

OPERATING INSTRUCTIONS

1/24/01

OSRAM
SYLVANIA
Process Heat

HOT AIR TOOL 3500

068462, 068463, 068464, 070878, 071383



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

Description

- Compact, efficient heater with stainless steel housing and positive hose-barb air connection for heating air or inert gases to 1400°F (760°C). Built in “K” Thermocouple allows for closed-loop control of temperature to ±1°F of set point. If operated correctly, the heater will operate continuously for 5000 hours or longer.

Specifications

MAXIMUM INLET PRESSURE 60 PSI (4 BAR)
MAXIMUM INLET AIR TEMPERATURE 120°F (50°C)
MAXIMUM EXIT AIR TEMPERATURE 1400°F (760°C)

MODEL NUMBER	MAXIMUM WATTAGE	MAXIMUM VOLTAGE	AMP RATING	MINIMUM INLET PRESSURE PSI (mBAR)	MINIMUM FLOW SCFH(SLPM)
068462	1500	120	13	0.3 (21)	30 (14)
068463	2000	240	9	0.6 (41)	70 (33)
068464	3500	240	15	1.0 (70)	90 (43)

Safety

- **SHOCK HAZARD** Only qualified individuals should install this heater and related controls. Follow all applicable electrical codes and use proper wiring.
- **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 which will damage heater.

OPERATING INSTRUCTIONS

1/24/01

OSRAM
SYLVANIA
Process Heat

- ❑ Operate at safe voltages as shown on the PERFORMANCE CURVES. Excess voltage will cause premature failure.
- ❑ Always have sufficient airflow through the heater before applying power. Otherwise element will overheat very quickly, and burn out. **NOTE:** A thermocouple cannot detect temperatures if there is no flow – turn on flow before applying power, even when a controller with a thermocouple is being used.
- ❑ Use phase angle fired power controllers. On-off controllers may shorten heater life (or burnout element).
- ❑ For closed-loop control, use a temperature controller with a fast sampling period (500ms) and minimal overshoot.

Installation

- Securely mount the heater. Do not clamp so tightly as to distort the stainless steel housing.
- Connect the filtered air source to the heater using ¼" ID high pressure tubing.
- Connect the two power leads, grounding screw, and thermocouple leads to the appropriate connections. For "K" thermocouples, the red lead is negative (-), and the yellow lead is positive (+).
- If a thermocouple is used, ensure that it is located within one inch from the heater exit.

Start-up

- Reference the PERFORMANCE CURVES section for operational parameters before attempting to operate heater(s).
- Turn on air supply and adjust to desired flow/pressure.
- If using a closed loop system, turn on power to the temperature and power controller, then set the desired temperature on the temperature controller. If using an open loop system, increase power to the heater through the power controller until the desired temperature is attained.

Performance Curves

To use these curves, first determine the pressure at the heater entrance or flow through the heater, and then locate the maximum allowable temperature on the curve. DO NOT EXCEED THAT TEMPERATURE. If you are not using a closed-loop control, The second set of performance curves show the maximum voltage that may be applied to these heaters as a function of air pressure. The pressure is the pressure at the heater entrance with no bends, elbows, or tube ID restrictions between the pressure gauge and the heater.

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.

OPERATING INSTRUCTIONS

1/24/01

OSRAM
SYLVANIA
Process Heat

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.

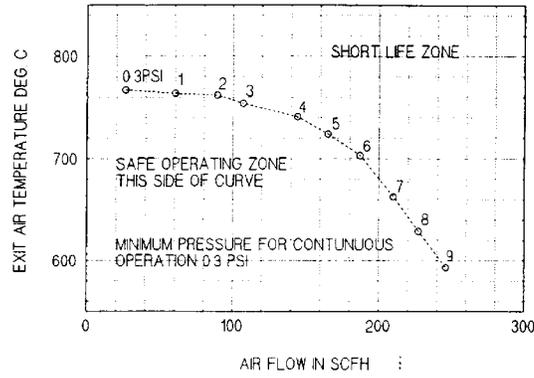
OPERATING INSTRUCTIONS

1/24/01

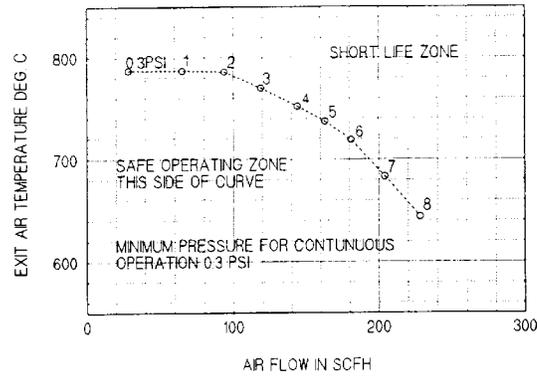
OSRAM
SYLVANIA
Process Heat

1500 WATT HOT AIR TOOL (MODEL # 068462)

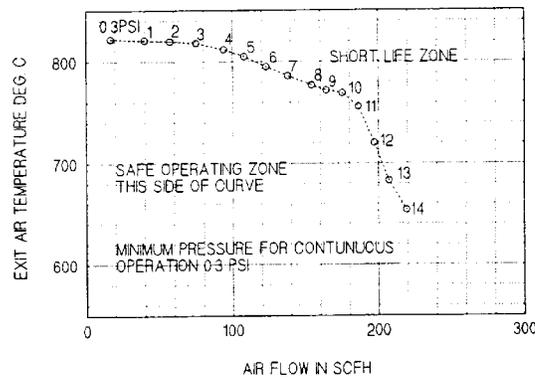
OPEN-ENDED:



FLARE:

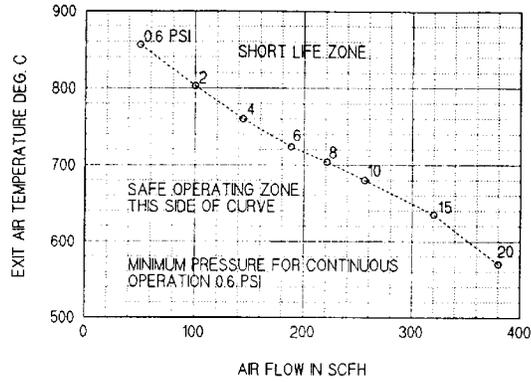


NOZZLE:

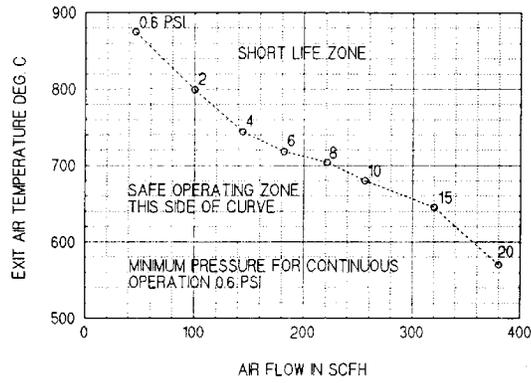


2000 WATT HOT AIR TOOL (MODEL # 068463)

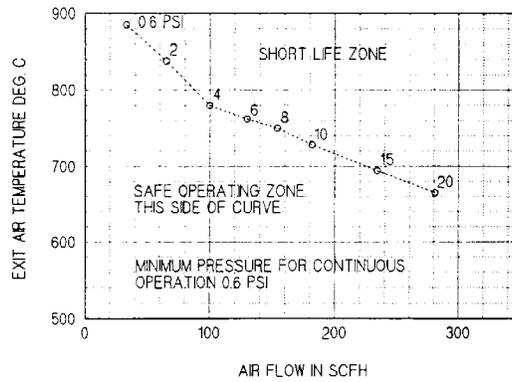
OPEN-ENDED:



FLARE:



NOZZLE:



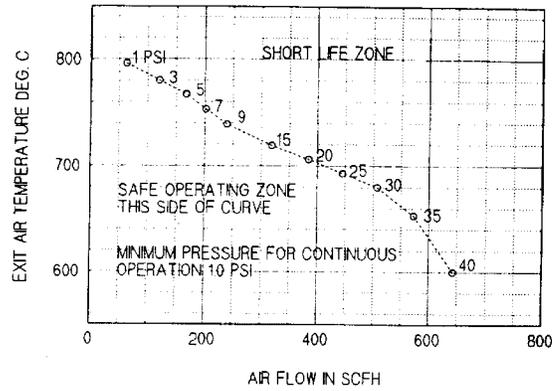
OPERATING INSTRUCTIONS

1/24/01

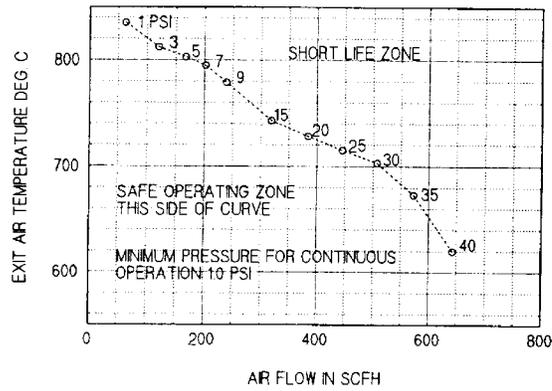
OSRAM
SYLVANIA
Process Heat

3500 WATT HOT AIR TOOL (MODEL # 068464)

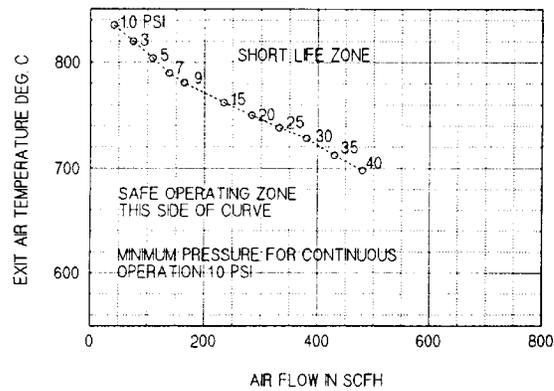
OPEN-ENDED:



FLARE:



NOZZLE:

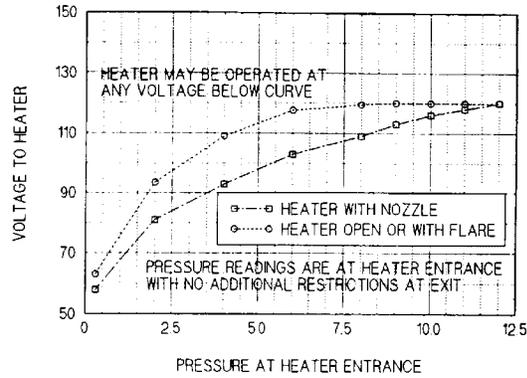


OPERATING INSTRUCTIONS

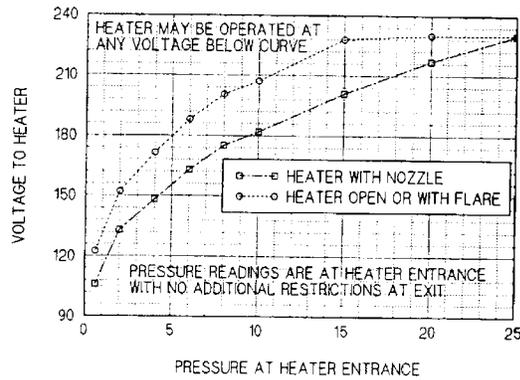
1/24/01

OSRAM
SYLVANIA
Process Heat

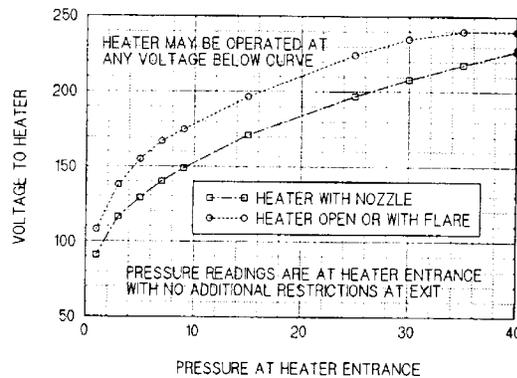
MODEL # 068462:



MODEL # 068463:



MODEL # 068464:

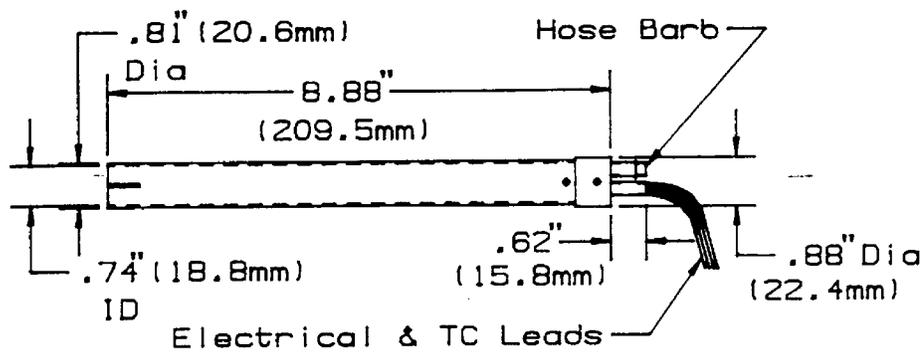


OPERATING INSTRUCTIONS

1/24/01

OSRAM
SYLVANIA
Process Heat

HEATER



FLARE

