## **Process Air and Radiant**

# **ADH**

# High Temperature Air Duct Heater

- 5 270 kW
- 480 Volt, Three Phase (Up to 600V Available)
- INCOLOY® Sheath Elements
- 800°F Max. Outlet Air Temp.

#### **Construction**

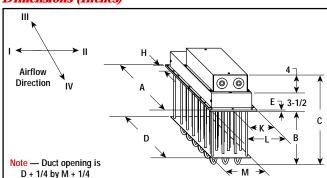
Rugged Construction Elements — Sturdy 0.475" diameter INCOLOY® sheath tubular elements are mounted to a heavy 1/4 or 3/8" thick steel flange. Element fasteners allow for easy replacement.

Corrosion-Resistant Terminal Enclosure — The element terminal enclosure is made of 16 gauge high-temperature, corrosion-resistant steel and includes 1" thick high-temperature insulation to minimize temperatures in the wiring area.

Wiring Box — The 16 gauge wiring box encloses individual terminal blocks for each circuit. Threaded stud type terminals are provided to permit quick positive attachment of circuit wiring conductors.

**Element Support Plate** — A stainless steel element support plate is held in place with Stainless Steel support rods to provide structural stability.

#### **Dimensions (Inches)**



Flange Mounting Gasket — Packed separately with each duct heater to minimize air leakage between the flange and air duct.

#### **Mounting**

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 or L dimension plus 3/8" and B dimension plus 1-5/8".

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

Maximum Work Temperatures — Type ADH heaters can generally be used at the following maximum temperatures, provided the minimum air velocity is maintained uniformly through the heater.

Air Velocity (Ft./Sec.)	Max. Outlet Air Temp. (°F)					
4 - 36	800					

**Note** — Maximum temperatures are based on 30 W/ln². If elements have a lower watt density, work temperature may be increased; if watt density is higher, work temperature should be lower.

Note — An Air Flow Switch is recommended with air duct heaters.

**Note** — See Allowable Watt Density & Heater Selection Graphs in the Technical section of this catalog.

### **Options**

- · Gas Tight Design
- Overtemperature Protection
- Moisture-Resistant Terminal Enclosure
- · Explosion-Resistant Terminal Enclosure
- Additional Thermocouple
- Special Ratings, Sizes or Construction Materials

## Specifications and Ordering Information

		No.	No.	Dimensions (In.)												Wt.
kW	W/In <sup>2</sup>			Α	В	С	D	Ε	Н	K	L	M	Model	Stock	PCN	(Lbs.)
5	30	3	1	5-5/8	20-1/8	28-1/8	4	1/4	2-1/2	3-1/2	11-1/8	9-1/2	ADH-005	SSS	210016	8
10	30	6	1	7-5/8	20-3/8	28-1/8	6	1/4	3-1/2	3-1/2	11-1/8	9-1/2	ADH-010		210024	15
15	30	9	1	9-5/8	20-3/8	28-1/8	8	1/4	3	3-1/2	11-1/8	9-1/2	ADH-015		210032	25
20	30	12	1	11-5/8	20-3/8	28-1/8	10	1/4	2-3/4	3-1/2	11-1/8	9-1/2	ADH-020	s	210040	35
25	30	15	1	13-5/8	20-3/8	28-1/8	12	1/4	3-1/4	3-1/2	11-1/8	9-1/2	ADH-025	s	210059	40
30	30	18	1	15-5/8	20-3/8	28-1/4	14	3/8	3-3/4	3-1/2	11-1/8	9-1/2	ADH-030	s	210067	55
35	30	21	1	17-5/8	20-3/8	28-1/4	16	3/8	4-1/4	3-1/2	11-1/8	9-1/2	ADH-035	s	210075	65
40	30	24	2	19-5/8	20-3/8	28-1/4	18	3/8	4-3/4	3-1/2	11-1/8	9-1/2	ADH-040	s	210083	70
45	30	27	2	21-5/8	20-3/8	28-1/4	20	3/8	5-1/4	3-1/2	11-1/8	9-1/2	ADH-045	s	210091	80
50	30	30	2	23-5/8	20-3/8	28-1/4	22	3/8	5-3/4	3-1/2	11-1/8	9-1/2	<b>ADH-050</b>	<b>S</b>	<b>210104 210112</b> 210120	90
60	30	36	2	27-5/8	20-3/8	28-1/4	26	3/8	4-1/2	3-1/2	11-1/8	9-1/2	<b>ADH-060</b>	S		105
80	30	48	4	35-5/8	20-3/8	28-1/4	34	3/8	4-3/8	3-1/2	11-1/8	9-1/2	ADH-080	NS		140
90	30	54	5	39-5/8	20-3/8	28-1/4	38	3/8	4-7/8	3-1/2	11-1/8	9-1/2	ADH-090	NS	210139	160
100	30	60	5	43-5/8	20-3/8	28-1/4	42	3/8	5-3/8	3-1/2	11-1/8	9-1/2	<b>ADH-100</b>	<b>S</b>	<b>210147</b>	175
144	30	48	4	35-5/8	35	42-7/8	34	3/8	4-3/8	3-1/2	11-1/8	9-1/2	ADH-144	NS	210155	165
162	30	54	6	39-5/8	35	42-7/8	38	3/8	4-7/8	3-1/2	11-1/8	9-1/2	ADH-162	o o o	210163	185
216	30	72	6	27-5/8	35	42-7/8	26	3/8	4-1/2	3-7/8	20	18-3/8	ADH-216F <sup>1</sup>		210171	240
270	30	90	8	33-5/8	35	42-7/8	32	3/8	5-1/2	3-7/8	20	18-3/8	ADH-270F <sup>1</sup>		210180	300

**Stock Status:** S = stock AS = assembly stock NS = non-stock **To Order**—Specify model, PCN, kW and quantity.

1. Elements contain threaded gas tight fittings as standard.

Represented By: Ross & Pethtel Phone: 225-273-2202 <u>Website</u>