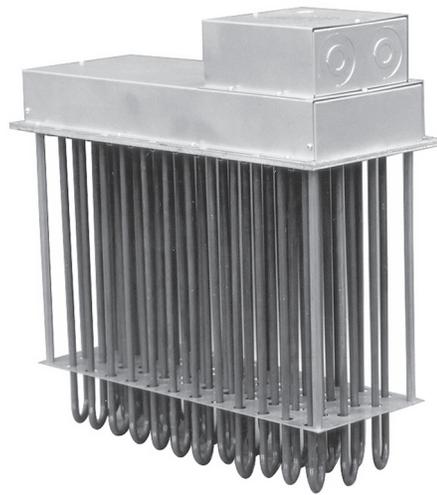
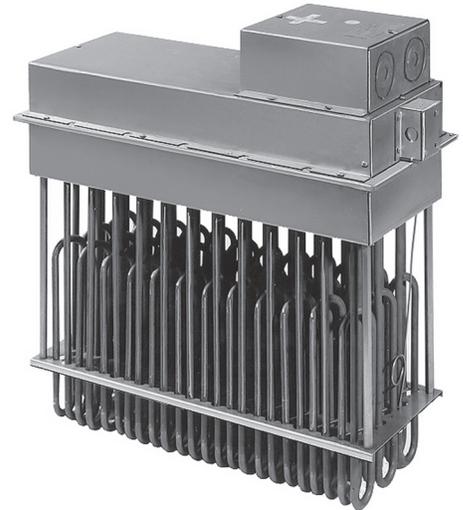


Installation Instructions

ADH and ADHT Air Duct Heaters



ADH



ADHT



Types ADH and ADHT Air Duct Heaters

Specifications - Table A

| Model | Approx. Net. Wt. (lbs) | Model | Approx. Net. Wt. (lbs) | Volts | Phase | kW | No. Elements | No. Mtg. Holes 9/32" Dia. | No. Ckts. | Dimensions (In.) | | | | | | | | |
|----------|------------------------|-----------|------------------------|-------|-------|-----|--------------|---------------------------|-----------|------------------|--------|--------|----|-----|-------|-------|--------|--------|
| | | | | | | | | | | A | B | C | D | E | H | K | L | M |
| ADH-005 | 8 | ADHT-005 | 10 | 480 | 3 | 5 | 3 | 10 | 1 | 5-5/8 | 20-3/8 | 28-1/8 | 4 | 1/4 | 2-1/2 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-010 | 15 | ADHT-010 | 20 | 480 | 3 | 10 | 6 | 10 | 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-015 | 25 | ADHT-015 | 30 | 480 | 3 | 15 | 9 | 12 | 1 | 9-5/8 | 20-3/8 | 28-1/8 | 8 | 1/4 | 3 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-020 | 35 | ADHT-020 | 40 | 480 | 3 | 20 | 12 | 14 | 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-025 | 40 | ADHT-025 | 50 | 480 | 3 | 25 | 15 | 14 | 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-030 | 55 | ADHT-030 | 65 | 480 | 3 | 30 | 18 | 14 | 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-035 | 65 | ADHT-035 | 80 | 480 | 3 | 35 | 21 | 14 | 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-040 | 70 | ADHT-040 | 90 | 480 | 3 | 40 | 24 | 14 | 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-045 | 80 | ADHT-045 | 100 | 480 | 3 | 45 | 27 | 14 | 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-050 | 90 | ADHT-050 | 110 | 480 | 3 | 50 | 30 | 14 | 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 |
| ADH-060 | 105 | ADHT-060 | 130 | 480 | 3 | 60 | 36 | 18 | 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 |
| ADH-070 | 70 | ADHT-070 | 140 | 480 | 3 | 70 | 42 | 22 | 4 | 31-5/8 | 20-3/8 | 28-1/4 | 30 | 3/8 | 4-1/2 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-080 | 140 | ADHT-080 | 175 | 480 | 3 | 80 | 48 | 22 | 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-090 | 160 | ADHT-090 | 200 | 480 | 3 | 90 | 54 | 22 | 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-100 | 175 | ADHT-100 | 220 | 480 | 3 | 100 | 60 | 22 | 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 |
| — | — | ADHT-120 | 205 | 480 | 3 | 120 | 36 | 18 | 4 | 27-5/8 | 35 | 42-7/8 | 26 | 3/8 | 4-1/2 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-144 | 165 | — | — | 480 | 3 | 144 | 48 | 22 | 4 | 35-5/8 | 35 | 42-7/8 | 34 | 3/8 | 4-3/8 | 3-1/2 | 11-1/8 | 9-1/2 |
| — | — | ADHT-160 | 270 | 480 | 3 | 160 | 48 | 22 | 8 | 35-5/8 | 35 | 42-7/8 | 34 | 3/8 | 4-3/8 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-162 | 185 | — | — | 480 | 3 | 162 | 54 | 22 | 6 | 39-5/8 | 35 | 42-7/8 | 38 | 3/8 | 4-7/8 | 3-1/2 | 11-1/8 | 9-1/2 |
| — | — | ADHT-180 | 305 | 480 | 3 | 180 | 54 | 22 | 6 | 39-5/8 | 35 | 42-7/8 | 38 | 3/8 | 4-7/8 | 3-1/2 | 11-1/8 | 9-1/2 |
| ADH-216F | 240 | — | — | 480 | 3 | 216 | 72 | 22 | 6 | 27-5/8 | 35 | 42-7/8 | 26 | 3/8 | 4-1/2 | 3-7/8 | 20 | 18-3/8 |
| — | — | ADHT-240F | 400 | 480 | 3 | 240 | 72 | 22 | 8 | 27-5/8 | 35 | 42-7/8 | 26 | 3/8 | 4-1/2 | 3-7/8 | 20 | 18-3/8 |
| ADH-270F | 300 | — | — | 480 | 3 | 270 | 90 | 22 | 8 | 33-5/8 | 35 | 42-7/8 | 32 | 3/8 | 5-1/2 | 3-7/8 | 20 | 18-3/8 |
| — | — | ADHT-300F | 500 | 480 | 3 | 300 | 90 | 22 | 10 | 33-5/8 | 35 | 42-7/8 | 32 | 3/8 | 5-1/2 | 3-7/8 | 20 | 18-3/8 |

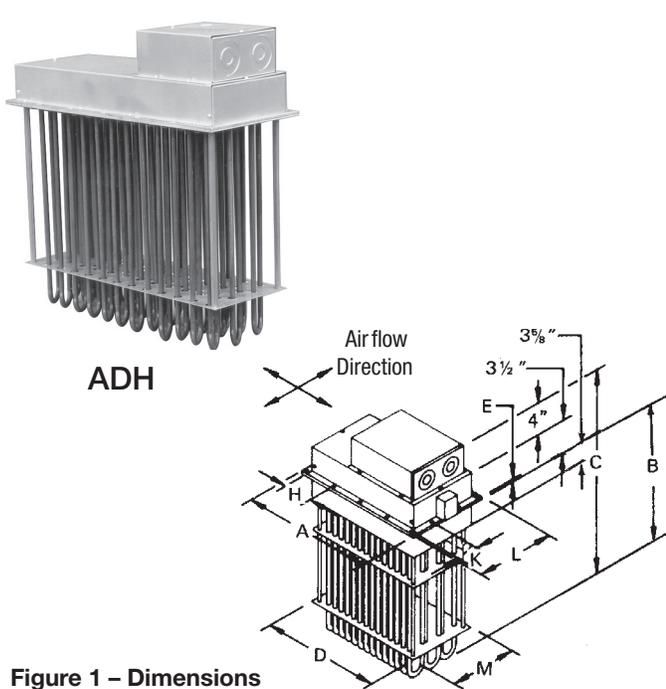


Figure 1 - Dimensions

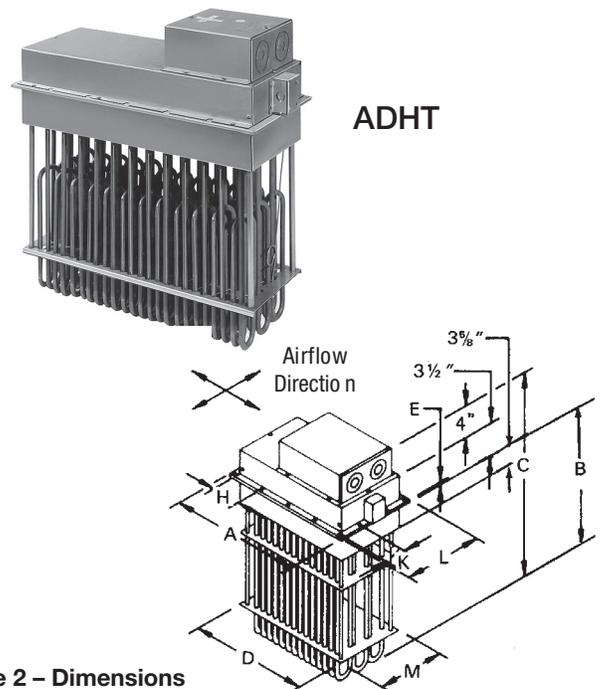


Figure 2 - Dimensions

General

⚠ WARNING

FIRE/EXPLOSION HAZARD. This heater is not intended for use in hazardous atmospheres where flammable vapors, gases, liquids or other combustible atmospheres are present as defined in the National Electrical Code. Failure to comply can result in personal injury or property damage.

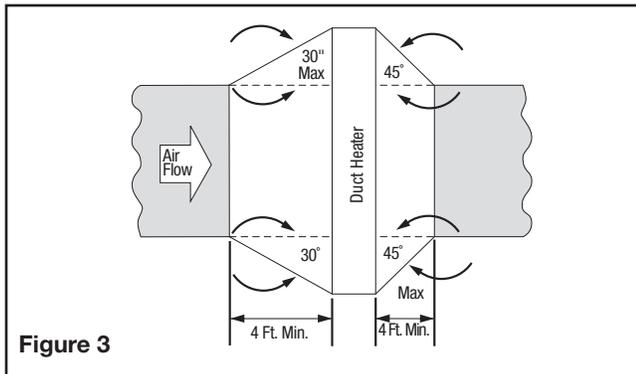
1. Heater construction characteristics —
 - A. Alloy sheathed tubular elements, .475" diameter
 - B. Steel flange
 - C. Stainless steel support construction
 - D. High temperature alloy terminals and connections
 - E. Replaceable individual heating elements
 - F. Wiring terminals located outside the heated zone
2. Maximum Temperatures — Types ADH and ADHT process air heaters can generally be used at the following maximum temperatures shown, provided the minimum air velocity is maintained uniformly through the heater.

| Air Velocity (Ft./Sec.) | Max. Outlet Air Temp. (°F) | |
|----------------------------|----------------------------|------|
| | ADH | ADHT |
| 4 | 800 | 1050 |
| 9 | 800 | 1100 |
| 16 | 800 | 1150 |
| 25 | 800 | 1200 |
| 36 | 800 | 1200 |

⚠ CAUTION

Do not energize heater in air with a velocity less than 1 Ft. Per Second.

3. The heater may be bolted to the duct with the terminal housing and flange at the top, at either side or at the bottom.
4. Several heaters may be mounted in tandem so long as proper controls are used to limit the maximum temperature attained.
5. Installation with duct transitions in some air distribution systems, the duct heater may be considerably larger than the ductwork and the duct area must be increased by a sheet metal transition. The slope of the transformation piece on the upstream side of the equipment is limited to 30° as indicated in Figure 3. On the leaving side, the slope should not be more than 45°.



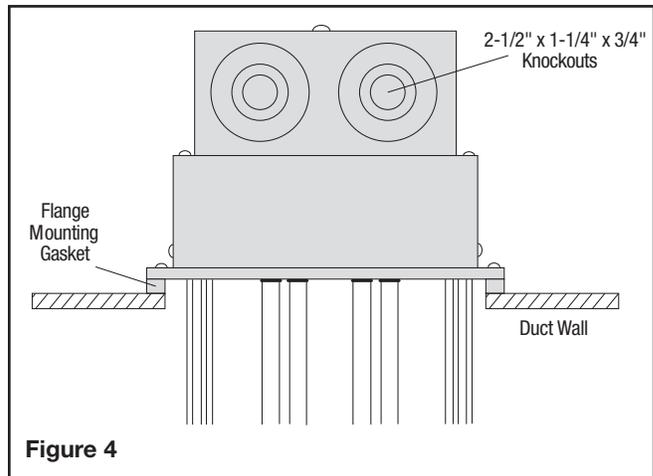
6. Use moisture proof terminal cover in atmospheres bear-

ing corrosive fumes or excessive moisture.

7. Use explosion resistant heaters in explosive atmospheres and reduce current rating to elements.
8. Gas tight design — Achieved by the use of threaded fittings with fiber washers to attach heating elements to flange — prevents leakage of ducted air into terminal housing.
9. Overtemperature protection — Thermocouple fastened to the element sheath surface and wired to a terminal block can be provided for accurate overheat protection (standard on ADHT models).
10. Flange mounting gasket — Packed separately with each duct heater to minimize air leakage between the flange and air duct. Refer to Table B and Figure 4.

Specifications – Table B

| Flange Gasket Part No. | Flange Size | Used on ADH and ADHT |
|------------------------|-----------------|----------------------|
| 168-055429-001 | 11-1/8 x 5-5/8 | 5 kW |
| 168-055429-002 | 11-1/8 x 7-5/8 | 10 kW |
| 168-055429-003 | 11-1/8 x 9-5/8 | 15 kW |
| 168-055429-004 | 11-1/8 x 11-5/8 | 20 kW |
| 168-055429-005 | 11-1/8 x 13-5/8 | 25 kW |
| 168-055429-006 | 11-1/8 x 15-5/8 | 30 kW |
| 168-055429-007 | 11-1/8 x 17-5/8 | 35 kW |
| 168-055429-008 | 11-1/8 x 19-5/8 | 40 kW |
| 168-055429-009 | 11-1/8 x 21-5/8 | 45 kW |
| 168-055429-010 | 11-1/8 x 23-5/8 | 50 kW |
| 168-055429-011 | 11-1/8 x 27-5/8 | 60, 120 kW |
| 168-055429-012 | 11-1/8 x 31-5/8 | 70kW |
| 168-055429-013 | 11-1/8 x 35-5/8 | 80, 144, 160 kW |
| 168-055429-014 | 11-1/8 x 39-5/8 | 90, 162, 180 kW |
| 168-055429-015 | 11-1/8 x 43-5/8 | 100 kW |
| 168-055429-017 | 20 x 27-5/8 | 216, 240 kW |
| 168-055429-018 | 20 x 33-5/8 | 270, 300 kW |

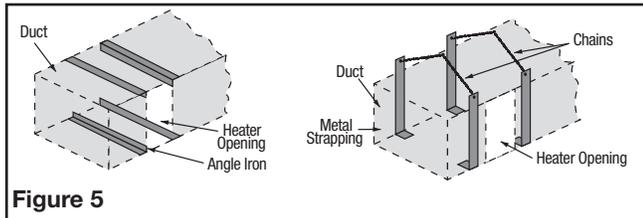


Installation

⚠ WARNING

ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Heater must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70. The system designer is responsible for the safety of this equipment and should install adequate back-up controls and safety devices with their electric heating equipment. Where the consequences of failure could result in personal injury or property damage, back-up controls are essential.

1. Locate and position heater in duct in accordance with both process requirements and recommendations given.
2. Refer to Figures 1 and 2, layout "D" and "M" dimensions on duct mounting face established in step 1.
3. With tools suitable for sheet metal work, cut layout opening in duct.
4. In general, heaters less than 35 pounds in weight may be mounted directly in opening without additional duct reinforcement if duct installation and condition permits. To fasten heater to duct wall use #14 pan or round head self-tapping screws. The flange mounting gasket supplied with the heater is recommended for insertion between heater flange and duct to minimize air leakage.
5. For heater weights greater than 35 pounds (see Specifications Table A, page 1) due consideration should be given to; (a) mechanically strengthening duct work with, for example, angle irons or chains (see Figure 5), and (b) heat insulating duct line in immediate area of heater location to prevent excessive heat loss. Consult your local sheet metal contractor.



6. In high ambient temperature operations, least corrosive action and least oxidation to the terminals will occur if the heaters are mounted with the terminals in the coolest possible ambient, usually on the bottom or side of the duct.
 - A. Minimum duct size is "A" or "L" dimension +3/8" and "B" dimension +1-5/8".

ADH Low temperature duct heaters — can be fastened directly to the sheet metal duct work with bolts or sheet metal screws.

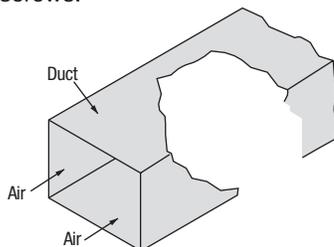


Figure 6

ADHT High temperature duct heaters — are generally mounted on field fabricated stand off supports from the ductwork to position the heater such that the 3" insulation housing is in the same plane as the duct insulation.

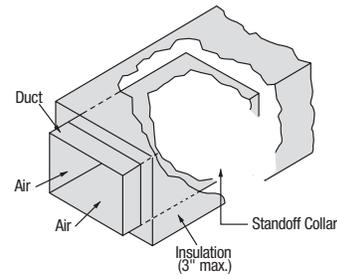


Figure 7

Temperature Control Instructions

1. A Chromalox thermal cutout or thermostat is recommended for overheat protection and control of heater and process. Consult local Chromalox representative.
2. In general, place thermostat sensing element close to the heating elements, near top of duct, at right angles to the direction of air flow, and on the downstream side of the heater. Thermostat, provided with a manual reset button, is separately mounted.

⚠ WARNING

HAZARD OF FIRE. Since these heaters are capable of developing high temperatures, extreme care should be taken to:

- A. Avoid installing heaters in an atmosphere containing combustible gases and vapors.
 - B. Avoid contact between heater and combustible material.
 - C. Keep combustible materials far enough away to be free of the effects of high temperatures.
3. For heater protection, the indicated maximum temperature of the control unit should be 50°F less than the actual maximum air temperature that will be permitted, to allow for overshoot.
 4. Single circuit heater elements may be wired into two circuits to allow for partial heating and control. It is important to have thermal control wired into all electric power circuits, so that all elements may be protected from overheat.

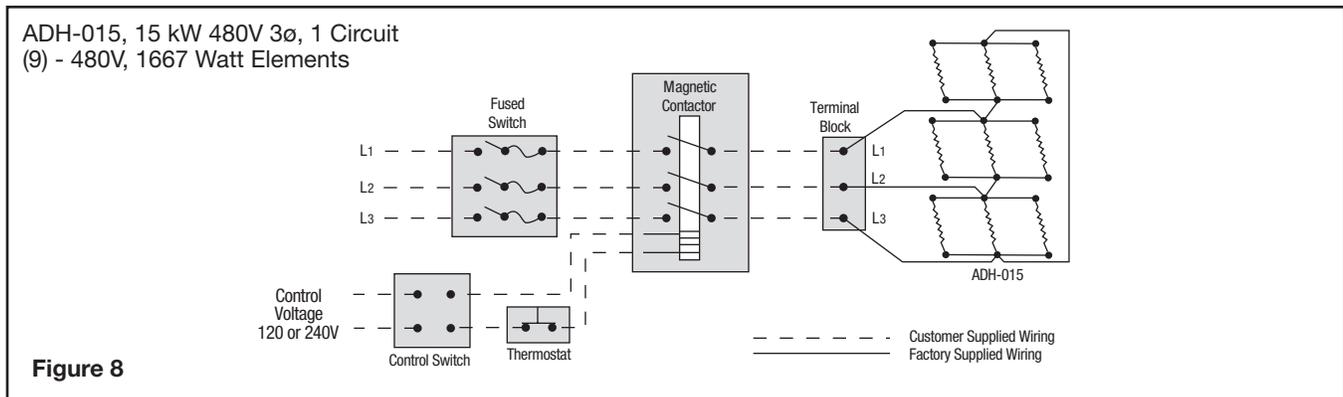
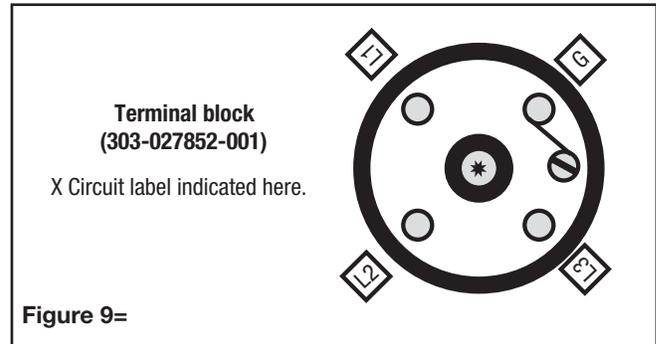
Wiring

⚠ WARNING

ELECTRIC SHOCK HAZARD. Any installation involving electric heaters must be performed by a qualified person and must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.

1. All wiring should be done in accordance with National Electrical Code and with local codes by a qualified person.
2. Connect air heaters to same line voltage, phase, and frequency as on heater nameplate.
3. Teflon insulated nickel plated copper wire or bus bar is recommended for power connections to heater terminals and for wiring runs in heated zones. When ambient temperature in heated zone exceeds that for which insulated wire is recommended use bare nickel-plated copper with porcelain beads, tubing or bus bar. Consult local Chromalox representative.
4. Users should install adequate back-up controls and safety devices with their electric heating equipment. Selection of controls, thermostat, SCR units, contactors and etc. depends on the degree of accuracy required, reliability, electrical rating of heater and economic considerations.

5. Below is an example of a standard ADH-015, 480V 3 Ø 15 kW, wired with recommended back-up controls. (Figure 8)
6. Individual terminal blocks with 1/4-20 threaded stud type terminals are provided for each circuit to permit quick positive attachment of circuit wiring conductors (one terminal block per circuit). (Figure 9)



Operation

Do not operate heater at voltages in excess of that stamped on the heater since excess voltage will shorten heater life.

Maintenance

⚠ WARNING

ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Heater must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.

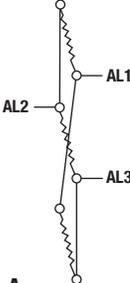
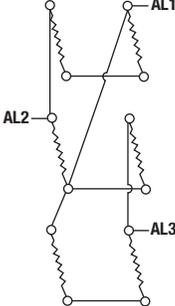
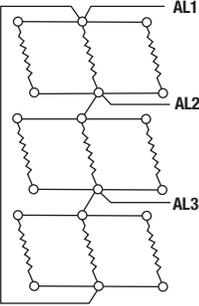
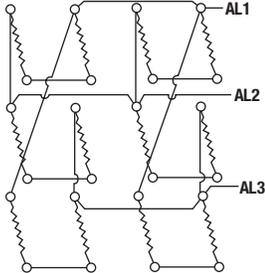
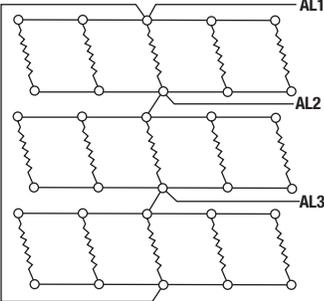
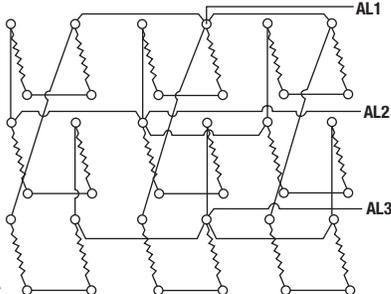
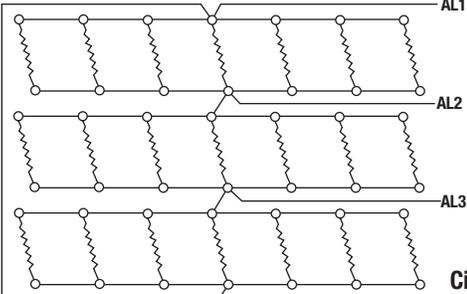
1. Periodically clean terminals and terminal covers of dust and corrosion to maintain good electrical connections and to permit rapid heat dissipation. Use airblast, and be careful to avoid damage to mica insulation.
2. Check for loose terminal connections. Tighten as necessary.

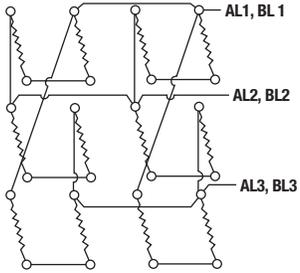
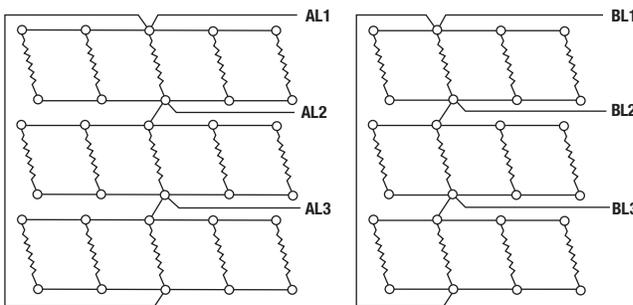
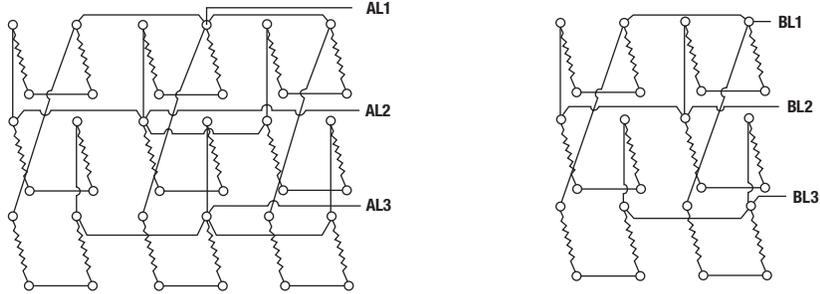
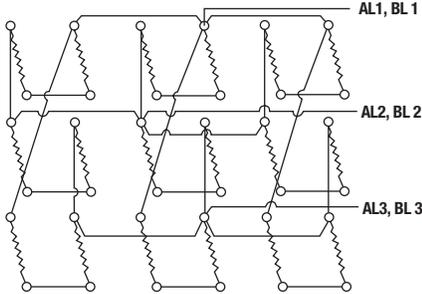
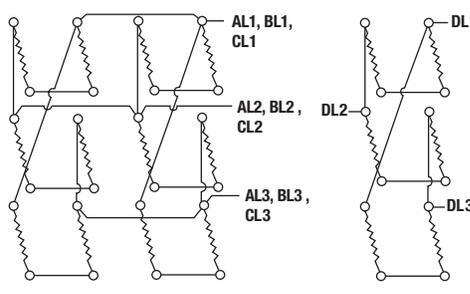
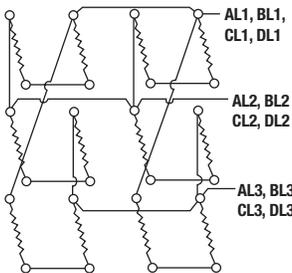
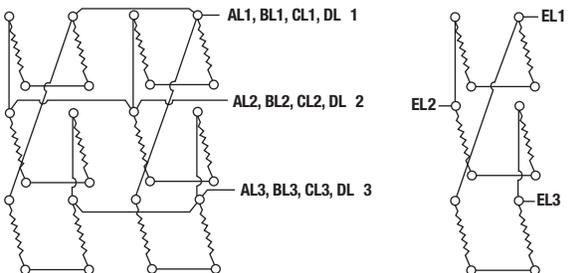
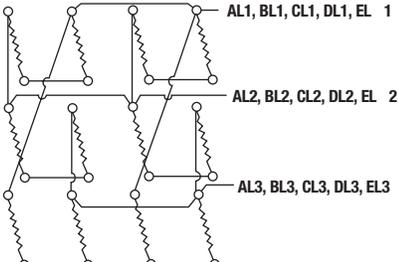
Maintenance

ADH-005, ADHT-005, ADH-010, ADHT-010,
 ADH-015, ADHT-015, ADH-020, ADHT-020,
 ADH-025, ADHT-025, ADH-030, ADHT-030,
 ADH-035, ADHT-0354

ADH-040, ADHT-040, ADH-045, ADHT-045,
 ADH-050, ADHT-050, ADH-060, ADHT-060,
 ADH-080, ADHT-080, ADH-090, ADHT-090,
 ADH-100, ADHT-1005

ADHT-120, ADH-144, ADHT-160, ADH-162,
 ADHT-180, ADH-216F, ADHT-240F, ADH-270F,
 ADH-300F6

| | | |
|--|---|---|
| <p>ADH-005, ADHT-005</p> <p>1 Circuit, 3 Elements per Heater</p>  <p>Circuit A</p> | <p>ADH-010, ADHT-010</p> <p>1 Circuit, 6 Elements per Heater</p>  <p>Circuit A</p> | <p>ADH-015, ADHT-015</p> <p>1 Circuit, 9 Elements per Heater</p>  <p>Circuit A</p> |
| <p>ADH-020, ADHT-020</p> <p>1 Circuit, 12 Elements per Heater</p>  <p>Circuit A</p> | <p>ADH-025, ADHT-025</p> <p>1 Circuit, 15 Elements per Heater</p>  <p>Circuit A</p> | |
| <p>ADH-030, ADHT-030</p> <p>1 Circuit, 18 Elements per Heater</p>  <p>Circuit A</p> | <p>ADH-035, ADHT-035</p> <p>1 Circuit, 21 Elements per Heater</p>  <p>Circuit A</p> | |

| | | |
|--|---|--|
| <p align="center">ADH-040, ADHT-040</p> <p align="center">2 Circuits per Heater, Circuit A, B, 12 Elements per Circuit, 24 Elements per Heater</p>  <p align="center">Typical Circuit</p> | <p align="center">ADH-045, ADHT-045</p> <p align="center">2 Circuits per Heater, Circuit A, 15 Elements, Circuit B, 12 Elements, 27 Elements per Heater</p>  <p align="center">Circuit A Circuit B</p> | |
| <p align="center">ADH-050, ADHT-050</p> <p align="center">2 Circuits per Heater, Circuit A 18 Elements, Circuit B 12 Elements, 30 Elements per Heater</p>  <p align="center">Circuit A Circuit B</p> | | |
| <p align="center">ADH-060, ADHT-060</p> <p align="center">2 Circuits per Heater, Circuit A, B, 18 Elements per Circuit, 36 Elements per Heater</p>  <p align="center">Typical Circuit</p> | <p align="center">ADH-070, ADHT-070</p> <p align="center">4 Circuits per Heater, Circuit A, B, C, 12 Elements per Circuit, Circuit D, 6 Elements, 42 Elements per Heater</p>  <p align="center">Circuit A, B, C Circuit D</p> | <p align="center">ADH-080, ADHT-080</p> <p align="center">4 Circuits per Heater, Circuit A, B, C, D, 12 Elements per Circuit, 48 Elements per Heater</p>  <p align="center">Typical Circuit</p> |
| <p align="center">ADH-090, ADHT-090</p> <p align="center">5 Circuits per Heater, Circuit A, B, C, D, 12 Elements per Circuit, Circuit E, 6 Elements, 54 Elements per Heater</p>  <p align="center">Circuit A, B, C, D Circuit E</p> | <p align="center">ADH-100, ADHT-100</p> <p align="center">5 Circuits per Heater, Circuit A, B, C, D, E, 12 Elements per Circuit, 60 Elements per Heater</p>  <p align="center">Typical Circuit</p> | |

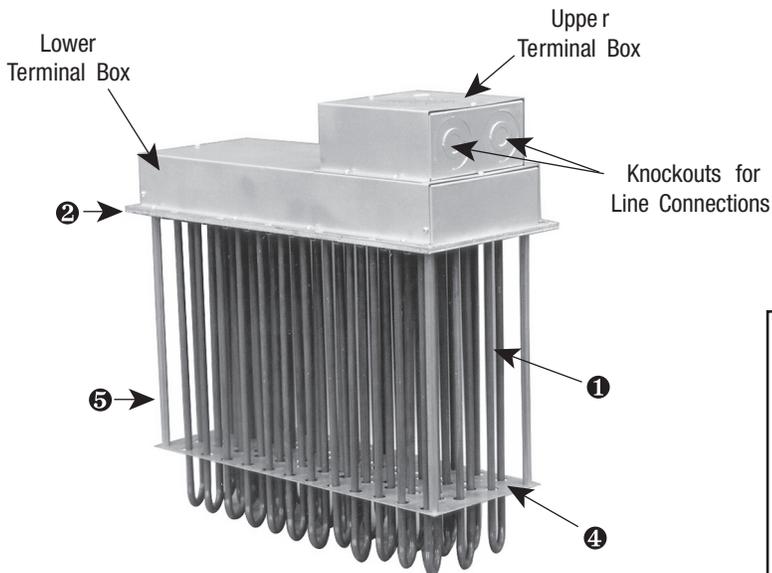
| ADHT-120 | | ADH-144 | |
|--|---|---|--|
| <p>4 Circuits per Heater, Circuit A, B, C, D, 9 Elements per Circuit, 36 Elements per Heater</p> <p>Typical Circuit</p> | | <p>4 Circuits per Heater, Circuit A, B, C, D, 12 Elements per Circuit, 48 Elements per Heater</p> <p>Typical Circuit</p> | |
| ADH-160 | | ADH-162, ADHT-180 | |
| <p>8 Circuits, Circuit A, B, C, D, E, F, G, H, 6 Elements per Circuit, 48 Elements per Heater</p> <p>Typical Circuit</p> | | <p>6 Circuits, Circuit A, B, C, D, E, F, 9 Elements per Circuit, 54 Elements per Heater</p> <p>Typical Circuit</p> | |
| ADH-216F | ADHT-240F | ADH-270F | ADH-300F |
| <p>6 Circuits, Circuit A, B, C, D, E, F, 12 Elements per Circuit, 72 Elements per Heater</p> <p>Typical Circuit</p> | <p>8 Circuits, Circuit A, B, C, D, E, F, G, H, 9 Elements per Circuit, 72 Elements per Heater</p> <p>Typical Circuit</p> | <p>8 Circuits, Circuits A, B, C, D, E, F, G, 12 Elements per Circuit, Circuit H, 6 Elements, 90 Elements per Heater</p> <p>Circuit A - G Circuit H</p> | <p>10 Circuits, Circuit A, B, C, D, E, F, G, H, I, J, 9 Elements per Circuit, 90 Elements per Heater</p> <p>Typical Circuit</p> |

Renwal Parts Identification – Type ADH

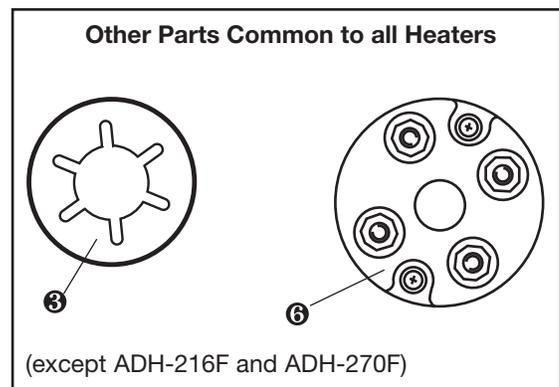
| Model | ① Individual Replacement Element | ② Flange | ③* Element Retaining Clip | ④ Element Spacer Plate | ⑤ Support Rod Spacers | ⑥ Terminal Block Assembly |
|----------|-------------------------------------|----------------|------------------------------|---------------------------|--------------------------|------------------------------|
| ADH-005 | 393-055440-007 (3) | 121-055367-001 | 272-511327-001 (6) | 271-055370-001 | 242-055376-001 (4) | 303-027852-001 |
| ADH-010 | 393-055440-006 (6) | 121-055367-002 | 272-511327-001 (12) | 271-055370-002 | 242-055376-001 (4) | 303-027852-001 |
| ADH-015 | 393-055440-007 (9) | 121-055367-003 | 272-511327-001 (18) | 271-055370-003 | 242-055376-001 (4) | 303-027852-001 |
| ADH-020 | 393-055440-006 (12) | 121-055367-004 | 272-511327-001 (24) | 271-055370-004 | 242-055376-001 (4) | 303-027852-001 |
| ADH-025 | 393-055440-007 (15) | 121-055367-005 | 272-511327-001 (30) | 271-055370-005 | 242-055376-001 (4) | 303-027852-001 |
| ADH-030 | 393-055440-006 (18) | 121-055367-006 | 272-511327-001 (36) | 271-055370-006 | 242-055376-001 (4) | 303-027852-001 |
| ADH-035 | 393-055440-007 (21) | 121-055367-007 | 272-511327-001 (42) | 271-055370-007 | 242-055376-001 (4) | 303-027852-001 |
| ADH-040 | 393-055440-006 (24) | 121-055367-008 | 272-511327-001 (48) | 271-055370-008 | 242-055376-001 (4) | 303-027852-001 (2) |
| ADH-045 | 393-055440-007 (27) | 121-055367-009 | 272-511327-001 (54) | 271-055370-009 | 242-055376-001 (4) | 303-027852-001 (2) |
| ADH-050 | 393-055440-006 (30) | 121-055367-010 | 272-511327-001 (60) | 271-055370-010 | 242-055376-001 (4) | 303-027852-001 (2) |
| ADH-060 | 393-055440-006 (36) | 121-055367-011 | 272-511327-001 (72) | 271-055370-011 | 242-055376-001 (4) | 303-027852-001 (2) |
| ADH-080 | 393-055440-006 (48) | 121-055367-013 | 272-511327-001 (96) | 271-055370-013 | 242-055376-001 (5) | 303-027852-001 (4) |
| ADH-090 | 393-055440-006 (54) | 121-055367-014 | 272-511327-001 (108) | 271-055370-014 | 242-055376-001 (6) | 303-027852-001 (5) |
| ADH-100 | 393-055440-006 (60) | 121-055367-015 | 272-511327-001 (120) | 271-055370-015 | 242-055376-001 (6) | 303-027852-001 (5) |
| ADH-144 | 393-055440-009 (48) | 121-055367-013 | 272-511327-001 (96) | 271-055370-013 (2) | 242-055376-001 (10) | 303-027852-001 (4) |
| ADH-162 | 393-055440-009 (54) | 121-055367-014 | 272-511327-001 (108) | 271-055370-014 (2) | 242-055376-001 (12) | 303-027852-001 (6) |
| ADH-216F | 393-055440-171 (72) | 121-055367-032 | | 271-055370-866 (2) | 242-055376-001 (12) | 303-027852-001 (6) |
| ADH-270F | 393-055440-171 (90) | 121-055367-033 | | 271-055370-867 (2) | 242-055376-001 (12) | 303-027852-001 (8) |

NOTE: Number in parentheses () indicates the quantity of that part required.

* Older heaters may have retaining channels instead of clips. Contact Factory for part number and quantity.



| ADH Replacement Element Rating | | |
|--------------------------------|-------|-------|
| Part No. | Volts | Watts |
| 393-055440-171 (w/ftgs) | 480 | 3000 |
| 393-055440-006 | 240 | 1667 |
| 393-055440-007 | 480 | 1667 |
| 393-055440-009 | 480 | 3000 |

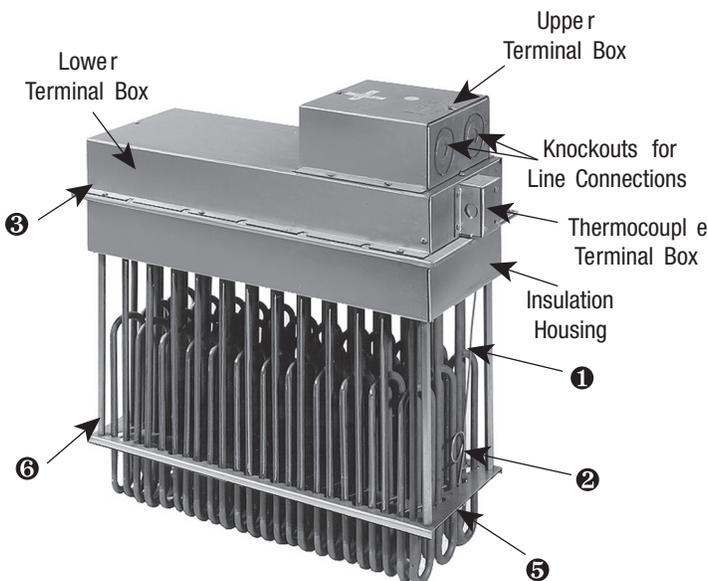


Renwal Parts Identification – Type ADHT

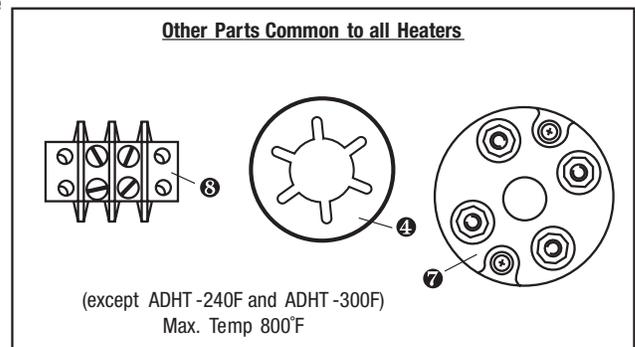
| Model | ① Individual Replacement Element | ② Thermocouples | ③ Flange | ④* Element Retaining Clip | ⑤ Element Spacer Place | ⑥ Support Rod Spacers | ⑦ Terminal Block Assembly | ⑧ Thermocouple Terminal Block |
|-----------|----------------------------------|-----------------|----------------|---------------------------|------------------------|-----------------------|---------------------------|-------------------------------|
| ADHT-005 | 393-055441-007 (3) | 309-304461-024 | 121-055367-001 | 272-511327-001 (6) | 271-055370-016 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-010 | 393-055441-006 (6) | 309-304461-024 | 121-055367-002 | 272-511327-001 (12) | 271-055370-017 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-015 | 393-055441-007 (9) | 309-304461-024 | 121-055367-003 | 272-511327-001 (18) | 271-055370-018 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-020 | 393-055441-006 (12) | 309-304461-024 | 121-055367-004 | 272-511327-001 (24) | 271-055370-019 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-025 | 393-055441-007 (15) | 309-304461-024 | 121-055367-005 | 272-511327-001 (30) | 271-055370-020 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-030 | 393-055441-006 (18) | 309-304461-024 | 121-055367-006 | 272-511327-001 (36) | 271-055370-021 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-035 | 393-055441-007 (21) | 309-304461-024 | 121-055367-007 | 272-511327-001 (42) | 271-055370-022 | 242-055376-002 (4) | 303-027852-001 | 303-122014-002 |
| ADHT-040 | 393-055441-006 (24) | 309-304461-024 | 121-055367-008 | 272-511327-001 (48) | 271-055370-023 | 242-055376-002 (4) | 303-027852-001 (2) | 303-122014-002 |
| ADHT-045 | 393-055441-007 (27) | 309-304461-024 | 121-055367-009 | 272-511327-001 (54) | 271-055370-024 | 242-055376-002 (4) | 303-027852-001 (2) | 303-122014-002 |
| ADHT-050 | 393-055441-006 (30) | 309-304461-024 | 121-055367-010 | 272-511327-001 (60) | 271-055370-025 | 242-055376-002 (4) | 303-027852-001 (2) | 303-122014-002 |
| ADHT-060 | 393-055441-006 (36) | 309-304461-024 | 121-055367-011 | 272-511327-001 (72) | 271-055370-026 | 242-055376-002 (4) | 303-027852-001 (2) | 303-122014-002 |
| ADHT-080 | 393-055441-006 (48) | 309-304461-024 | 121-055367-013 | 272-511327-001 (96) | 271-055370-028 | 242-055376-002 (5) | 303-027852-001 (4) | 303-122014-002 |
| ADHT-090 | 393-055441-006 (54) | 309-304461-024 | 121-055367-014 | 272-511327-001 (108) | 271-055370-029 | 242-055376-002 (6) | 303-027852-001 (5) | 303-122014-002 |
| ADHT-100 | 393-055441-006 (60) | 309-304461-024 | 121-055367-015 | 272-511327-001 (120) | 271-055370-030 | 242-055376-002 (6) | 303-027852-001 (5) | 303-122014-002 |
| ADHT-120 | 393-055441-009 (36) | 309-304461-024 | 121-055367-011 | 272-511327-001 (72) | 271-055370-026 (2) | 242-055376-002 (8) | 303-027852-001 (4) | 303-122014-002 |
| ADHT-160 | 393-055441-009 (48) | 309-304461-024 | 121-055367-013 | 272-511327-001 (96) | 271-055370-028 (2) | 242-055376-002 (10) | 303-027852-001 (8) | 303-122014-002 |
| ADHT-180 | 393-055441-009 (54) | 309-304461-024 | 121-055367-014 | 272-511327-001 (108) | 271-055370-029 (2) | 242-055376-002 (12) | 303-027852-001 (6) | 303-122014-002 |
| ADHT-240F | 393-055441-159 (72) | 309-304461-024 | 121-055367-032 | | 271-055370-833 (2) | 242-055376-002 (12) | 303-027852-001 (8) | 303-122014-002 |
| ADHT-300F | 393-055441-159 (90) | 309-304461-024 | 121-055367-033 | | 271-055370-834 (2) | 242-055376-002 (12) | 303-027852-001 (10) | 303-122014-002 |

NOTE: Number in parentheses () indicates the quantity of that part required.

* Older heaters may have retaining channels instead of clips. Contact Factory for part number and quantity.



| ADHD Replacement Element Rating | | |
|---------------------------------|-------|-------|
| Part No. | Volts | Watts |
| 393-055441-159 (w/ftgs) | 480 | 3333 |
| 393-055441-006 | 240 | 1667 |
| 393-055441-007 | 480 | 1667 |
| 393-055441-009 | 480 | 3333 |



Limited Warranty:

Please refer to the Chromalox limited warranty applicable to this product at
<http://www.chromalox.com/customer-service/policies/termsofsale.aspx>.

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