# **Electric Unit Heaters EUL-B & EUS-B Series**



## **AIMPORTANT INSTRUCTIONS**

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- 1. Read all instructions before using the heater.
- 2. The heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. The trim around the heater outlet becomes hot during heater operation. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 ft (0.9 m) from the front of the unit and keep them away from the sides and rear.
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the unit is left operating and unattended.
- Do not operate any heater after it malfunctions. Disconnect power at the service panel and have the heater inspected by a reputable electrician before reusing.
- 5. Do not use outdoors.
- To disconnect the unit, turn the controls off, and then switch off at main power supply panel.
- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage to the heater.
- To prevent a possible fire, do not block air intake or exhaust in any manner.
- All electrical heaters have hot and arcing or sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
- Do not modify this heater. Use it only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.

### SAVE THESE INSTRUCTIONS

## X Installation Instructions

**WARNING:** Wiring procedures and connections should be in accordance with the National Electric code (NEC) and local codes.

**WARNING:** To reduce the risk of fire, do not store or use gasoline or other flammable vapors or liquids in the vicinity of the heater.

▲ CAUTION: High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 3 ft (0.9 m) from the front of the heater.

#### **HEATER LOCATION**

Unit heaters should be located along outside walls to provide perimeter air circulation. The discharge air should wipe the walls without blowing directly on them. (Figure 1)

- Small rooms can be heated by one or two units. Locate the unit heater(s) to set up circular air movement within the space.
- Large rooms requiring multiple unit installations. Units should be located so that the discharge air from one unit supports the discharge from another unit and sets up a circular movement.
- Remove Thermostats should be located on interior walls or posts away from heat sources, cold drafts, and away from heater discharge air streams.

#### **MOUNTING UNIT HEATER(S)**

♠ CAUTION: Heater must be mounted a minimum of 10 in (25.4 cm) from walls and 8 ft (240 cm) above floor with discharge parallel to or away from wall.

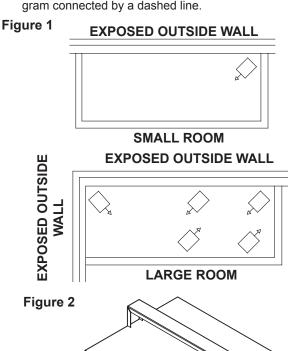
- Ceiling Mounting The heater comes equipped with a mounting bracket. Fasten to or suspend the heater from the ceiling using the holes provided in the bracket.
- Wall Mounting The heater may also be mounted to a wall with

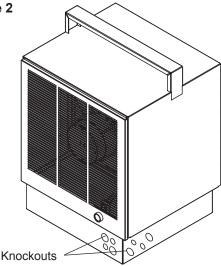
accessory wall bracket, catalogue EULSWB. The wall bracket attaches to the centre hole of unit mounting bracket.

#### WIRING

WARNING: BE SURE ELECTRICITY IS TURNED OFF AT MAIN SWITCH BEFORE WIRING. ALL WIRING TO BE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRIC CODES. HEATER MUST BE GROUNDED AS A PRECAUTION AGAINST ELECTRIC SHOCK.

- Connect heater only to the voltage and frequency specified on the nameplate.
- All wiring to be inaccordance with local codes and National Electrical Code.
- Remove screws securing access door and swing door down to expose wiring and control compartment.
- 4. Knockouts are provided at the back of and one side of the heater for power and control wiring. (Figure 2) In combinations of: 1 % in (35mm) and 1 % in (29mm), and 1 % in (29mm) and 7 in (22mm).
- A ground terminal is provided. The ground wire should be connected before making other connections.
- Rough-in branch circuit wiring to the heater using wire rated for 140°F (60 °C). Wire heater according to diagram attached to the access door.
- Electrical accessory options are shown on the heater wiring diagram connected by a dashed line.





### Operation

**WARNING:** This heater must be properly installed before it is used.

#### **CONTROLS**

- Fan Delay The heater is equipped with a fan delay control. There will be a short delay to enable the heating elements to warm up before the fan turns on. The fan will also remain on for a few moments after the elements are de-energized.
- Automatic High Limit Each heater is equipped with automatic reset thermal cutouts. Should these safety switches operate, they will automatically reset once the element reaches a safe operation temperature, however, the cause of the high limit condition should be determined and corrected to sure satisfactory operation.

#### **OPTIONAL CONTROLS**

- Integral thermostats All units are available with a built-in snap-action thermostat. The sensing element is located in the return air stream to provide accurate temperature control. The thermostat has a range of 40°F (5°C) (low) to 100°F (38°C) (high). It can be manually operated or rendered tamper-proof as desired. This control can be field-mounted or factory mounted.
- Remote Line Voltage Thermostat All units can be connected to a line-voltage remote thermostat. A special control terminal block is provided in all units to facilitate easy connection of the remote thermostat control wiring.
- Remote Low Voltage Thermostat with Relay A low voltage transformer/relay can be field or factory installed with the unit for remote low voltage thermostatic control. The special control terminal block is utilized for this optional control feature.
- Fan-Only Switch An optional fan-only switch is available for integral mounting within the unit. This switch provides continuous fan-operation, independent of the built-in or optional remote thermostatic control, which is effective in eliminating air stratification.

#### START UP

- 1. Before the unit is energized, the discharge louvres should be adjusted for desired air deflection.
- Check to see that all controls and optional accessories are operation properly.

### Maintenance

▲ CAUTION: Before removing the front cover for cleaning, make certain the power has been turned off at the circuit breaker panel.

**CAUTION:** Allow adequate time for the element and body casing to cool before attempting to work on the heater.

- Under normal conditions, the heater should be cleaned once a year. DISCONNECT ALL POWER before cleaning or servicing the heater.
- All motors are lubricated for extended life operation, and will not have to be oiled.

## **Warranty**

The Manufacturer warrants the heating elements and components of the enclosed product against any defect in material or workmanship for a period of one year from the date of purchase. In full satisfaction of any claims under this Warranty the Manufacturer will repair or replace without charge, in its factory or in the field as it alone may decide, any parts which in its opinion are defective.

The Manufacturer shall not be responsible for any transportation or shipping costs in relation to such repair or replacement except as specifically assumed by it. Misuse of this product or repairs by persons other than the Manufacturer's authorized personnel without the Manufacturer's written approval, will void this Warranty.

This Warranty is in lieu of all other warranties or conditions whether express or implied including but not limited to those of merchantability or fitness for purpose and shall constitute the sole remedy of the Purchaser and the sole liability of the Manufacturer in respect of the sale of the product, whether in the nature of breach or breach of fundamental term, or of negligence or otherwise.

The Manufacturer shall not be liable for any special, indirect or consequential damages or for any damages resulting from removal or replacement of a heater subject to warranty claim without the Manufacturer's authorization.

This Warranty is transferable by the original consumer purchaser of the product. Any claims under this Warranty must be submitted in writing to the Service Manager, Dimplex North America Ltd., 1367 Industrial Rd., Cambridge, Ontario N1R 7G8, Canada.

## Replacement Parts

Thermostat
Control Knob
Control Fuse
Terminal Block
Grille

Grille 30006159-5ARP				
	15-25kW	30kW	40-50kW	
Fan Blade	02000017RP	02000018RP	02000045RP	
Motor	2000080200RP	2000090100RP	3024019RP	
Casing	30006730-SARP		30006851-SARP	
Louver	30000013-SARP		30006855-SARP	
Hi Limit Cutout	03005039RP		03005046RP	
Fan Delay Relay	06942602RP		03005044RP	
Capacitor	00857007RP	02007005RP	N/A	
Contactor	2400160300RP 2400161300RP (above 48A)		2400160200RP	
Transformer	347V: 2100080022RP 480V: 2100080011RP 600V: 2100080012RP		480V: 02005869RP 600V: 03005045RP	
208V Elements	15kW: 2200270100RP 20kW: 2200270500RP 25kW: 2200270800RP	2200271800RP	N/A	
240V Elements	15kW: 2200270200RP 20kW: 2200270100RP 25kW: 2200270900RP	N/A	N/A	
347V Elements	15kW: 2200271400RP 20kW: 2200271600RP	N/A	N/A	
480V Elements	15kW: 2200270300RP 20kW: 2200270600RP 25kW: 2200271000RP	2200271200RP	40kW: 02038336RP (9 elements/unit) 60kW: 02038338RP (9 elements/unit)	
600V Elements	15kW: 2200270400RP 20kW: 2200270700RP 25kW: 2200271100RP	2200271300RP	40kW: 02038337RP (9 elements/unit) 60kW: 02038338RP (9 elements/unit)	

<sup>\*</sup>All units have 6 elements unless otherwise indicated

## **♥ Dimplex**®

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