

ADHT High Temperature Air Duct Heater

- 5 - 300 kW
- 480 Volt, Three Phase
(Up to 600V Available)
- INCOLOY® Sheath Elements
- 20 W/In²
- 1200°F Max. Outlet Air Temp.
- Insulated Standoff Collar

Type ADHT

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 to 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.

Insulation Housing — Includes 3" of high temperature thermal insulation to reduce duct heat conducted into terminal enclosure.

Overtemperature Protection — A type K thermocouple is welded to the element sheath surface to sense element temperature, and is wired to a terminal block located on the outer surface of the terminal housing.

Mounting

Generally mounted to a field fabricated stand off collar from the ductwork to position the heater such that the 3" insulation housing is in the same plane as the duct insulation.

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", and 3" for insulation housing.

Application & Selection Guidelines

Maximum Work Temperatures — Type ADHT heaters can generally be used at the following maximum temperatures, provided the minimum air velocity is maintained uniformly through the heater. Maximum temperatures are based on 20 W/In².

Air Velocity (Ft./Sec.)	Max. Outlet Air Temp. (°F)
4	1050
9	1100
16	1150
25	1200
36	1200

Note — See Allowable Watt Density & Heater Selection Graphs in Technical section.

Note — An airflow type switch or other device is recommended to protect against loss of airflow.

Basic Model				Includes Gas Tight Fittings		
Volts KW Phase	Model	PCN	SS	Model	PCN	SS
240V 5KW 1PH	ADHT-005	216178	AS	ADHT-005F	216450	AS
240V 5KW 3PH	ADHT-005	216186	AS	ADHT-005F	216469	AS
480V 5KW 1PH	ADHT-005	216194	AS	ADHT-005F	216477	AS
480V 5KW 3PH	ADHT-005	210198	AS	ADHT-005F	216485	AS
240V 10KW 1PH	ADHT-010	216215	AS	ADHT-010F	216493	AS
240V 10KW 3PH	ADHT-010	216223	AS	ADHT-010F	216506	AS
480V 10KW 1PH	ADHT-010	216231	AS	ADHT-010F	216549	AS
480V 10KW 3PH	ADHT-010	210200	AS	ADHT-010F	216557	AS
240V 15KW 1PH	ADHT-015	216248	AS	ADHT-015F	216565	AS
240V 15KW 3PH	ADHT-015	216258	AS	ADHT-015F	216573	AS
480V 15KW 1PH	ADHT-015	216266	AS	ADHT-015F	216581	AS
480V 15KW 3PH	ADHT-015	210219	AS	ADHT-015F	216590	AS
240V 20KW 1PH	ADHT-020	216274	AS	ADHT-020F	216602	AS
240V 20KW 3PH	ADHT-020	216282	AS	ADHT-020F	216610	AS
480V 20KW 1PH	ADHT-020	216290	AS	ADHT-020F	216629	AS
480V 20KW 3PH	ADHT-020	210227	AS	ADHT-020F	216637	AS
240V 25KW 1PH	ADHT-025	216303	AS	ADHT-025F	216645	AS
240V 25KW 3PH	ADHT-025	216311	AS	ADHT-025F	216653	AS
480V 25KW 1PH	ADHT-025	216320	AS	ADHT-025F	216661	AS
480V 25KW 3PH	ADHT-025	210235	AS	ADHT-025F	216670	ST
240V 30KW 1PH	ADHT-030	216338	AS	ADHT-030F	216688	AS
240V 30KW 3PH	ADHT-030	216346	AS	ADHT-030F	216696	AS
480V 30KW 1PH	ADHT-030	216354	AS	ADHT-030F	216709	AS
480V 30KW 3PH	ADHT-030	210243	AS	ADHT-030F	216717	AS
240V 35KW 3PH	ADHT-035	216362	AS	ADHT-035F	216725	AS
480V 35KW 1PH	ADHT-035	216370	AS	ADHT-035F	216733	AS
480V 35KW 3PH	ADHT-035	210251	AS	ADHT-035F	216741	AS
240V 40KW 3PH	ADHT-040	216389	AS	ADHT-040F	216750	AS
480V 40KW 1PH	ADHT-040	216397	AS	ADHT-040F	216768	AS
480V 40KW 3PH	ADHT-040	210260	AS	ADHT-040F	216776	AS
240V 45KW 3PH	ADHT-045	216408	AS	ADHT-045F	216784	AS
480V 45KW 1PH	ADHT-045	216418	AS	ADHT-045F	216792	AS
480V 45KW 3PH	ADHT-045	210278	AS	ADHT-045F	216805	AS
240V 50KW 3PH	ADHT-050	216426	AS	ADHT-050F	216813	AS
480V 50KW 1PH	ADHT-050	216434	AS	ADHT-050F	216821	AS
480V 50KW 3PH	ADHT-050	210286	AS	ADHT-050F	216830	AS
480V 60KW 2-3PH	ADHT-060	210294	AS	ADHT-060F	216848	AS
480V 70KW 3PH	ADHT-070	216442	AS	ADHT-070F	216856	AS
480V 80KW 3PH	ADHT-080	210307	AS	ADHT-080F	216864	AS
480V 90KW 3PH	ADHT-090	210315	AS	ADHT-090F	216872	AS
480V 100KW 3PH	ADHT-100	210323	AS	ADHT-100F	216880	AS
480V 120KW 3PH	ADHT-120	210331	AS	ADHT-120F	216899	AS
480V 160KW 3PH	ADHT-160	210340	AS	ADHT-160F	216901	AS
480V 180KW 3PH	ADHT-180	210358	AS	ADHT-180F	216910	AS
480V 240KW 3PH				ADHT-240F	210366	AS
480V 300KW 3PH				ADHT-300F	210374	AS

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