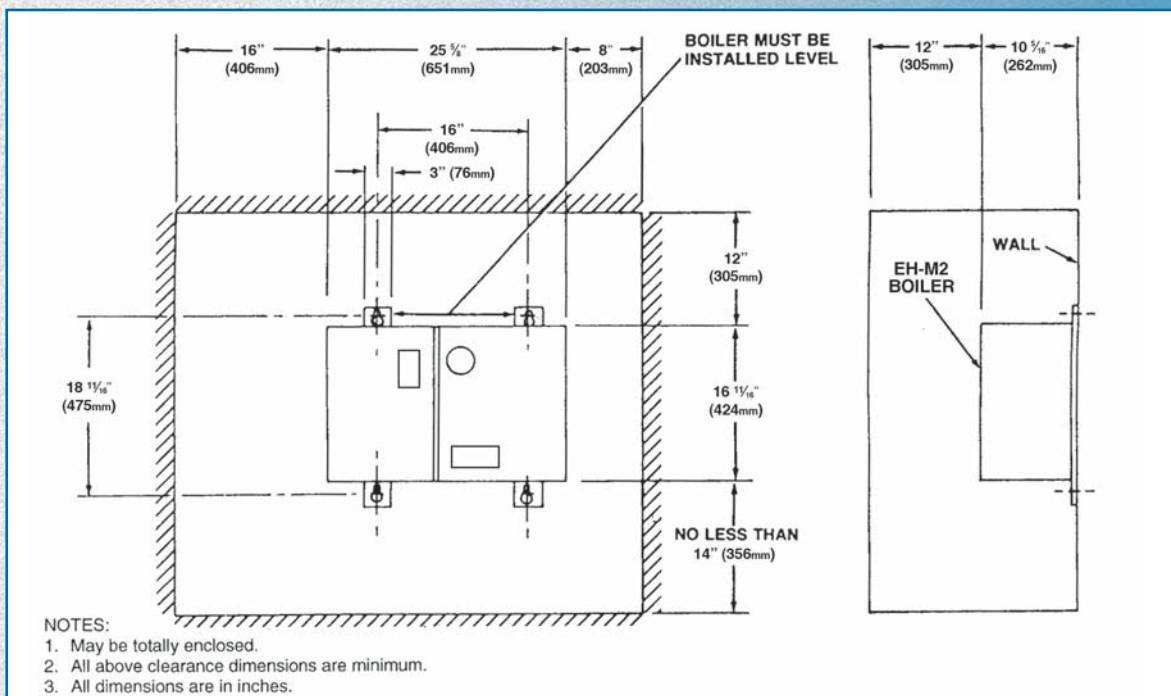
- Cast-iron ASME approved heat exchanger
- Terminal strips for circulator, thermostat, flow switch, temperature sensors and remote signal input.
- Complete jacketing
- U.L. listed, ASME authorized
- Circuit breaker for circulator and control circuit.



# FEATURES



# DIMENSIONS





# RATINGS AND SPECIFICATIONS

Boiler Model No.	SINGLE PHASE * KW at 240 VAC	SINGLE PHASE Capacity *(Btu/hr) at 240 VAC	Neutral Lug Size (AWG)		SINGLE PHASE — THREE WIRE			THREE PHASE — FOUR WIRE 208/240 VAC WYE				
			Solid Cu	Stranded Cu	Main Lug Size (AWG) CU	Grounding Lug Size (AWG) Cu	† ** Heater Amps at 240 VAC	KW at 208 VAC	Capacity (Btu/h) at 208 VAC	Main Lug Size (AWG) CU	Grounding Lug Size (AWG) Cu	† Heater Amps at 208 VAC
EH-8M2	8	27000	14-12	12	6-2/0	6-2/0	33	—	—	—	—	—
EH-10M2	10	34000	14-12	12	6-2/0	6-2/0	42	—	—	—	—	—
EH-12M2	12	41000	14-12	12	6-2/0	6-2/0	50	9	31000	6-2/0	6-2/0	43.4
EH-16M2	16	55000	14-12	12	6-2/0	6-2/0	67	12	41000	6-2/0	6-2/0	±57.8
EH-20M2	20	68000	14-12	12	6-2/0	6-2/0	83	15	51000	6-2/0	6-2/0	±72
EH-24M2	24	82000	14-12	12	6-2/0	6-2/0	100	18	62000	6-2/0	6-2/0	±69
EH-28M2	28	96000	14-12	12	6-2/0	6-2/0	117	21	72000	6-2/0	6-2/0	±69
EH-32M2	32	109000	14-12	12	6-2/0	6-2/0	133	24	82000	6-2/0	6-2/0	±83
EH-40M2	40	137000	14-12	12	2-310 MCM	6-2/0	167	30	103000	6-2/0	6-2/0	±108.3

\* Multiply by 0.751 for values at 208 volts AC.

\*\* Multiply by 0.867 for values at 208 volts AC.

† For total current add, to the value shown in the table, the current draw for circulator and/or zone valve transformer (10 Amp. max.).

‡ Leg with the highest value of line current of an unbalanced 3 phase load.

## Specify Model as follows: Model Number. Single or three Phase.

“135M2” for single phase, 120V/240V / 120V/208V WYE. 3 wire with control circuit breaker.

“345M2” for three phase, 120V/208V WYE. 4 wire with control circuit breaker.

EXAMPLE:

EH20-135 M2=20KW 208/240V, Single Phase, 3 wire, Monitron II Boiler.

EH20-345 M2 = 15KW, 208V, Three Phase, 4 wire, Monitron II Boiler.

## ELECTRICAL

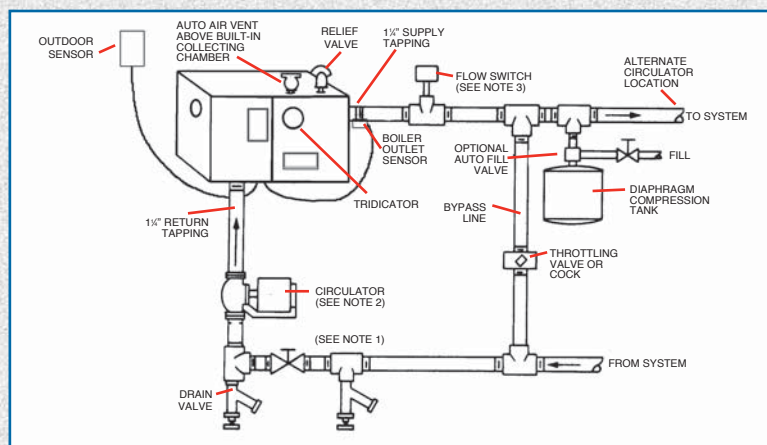
- Single branch circuit for 3 wire 120/208V WYE/120/240V, Single phase, 60 Hz or for 4 wire 120/208V WYE three phase, 60Hz

- Circulator relay 10 AMP Max., 120V

- Heating elements: Low-density replaceable. Copper sheathed and silver brazed base.

## TYPICAL PIPING DIAGRAM

FOR USE WITH TWO-WAY ZONE VALVES



### NOTES:

- Optional blocking gate valve and hose end valve used (with drain valve) for fast fill and purge of system. **IMPORTANT** Close bypass line valve (if used) during purging.
- Alternative circulator location could be installed on supply piping. Circulator should not be installed at lowest point of piping.
- There should be no elbows, tees, or change of pipe size for at least 5 diameters of pipe size (see table below) upstream and downstream of flow switch.

Boiler Model	Flow Switch McDonnell & Miller No.	Pipe Size	Minimum Length of Straight Pipe Upstream and Down-Stream of Flow Switch
EH-40M2	FS8W	32mm (1 1/8 IN.)	216mm (8 5/8 IN.)
EH-8M2- EH-32M2	FS4-3T3-1	25mm (1 IN.)	165mm (6 5/8 IN.)

**Slant/Fin**

SLANT/FIN LTD/LTEE, 6450 Northam Drive, Mississauga, ON L4V 1H9

Phone: (905) 677-8400 Fax: (905) 677-1829 Order Desk Fax: (905) 677-9015

www.slantfin.ca E-mail: orderdesk@slantfin.ca info@slantfin.ca