

# **Enclosure Heater PH** Series







- 1. The PH enclosure heater is a fan forced air heater designed to maintain a suitable temperature inside a metal enclosure or control panel.
- 2. The proper selection of a heater for an enclosure or space is determined by a consideration of the surface area, insulation properties, temperature difference between the ambient and the enclosure, and the enclosure location. To ensure proper heater selection, refer to "Heater Selection" guidelines.
- 3. The intended use of this heater is to protect against the effects of low temperature such as corrosion, freezing or condensation from damaging critical components inside a control enclosure.
- 4. This heater is not designed for use as a space or comfort heater and should not be installed in a wet, dusty, corrosive or hazardous location.
- 5. Operating surface temperatures of this heater is sufficient to cause burns upon contact with bare skin.
- 6. Before servicing, disconnect heater from the supply and allow approximately 10 minutes for the heater to cool.
- 7. Heaters without a factory installed temperature control thermostat that are to be installed in UL Listed Industrial Control Panels, must be used in conjunction with a UL Recognized thermostat suitable for use in UL508A Industrial Control Panels, and installed per the requirements of UL 508A.

# 2. Installation

1. The heater is to be mounted on a metal surface only inside a metal enclosure and should be installed in the centre of the enclosure and as low as practical for the best possible heat distribution.



CAUTION. The heater must be mounted in a vertical position with the terminal block at the bottom, so that the air discharge vents are at the top.

2. To ensure unrestricted airflow through the heater and avoid high temperatures on adjacent surfaces, heat sensitive components should be spaced away from the air discharge vents as shown below.

#### 3. Installation

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CAUTION. Heaters must be wired by qualified personnel in compliance with local codes CAUTION

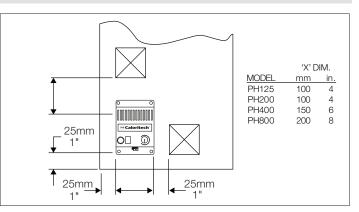


Figure 1



# CAUTION.

- Do not install in wet, dusty, corrosive or hazardous locations.
- Mount only on a metal surface in a metal enclosure.
- Heater surface temperatures are sufficient to cause burns.
- Keep away from combustible surfaces and heat sensitive components.

# 4. Wiring

- 1. Disconnect power before installation or servicing.
- 2. Heaters must be wired by gualified personnel to local electrical code requirements.
- 3. Check the supply voltage requirements with the heater nameplate voltage rating. Use wires suitable for 194°F (90°C).
- 4. Note that the heater thermostat does not have an "OFF" position.

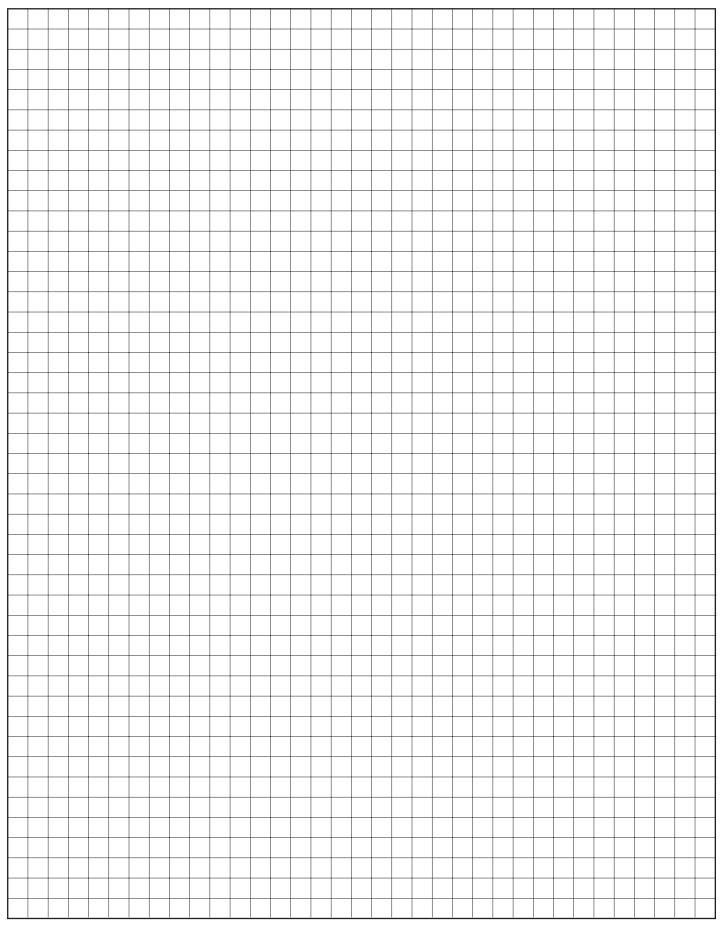
#### 5. Operation & Maintenance

- 1. Apply power to the circuit. Set the thermostat to the desired space temperature.
- 2. Allow suitable time for the thermostat to cycle and the space temperature to stabilize.
- 3. Due to system variances, you may need to readjust the thermostat to achieve desired temperature.
- 4. To ensure proper air flow through the heater, periodically check and clean the air ventilation openings from any dust or debris.
- 5. Standard heaters have a built-in pilot light to indicate heat on, and have a built-in fan switch which will allow the fan to run continuously for more uniform temperature distribution.
- 6. In "Fan" mode the heater will still provide heat when the temperature drops below set point. In the "Auto" mode the fan will turn on only when the heating element is energized.
- 7. The fan motor has permanently lubricated ball bearings and should not require maintenance.

#### 6. Overheat Protection

In the event of fan failure, or an overheat condition, an automatic reset temperature limit switch will open, breaking the power to the heating element.

# NOTES





PLEASE ADHERE TO INSTRUCTIONS IN THIS MANUAL Failure to do so may be dangerous and may void certain provisions of your warranty.

For further assistance, please call 24hr hotline: 1-877-325-3473 (U.S.A. and Canada) Please have model and serial numbers available before calling.

**WARRANTY:** Under normal use the Company warrants to the purchaser that defects in material or workmanship will be repaired or replaced without charge for a period of 18 months from date of shipment, or 12 months from the start date of operation, whichever expires first. Any claim for warranty must be reported to the sales office where the product was purchased for authorized repair or replacement within the terms of this warranty.

Subject to State or Provincial law to the contrary, the Company will not be responsible for any expense for installation, removal from service, transportation, or damages of any type whatsoever, including damages arising from lack of use, business interruptions, or incidental or consequential damages.

The Company cannot anticipate or control the conditions of product usage and therefore accepts no responsibility for the safe application and suitability of its products when used alone or in combination with other products. Tests for the safe application and suitability of the products are the sole responsibility of the user.

This warranty will be void if, in the judgment of the Company, the damage, failure or defect is the result of:

- Vibration, radiation, erosion, corrosion, process contamination, abnormal process conditions, temperature and pressures, unusual surges or pulsation, fouling, ordinary wear and tear, lack of maintenance, incorrectly applied utilities such as voltage, air, gas, water, and others or any combination of the aforementioned causes not specifically allowed for in the design conditions or,
- Any act or omission by the Purchaser, its agents, servants or independent contractors which for greater certainty, but not so as to limit the generality of the foregoing, includes physical, chemical or mechanical abuse, accident, improper installation of the product, improper storage and handling of the product, improper application or the misalignment of parts.

No warranty applies to paint finishes except for manufacturing defects apparent within 30 days from the date of installation.

The Company neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the product(s).

The Purchaser agrees that all warranty work required after the initial commissioning of the product will be provided only if the Company has been paid by the Purchaser in full accordance with the terms and conditions of the contract.

The Purchaser agrees that the Company makes no warranty or guarantee, express, implied or statutory, (including any warranty of merchantability or warranty of fitness for a particular purpose) written or oral, of the Article or incidental labour, except as is expressed or contained in the agreement herein.

**LIABILITY:** Technical data contained in the catalog or on the website is subject to change without notice. The Company reserves the right to make dimensional and other design changes as required. The Purchaser acknowledges the Company shall not be obligated to modify those articles manufactured before the formulation of the changes in design or improvements of the products by the Company.

The Company shall not be liable to compensate or indemnify the Purchaser, end user or any other party against any actions, claims, liabilities, injury, loss, loss of use, loss of business, damages, indirect or consequential damages, demands, penalties, fines, expenses (including legal expenses), costs, obligations and causes of action of any kind arising wholly or partly from negligence or omission of the user or the misuse, incorrect application, unsafe application, incorrect storage and handling, incorrect installation, lack of maintenance, improper maintenance or improper operation of products furnished by the Company.

# Visit <u>www.thermon.com</u> to contact a Thermon representative near you.

HEAD OFFICE: 7171 SOUTHWEST PKWY | BUILDING 300 SUITE 200 | AUSTIN, TX | 78735 | UNITED STATES CALORITECH: 2721 PLYMOUTH DRIVE | OAKVILLE, ON | L6H-5R5 | CANADA