

ADHT High Temperature Air Duct Heater

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

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