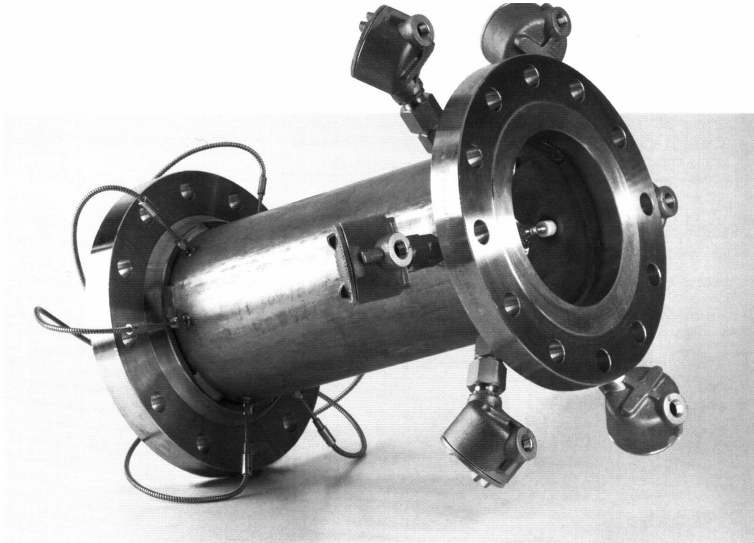


FLANGED INLINE SYSTEM with SureHeat™ Technology

HEATER 073166, 073377, 073384, 073153
SCR POWER CONTROL 072765, 072764, 072763, 072762
TEMPERATURE CONTROL 070429
OVERTEMPERATURE CIRCUIT 073262



⇒ **FOR SAFETY AND LONG HEATER LIFE, CAREFULLY READ THIS MANUAL BEFORE USE.**

Description

Compact industrial stainless steel flanged heater for heating high pressure (150psi max), high volume air or inert gases to 1400°F. The unit uses the new SureHeat™ technology, which has built-in sensors with an external control that protects the heater from burning out if the airflow is suddenly reduced, or the temperature is accidentally turned up too high. Sensors measure both element temperature and inlet temperature.

The flanged Inline System is a sophisticated, compact and efficient heating system capable of meeting extremely high demand heating needs. Heater sizes range from 4" to 8" diameter, and in wattages of 36 to 192kW. If operated correctly, the heater will operate continuously for 5000 hours or longer.

Specifications

MAXIMUM STATIC PRESSURE 150 PSI
 MAXIMUM EXIT TEMPERATURE 1400°F
 MAXIMUM INLET TEMPERATURE 130°F
 MOUNTING ANSI STANDARD FLANGES 300LB 4",6",8"

Heater P/N	Power Control P/N	kW	Max. Volts	Max. Amp Draw	Replacement Element P/N
073166	072765	36.0	480-3 phase	45	073167
073377	072764	72.0	480-3 phase	87	073378
073384	072763	144.0	480-3 phase	175	073385
073153	072762	192.0	480-3 phase	235	073253

Safety

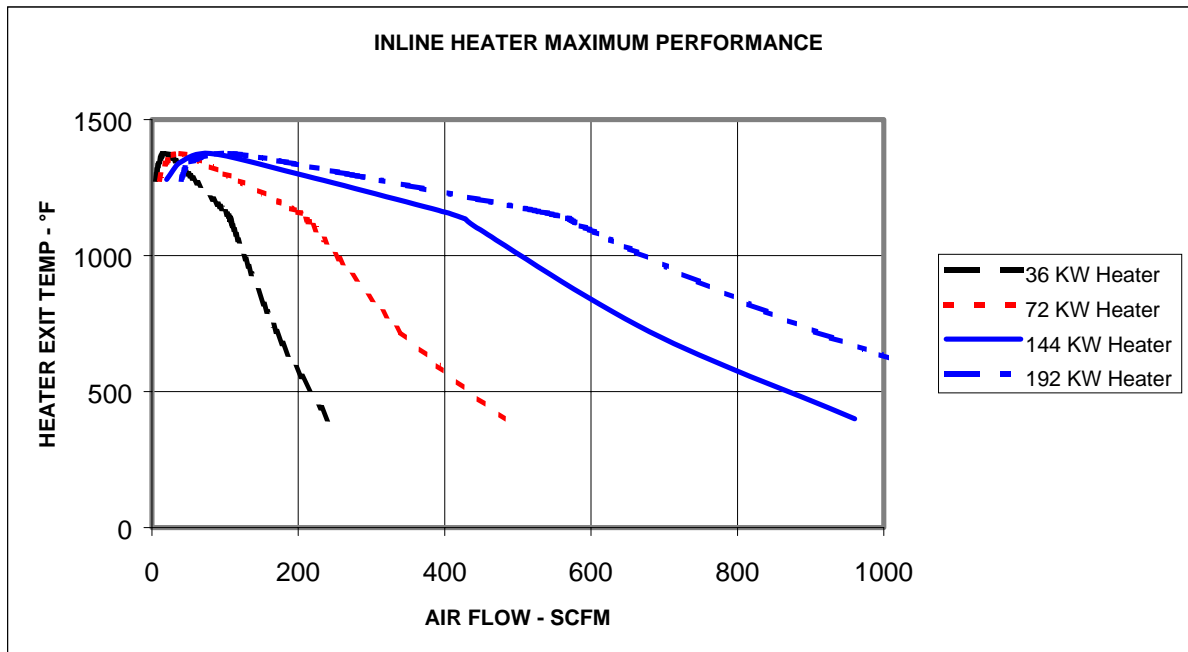
- ❑ **SHOCK HAZARD** Only qualified individuals should install this heater and related controls. Follow all applicable electrical codes and use proper wiring.
- ❑ **WARNING! You must use at least 600V 22Ga wire to connect heater sensors to 4-input Over-temperature board. These sensors are in contact with the heater elements and are at or near line voltage during heater operation.**
- ❑ **BURN/FIRE/EXPLOSION HAZARD** Do not use with or near explosive or reactive gases. Avoid contact with the side, or exposure to the exit-end, during or soon after operation. **DO NOT USE NEAR VOLATILE OR COMBUSTIBLE MATERIALS.**

Precautions

- ❑ Use filtered air. Avoid grease, oil, or oil vapors, corrosive or reactive gases that will damage heater.

Performance Curves

The following curve shows, for each heater, the maximum achievable air temperature (°F) as a function of the airflow in standard cubic feet per minute (SCFM), with inlet air at 70°F. When the heaters are operated at temperatures less than indicated on the curves, operating life in excess of 5000 hours can be expected. Also attached are performance curves showing pressure drop across the heaters at various air flows and temperatures.



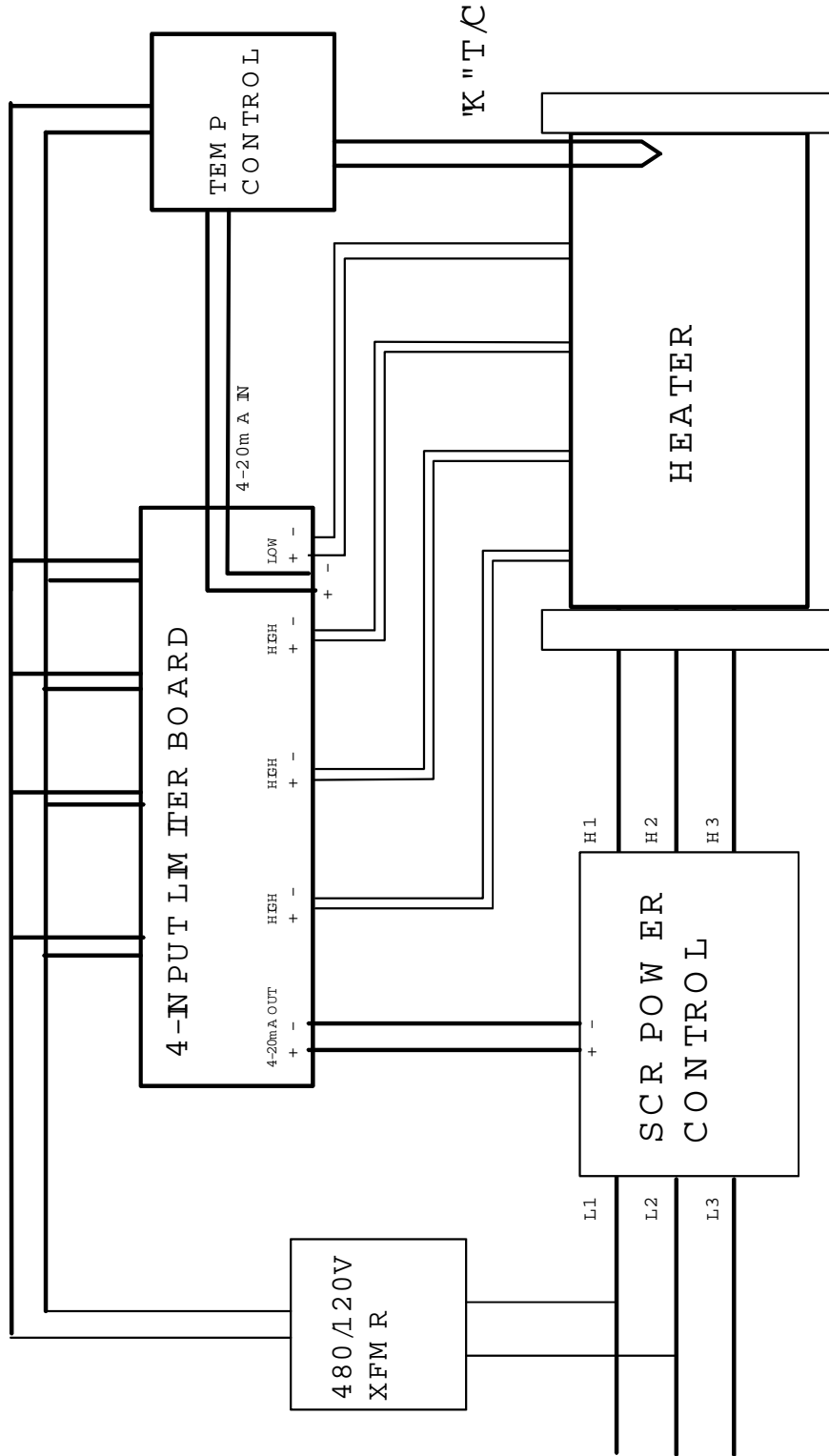
Installation and Wiring

1. Be sure heater is securely mounted.
2. Follow all applicable electrical codes when mounting and wiring heater and control components.
3. **USE MINIMUM 600V 22GA WIRE TO CONNECT HEATER SENSORS TO OVERTEMPERATURE BOARD.**

OPERATING INSTRUCTIONS

1/31/01

**OSRAM
SYLVANIA**
Process Heat



NOTES:

- 1) THE FOUR LM THER BOARD MODULES ARE MOUNTED IN A SINGLE 12"x3.25"OD SNAP TRAC
- 2) "LOW" IS THE SENSOR LOCATED AT THE HEATER INLET.
- 3) "HIGH" IS AN ELEMENT SENSOR FOR MEASURING ONE OF THE THREE PHASE ELEMENT TEMPERATURES.
- 4) THREE-PHASE SCR DIMENSIONS (HX XD) (OVERALL MOUNTING) ARE AS FOLLOWS:

072765	(36kW)	60A	480V	12"x12"x5.7"	/10"x10.8"
072764	(72kW)	100A	480V	12"x12"x5.7"	/10"x10.8"
072763	(144kW)	200A	480V	14"x19"x8.5"	/11"x18.35"
072762	(192kW)	250A	480V	19.25"x19"x8.5"	/16.25"x18.35"

WIRING SCHEMATIC FOR FLANGED INLINE HEATER WITH 4-INPUT LM THER BOARD
OSRAM SYLVANIA 1/09/01

Operation

START-UP

1. Turn on air and set pressure or flow to desired operating level.
2. Turn on power to the SCR power controller.
3. Turn on power to the temperature controller.
4. The temperature of the exit air will slowly increase to the set temperature. Any overshoot of the temperature of more than a few degrees is an indication of improper temperature controller parameters.

SHUT DOWN

1. Turn off power to the temperature controller and the SCR Power Controller.
2. Allow air to continue to flow for a minimum of 1 minute or until exit air temperature is 150°C or less. Continue airflow longer if hot equipment components present any potential hazard to personnel.
3. Turn off air to the system.

Warranty

OSRAM SYLVANIA warrants that all products to be delivered hereunder will be free from defects in material and workmanship at the time of delivery. OSRAM SYLVANIA's obligation under this warranty shall be limited to (at its option) repairing, replacing, or granting a credit at the prices invoiced at the time of shipment for any of said products. This warranty shall not apply to any such products which shall have been repaired or altered, except by OSRAM SYLVANIA, or which shall have been subjected. OSRAM SYLVANIA shall be liable under this warranty only if (A) OSRAM SYLVANIA receives notice of the alleged defect within sixty (60) days after the date of shipment; (B) the adjustment procedure hereinafter provided is followed, and (C) such products are, to OSRAM SYLVANIA's satisfaction, determined to be defective.

THE WARRANTY SET FORTH IN THE PRECEDING PARAGRAPH IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY.

The information contained in this manual is based on data considered to be true and accurate. Reasonable precautions for accuracy has been taken in the preparation of this manual, however OSRAM SYLVANIA assumes no responsibility for any omissions or errors, nor assumes any liability for damages that may result from the use of the product in accordance with the information contained in this manual.

Please direct all warranty/repair requests or inquiries to the place of purchase, and provide the following information, in writing:

- (A) Order number under which products were shipped
- (B) Model/Serial Number of product
- (C) Reason for rejection

PRODUCTS CAN NOT BE RETURNED TO OSRAM SYLVANIA WITHOUT AUTHORIZATION.

Replacement, repair, or credit for products found to be defective will be made by the place of purchase. All products found to be not defective will be returned to the Buyer; transportation charges collect or stored at Buyers expense.