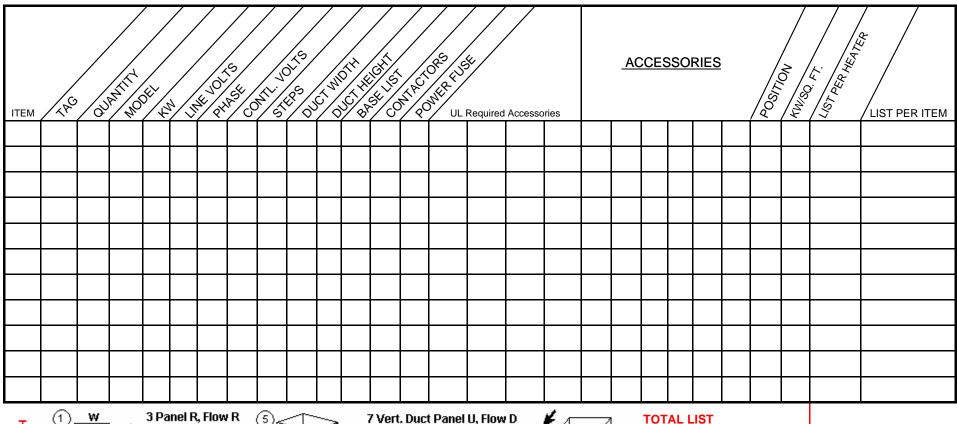
DUCT HEATER PRICING

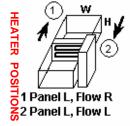


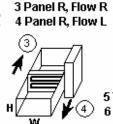
Warren Technology

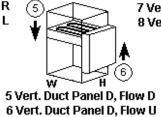
2050 West 73 Street, Hialeah, Florida 33016 · Telephone (305) 556-6933 · Fax (305) 557-6157 Website: www.warrenhvac.com E-mail: warren@warrenhvac.com

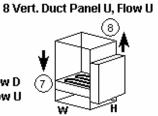
| | | DATE |
|------------|------------|---------------------|
| INVOICE OR | SHIP TO OR | P.O. NO |
| CUSTOMER | PROJECT | REQUESTED SHIP DATE |
| | | SHIP VIA |
| | | SHIPPING INSTR |

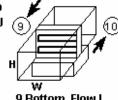














| TOTAL LIST | |
|--------------|---|
| MULTIPLIER | X |
| EXTRA CHARGE | % |
| HEATER NET | |
| | |

PAGE _____ OF ____

| F | R | E | IG | H | IT | | |
|---|---|---|----|---|----|---|---|
| _ | ^ | т | ۸ | | N | E | - |



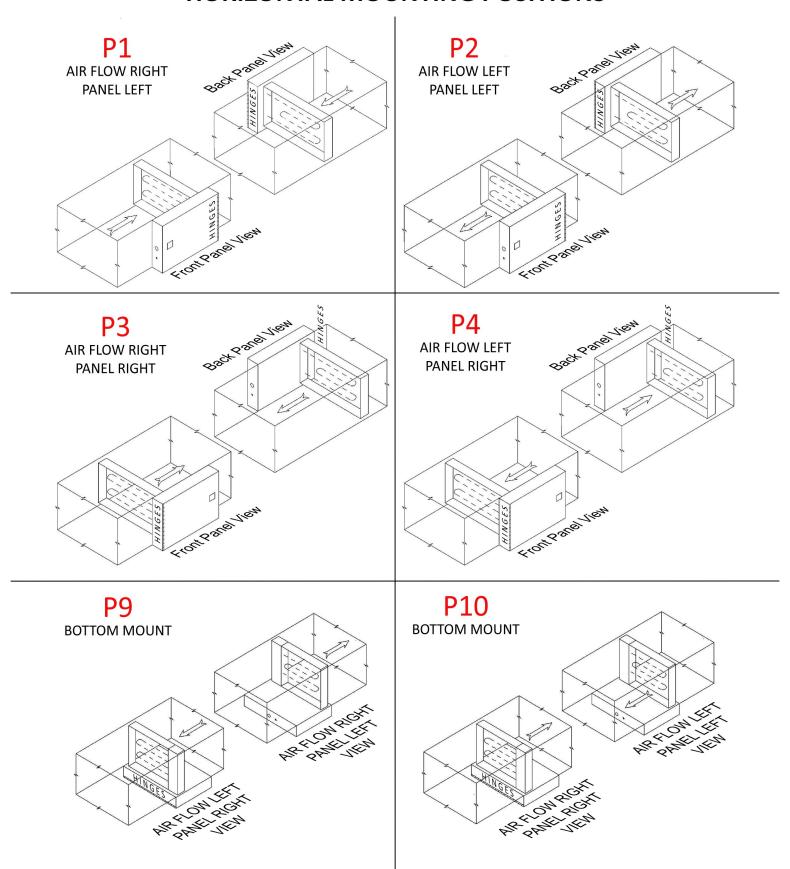
Warren Technology

2050 West 73 Street, Hialeah, Florida 33016 · Telephone (305) 556-6933 · Fax (305) 557-6157 Website: www.warrenhvac.com E-mail: warren@warrenhvac.com

What the Wholesaler, Distributor or Counter Sales Person Must Know Before Selling a *Warren* Duct Heater

| . How many Kilowatts (KW)? | 7. Heaters require either a fan interlock relay or | | | |
|--|--|--|--|--|
| | an air pressure switch for interlock to meet | | | |
| What Line Voltage, Phase and Hertz? | code and UL. | | | |
| | Fan Interlock Relay? | | | |
| B. What Control Voltage? | A/P Switch? | | | |
| | 8. Heaters drawing 48 amps or more, total load, | | | |
| What duct size? (Dim. In inches) | must have their circuits fused by the | | | |
| a. Width | manufacturer. Under 48 Amps, They Do Not | | | |
| b. Height | Fuse the Circuits? | | | |
| Note: Control panel always mounts on | Do not fuse? | | | |
| duct height | 9. Do you need a control transformer to get you | | | |
| | low voltage control or is there already one in | | | |
| 6. What type of construction? Check one: | the system? | | | |
| a. Slip-In | Need a Transformer | | | |
| b. Flange Mount 1" | Don't need Transformer | | | |
| c. Slip-In with Remote Panel | 10. How many steps (or stages) in | | | |
| d. Flanged 1" w/Remote Panel | the heater? | | | |
| e. Bottom Mount Application | _ | | | |
| | MAXIMUM KW PER STEP (OR STAGE) | | | |
| 6. What type of ductwork? | 120 Volt 1 Phase 5.5 KW | | | |
| a. Sheet Metal, No Insulation | 208 Volt 1 Phase 9.8 KW | | | |
| b. Sheet Metal, Internally Lined | 240 Volt 1 Phase 11.5 KW | | | |
| c. Sheet Metal, Externally Wrap | 277 Volt 1 Phase 13.0 KW | | | |
| d. Fiber Board | 208 Volt 3 Phase 15.0 KW | | | |
| | 240 Volt 3 Phase 17.2 KW | | | |
| | 480 Volt 3 Phase 25.0 KW | | | |
| | | | | |

HORIZONTAL MOUNTING POSITIONS





Warren Technology 2050 West 73 Street, Hialeah, Florida 33016 • Telephone (305) 556-6933 • Fax (305) 557-6157 Website: www.warrenhvac.com E-Mail: warren@warrenhvac.com

VERTICAL MOUNTING POSITIONS

P5 P6 AIR FLOW DOWN AIR FLOW UP PANEL DOWN PANEL DOWN Sack Order View Agg Que Jen 410th Page View thou balls lien **P8 P7** AIR FLOW DOWN AIR FLOW UP PANEL UP PANEL UP Say Say Jen State Askey New



thou balls lien

Warren Technology 2050 West 73 Street, Hialeah, Florida 33016 • Telephone (305) 556-6933 • Fax (305) 557-6157 Website: www.warrenhvac.com E-Mail: warren@warrenhvac.com

Hour Barle View



Warren Technology

2050 West 73 Street, Hialeah, Florida 33016 • Telephone (305) 556-6933 • Fax (305) 557-6157 Website: www.warrenhvac.com E-Mail: warren@warrenhvac.com

ENGINEERING DATA

The following load calculations and recommended operating ranges are based on standard 75°F entering air (comforting heating). Consult factory for other applications.

1. Conversion: 1 KW = 3413 B.T.U.

2. Load Requirement: KW = (cubic Feet per Min. x Temperature Rise) / 3160

3. Ohm's Law: Watts = (Volts)² / Resistance = Volts x Amps

4. Line Current, 1 phase: Amps = Watts / Volts

5. Line Current, 3 phase: Amps = Watts / (Volts x 1.73)

6. Pressure Drop: Inches $H_2O = [(KW / ft^2) / 760] \times [(velocity in f.p.m.) / 500]^2$

7. C.F.M. / F.P.M. Velocity VEL./F.P.M. = C.F.M. / (Duct Area/Ft.²)

Relationship

8. KW per square foot: KW / sq. ft = KW / [(Duct width {inches} x Duct height {inches}) / 144]

HEAT-VELOCITY RELATIONSHIP

The following graph shows the recommended ranges for combinations of heat and velocity, which will result in safe operating temperatures.

