



Electric Furnaces

Clean - Quiet - Efficient

NORTRON
by Broan



NORTRON

by Broan



B Series



D Series



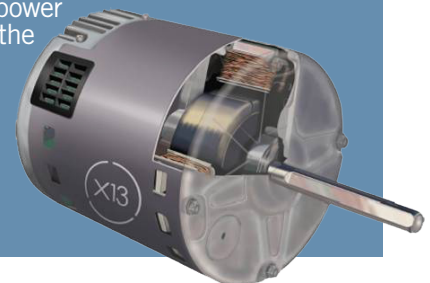
ECM Series
The Energy Efficient Solution

General Features

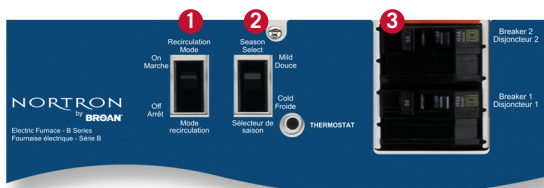
- **Clean and 100% Efficient:** Electric furnaces produce no soot or smoke and all of the heat produced stays inside
- **Quiet Operation:** Specially mounted and balanced blower for optimal quiet operation
- **5 Year Warranty**
- Multi-speed motor
- B Series models use sequencers to activate the heating elements
- D & ECM Series models use printed circuit board (PCB) controllers to activate the heating elements
- Available in a wide range of capacities ranging from 10 kW to 27 kW
- Installation Flexibility: Multi-position installation options mean the furnace may be installed in a basement, closet or crawl space.
- Compatible with Air Conditioners, Heat Pumps, Humidifiers or Air Cleaners
- Compatible with one or two-stage thermostats and humidistats
- Nickel-chrome heating elements create extremely high thermal efficiency
- Safety Limits: Each element is equipped with a high temperature limit which will prevent operation at unsafe air temperatures due to blocked or dirty filters
- CSA approved double-pole magnetic circuit breakers provide overcurrent protection
- Heavy duty 24 volt transformer
- Thermostat "On" light assists in diagnosing and locating the source of any malfunction
- CSA Approved for zero clearance against combustible materials with complete safety
- Rugged steel cabinet with baked epoxy powder coat finish
- Removable one-piece door for easy access to all interior components
- Standard disposable 20" x 20" filter to trap dust and lint (included)

ECM Series: The Energy Efficient Solution

- Lower annual operating costs due to the superior performance of a highly energy-efficient electronically commutated motor (ECM)
- Enjoy continuous, low-speed fan operation with no significant cost increase from the up to 200% greater operating efficiency of the ECM motor
- Permanently lubricated, multi-speed motor with rubber-mounted and precision balanced blower for quiet operation
- Circuit board activates relays at staged intervals to prevent power surges and controls the automatic operation of the blower

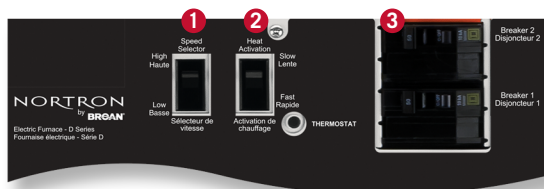


Control Panel Specifications:



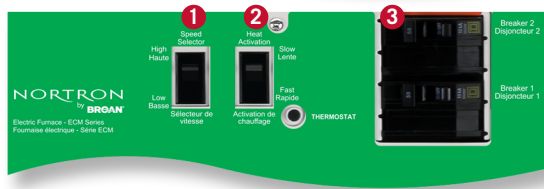
B Series: Sequencers Activate Elements

- 1 Recirculation Mode:** Motor runs continuously on low speed to help equalize room temperature.
- 2 Season Select:** The 'Mild' weather setting disconnects approximately half of the heating elements so that the entire furnace is not energized during milder spring and fall temperatures allowing for more gradual heating. The 'Cold' weather setting enables all elements for heating.
- 3 Double-Pole Magnetic Circuit Breakers:** CSA approved double-pole circuit breakers provide overcurrent protection and safely cut-off the power supply on both poles of the heater elements (number of circuit breakers varies by model).

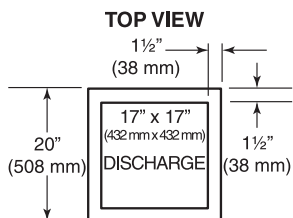


D & ECM Series: PCB Controller Activates Elements

- 1 Speed Selection:** Controls the fan ventilation speed. Even if there is no call for heat, the thermostat can activate the furnace fan for ventilation only.
- 2 Heat Activation:** Determines how rapidly the heating elements are activated. when the thermostat calls for heat. Slow (First Stage) or Fast (Second Stage).
- 3 Double-Pole Magnetic Circuit Breakers:** CSA approved double-pole circuit breakers provide overcurrent protection and safely cut-off the power supply on both poles of the heater elements (number of circuit breakers varies by model).

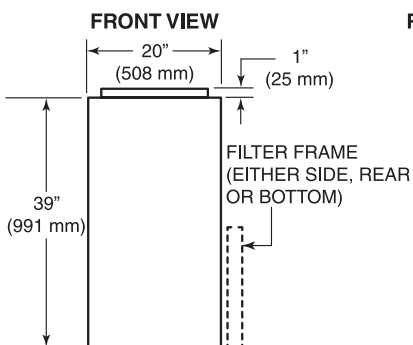


ECM Series Furnaces offer lower annual operating costs due to the superior performance of a highly energy-efficient Electronically Commutated Motor

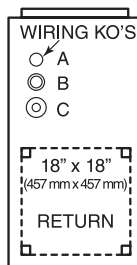


WIRING KNOCK-OUTS
A = 1 3/8" (35 mm)
B = 1 1/4" (32 mm) & 1 3/4" (44 mm)
C = 7/8" (22 mm) & 2" (51 mm)

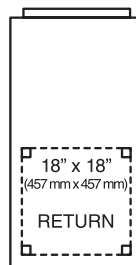
RETURN KNOCK-OUT
1-1/2" (38 mm) X 1-1/2" (38 mm)



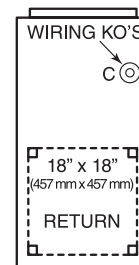
RIGHT SIDE VIEW



REAR VIEW



LEFT SIDE VIEW



5 Year Warranty

Product quality and continuous improvement are the cornerstones of Broan-NuTone's philosophy and as such, all Nortron by Broan electric furnaces are backed by Broan's 5 Year Parts Warranty.



Made in Canada

Nortron by Broan electric furnaces are proudly made in Canada at Broan-NuTone's 110,000 square foot manufacturing facility in Mississauga, Ontario. This facility employs over 180 people and is both ISO 9001 and ISO 50001 certified.

B SERIES ELECTRIC FURNACES

Model	21B10M	21B15M	21B18M	21B20M	21B25M	21B27MS	83B13	83B24	83B27
Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Phases	Single	Single	Single	Single	Single	Single	3-phase	3-phase	3-phase
Kilowatts	10	15	18	20	25	27	13.5	24	27
Volts	240	240	240	240	240	240	208	208	208
Motor HP	1/3	1/3	1/3	1/3	1/3	3/4	1/3	1/3	1/3
CFM (Heating Mode @ 0.20" w.g.)	756	1035	1035	1035	1035	1216	1200	1200	1315
BTU Per Hour	34,152	51,228	61,473	68,304	85,379	92,210	46,105	81,964	92,210
Temperature Rise	23°C / 41°F	24°C / 43°F	27°C / 49°F	33°C / 59°F	33°C / 67°F	37°C / 65°F	20°C / 36°F	35°C / 63°F	36°C / 65°F
Heating Element Sequencing	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical
Max. Cooling Capacity	3 Tons	3 Tons	3 Tons	3 Tons	3 Tons	4 Tons	3 Tons	3 Tons	3 Tons

D SERIES ELECTRIC FURNACES

Model	21D10	21D15	21D18	21D20	21D23	21D25	21D27
Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Phases	Single	Single	Single	Single	Single	Single	Single
Kilowatts	10	15	18	20	22.5	25	27
Volts	240	240	240	240	240	240	240
Motor HP	1/3	1/3	1/3	1/3	1/3	1/3	3/4
CFM (Heating Mode @ 0.20" w.g.)	756	1,035	1,035	1,035	1,035	1,035	1,216
BTU Per Hour	34,152	51,228	61,473	68,304	76,842	85,379	92,210
Temperature Rise	23°C / 41°F	24°C / 43°F	27°C / 49°F	33°C / 59°F	36°C / 65°F	37°C / 67°F	36°C / 65°F
Heating Element Sequencing	PCB Controller	PCB Controller	PCB Controller	PCB Controller	PCB Controller	PCB Controller	PCB Controller
Max. Cooling Capacity	3 Tons	3 Tons	3 Tons	3 Tons	3 Tons	3 Tons	4 Tons

ECM SERIES ELECTRIC FURNACES

Model	21ECM10	21ECM15	21ECM18	21ECM20	21ECM23
Motor Type	ECM	ECM	ECM	ECM	ECM
Phases	Single	Single	Single	Single	Single
Kilowatts	10	15	18	20	22.5
Volts	240	240	240	240	240
Motor HP	1/3	1/3	1/3	1/3	1/3
CFM (Heating Mode @ 0.20" w.g.)	775	1,020	1,149	1,149	1,149
BTU Per Hour	34,152	51,128	61,473	68,304	76,842
Temperature Rise	22°C / 40°F	22°C / 40°F	26°C / 47°F	29°C / 52°F	36°C / 65°F
Heating Element Sequencing	PCB Controller	PCB Controller	PCB Controller	PCB Controller	PCB Controller
Max. Cooling Capacity	3 Tons	3 Tons	3 Tons	3 Tons	3 Tons

Furnace Accessories

FK120 and **FK120ECM**: 120-volt Furnace Kit mounts inside furnace for the supply of electronic air cleaners and furnace humidifiers.

FSB1: Sub-base for use with furnaces when installed in the downflow position. CSA listed for mobile home installation.



PSC: Permanent Split Capacitor

ECM: Electronically Commutated Motor

Full specifications and installation manuals complete with service parts listing are available at www.broan.ca