## **Process Air and Radiant**

# **TDH** Medium Temperature Air Duct Heater

- 6 60 kW
- 240 and 480 Volt
- Three Phase
- INCOLOY<sup>®</sup> Sheath Elements
- 750°F Max. Outlet Air Temp.

### **Applications**

Heat Air for Drying and Curing Operations up to 750°F Air Temperature, Heat Treating, Reheating or Dehumidification, Booster Heater in Heating Ducts and Ovens.

#### **Construction**

U-Shaped Tubular Elements with INCOLOY® sheath are mounted in a heavy gauge steel flange with 9/32" diameter mounting holes for attaching to duct work. All terminal connections are of high-temperature alloy construction and are enclosed in an aluminum painted steel housing.

### *Features*

Steel flange is equipped with special holes to permit easy replacement of individual element. Sheet steel terminal box may be removed to facilitate wiring during installation.

All Heaters can be mounted in any position; top, side or bottom entry. In high ambient temperature operations, least corrosive action and least oxidation to the terminals will occur if heaters are mounted with terminals in the coolest possible ambient, usually on bottom



or side of duct. Minimum duct size is A dimension plus 3/8" or 11-1/8" plus 3/8" and B dimension plus 1-5/8".

**Wiring** — Terminals on field wiring connections are located in circular junction box outside of heating zone. Alloy wire or buss bar must be used for power connections.

Maximum Sheath Temperature — 1150°F.

#### **Application & Selection Guidelines**

**Maximum Work Temperatures** — Type TDH heaters can generally be used at the following maximum temperatures, without exceeding their capability, if properly installed according to instructions packed with heaters.

Air Velocity (Ft./Sec.)	Max. Output Air Temp. (°F)						
6	650						
9	700						
16	750						

**Note** — Maximum work temperatures are based on 22 W/In<sup>2</sup>. If elements have a lower watt density, output air temperature may

be increased but not to exceed 750°F. If watt density is higher, output air temperature should be lower.

3-5/8

**Note** — See Allowable Watt Density & Heater Selection Graphs and Pressure Drop Curve G-227-2 in the Technical section of this catalog.

### **Options**

Dimensions (Inches)

9/32" Dia. Mtg. Holes

> 3-1/2 (Тур.)

8-11/16

11-1/8 10-1/2

Replacement Elements — Order model number TI-43X752, 240V, 1000W (PCN 282781).

**Explosion-Resistant Terminal Enclosure** is available for hazardous area applications.

### **Overtemperature Protection**



### Specifications and Ordering Information

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			No			Dimen	Dimensions (In.)						PCN		\ <b>\</b> /+
kW	Volts	W/In <sup>2</sup>	Elem.	Х	A	В	С	D	F	М	Model	Stock	240V	480V	(Lbs.)
6	240/480	22	6	2-1/2	5-5/8	20-3/8	26-15/16	4	1/4	5	TDH-6C	AS	2607851	260806 <sup>1</sup>	19
12	240/480	22	12	3-1/2	7-5/8	20-3/8	26-15/16	6	1/4	7	TDH-12C	AS	2608221	260849 <sup>1</sup>	26
18	240/480	22	18	3	9-5/8	20-3/8	26-15/16	8	1/4	9	TDH-18C	AS	2608651	2608811	34
24	240/480	22	24	2-3/4	11-5/8	20-3/8	26-15/16	10	1/4	11	TDH-24C	AS	260902	260929 <sup>1</sup>	42
30	240/480	22	30	3-1/4	13-5/8	20-3/8	26-15/16	12	1/4	13	TDH-30C	AS	260945	2609611	51
36	240/480	22	36	3-3/4	15-5/8	20-3/8	27-5/8	14	3/8	15	TDH-36C	AS	260970	260988 <sup>1</sup>	60
42	240/480	22	42	4-1/4	17-5/8	20-3/8	27-5/8	16	3/8	17	TDH-42C	AS	260996	261008	69
48	240/480	22	48	4-3/4	19-5/8	20-3/8	27-5/8	18	3/8	19	TDH-48C	AS	261016	261024	78
54	240/480	22	54	5-1/4	21-5/8	20-3/8	27-5/8	20	3/8	21	TDH-54C	AS	261032	261040	87
60	240/480	22	60	5-3/4	23-5/8	20-3/8	27-5/8	22	3/8	23	TDH-60C	AS	261059	261067	96
Stock Status: S = stock AS = assembly stock			NS = nc	on-stock			1. Heat	ter has UL component recognition:							

To Order—Specify model, PCN, kW, volts and quantity.

 Heater has UL component recognition; UL versions of larger sizes are available.

Chromalox<sup>®</sup> Represe

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