9300 SERIES ARCHITECTURAL DRAFT BARRIER WALL AND PEDESTAL MOUNT

INSTALLATION INSTRUCTIONS





CAUTION: HIGH TEMPERATURES

• KEEP ELECTRICAL CORDS, FURNITURE, DRAPERIES OR ANY OTHER BLOCKING MATERIAL AWAY FROM HEATER. DO NOT OPERATE HEATER UNLESS FRONT COVER IS IN PLACE.

CAUTION:

- "TO REDUCE THE RISK OF FIRE, DO NOT USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THE HEATER".
- DO NOT INSTALL HEATERS BELOW ELECTRICAL CONVENIENCE RECEPTACLES.
- DO NOT INSTALL HEATERS AGAINST PAPERBOARD OR LOW DENSITY FIBERBOARD SURFACES.
- 9300 SERIES BOTTOM INLET HEATERS MUST BE MOUNTED A MINIMUM OF 3" ABOVE FINISHED FLOOR.

GENERAL:

TPI CORPORATION COMMERCIAL DRAFT BARRIER HEATERS MAY BE MOUNTED INDIVIDUALLY, END TO END AND WALL TO WALL. EACH HEATER IS FACTORY PRE-WIRED, READY FOR BRANCH CIRCUIT CONNECTION. HEATERS ARE CONSTRUCTED OF 14 GAUGE ALUMINUM AND ARE EQUIPPED WITH AN ALUMINUM FINNED HEATING ELEMENT, MANUAL RESET CAPILLARY LIMIT CONTROL AND ARE AVAILABLE WITH OPTIONAL INTEGRAL THERMOSTAT, DISCONNECT, CONTROL RELAYS, 120V DUPLEX RECEPTACLE, BLANK SECTIONS AND INSIDE OR OUTSIDE CORNER SECTIONS.

WIRING COMPARTMENT NET VOLUME

TOTAL NET VOLUME - 2452 cm³ (149.6 in³)

SUBTRACT FOR THE FOLLOWING ACCESSORIES AND CONTROLS:

ELEMENT: 5.74 cm³ (0.350 in³) 2 ELEMENTS: 11.48 cm³ (0.701 in³) 3 ELEMENTS: 17.22 cm³ (1.051 in³) MANUAL RESET : 17.70 cm³ (1.080 in³) THERMOSTAT : 33.92 cm³ (2.070 in³) 250V DISCONNECT: 59.98 cm³ (3.660 in³) 600V DISCONNECT: 185 cm³ (11.289 in³)

IMPORTANT: OWNER SHOULD RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following.

- 1. Read all instructions before using the heater.
- 2. A heater has hot and arcing parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
- 3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains away from heater.
- 4. To prevent possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
- 5. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.

SAVE THESE INSTRUCTIONS

ROUGH-IN WIRING:

- 1. RUN BRANCH CIRCUIT OF PROPER VOLTAGE AND WIRE SIZE TO LOCATION OF THE TERMINAL BOX.
- 2. WIRE ENTRY INTO A DRAFT BARRIER INSTALLATION IS COMMONLY MADE INTO ONE DRAFT BARRIER HEATER. THROUGH WIRING (FACTORY FURNISHED) IS USED FOR CONNECTION TO ADJACENT HEATERS.
- 3. KNOCKOUTS ARE PROVIDED AT EACH END OF THE BACK PANEL (3/4") FOR WALL MOUNTED UNITS. PEDESTAL MOUNTED UNITS ARE FURNISHED WITH FINISHED BACKS (NO HOLES OR OPENINGS) UNLESS OTHERWISE SPECIFIED BY THE CUSTOMER, CONDUIT CAN ALSO BE ROUTED UP THROUGH THE PEDESTAL. WALL AND PEDESTAL MOUNTED UNITS ARE PROVIDED WITH KNOCKOUTS ON THE SIDES OF THE JUNCTION BOX. SEE DRAWINGS FOR KNOCKOUT LOCATIONS.
- 4. ALL WIRING AND GROUNDING OF THE HEATER IS TO BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL CODES.

TO INSTALL:

- 1. ONCE INSTALLATION HEIGHT HAS BEEN DETERMINED, PROPER MARKINGS ALONG THE WALL SHOULD BE MADE TO INSURE THAT THE HEATER WILL BE MOUNTED EVENLY. IF THE WALL SURFACE IS NOT EVEN, ATTACH THE BACK PANEL TO THE HIGH SPOTS. THIS WILL ELIMINATE A DISTORTED APPEARANCE AND ALLOW FOR EASE OF ASSEMBLY OF THE FRONT COVER. SHIMS CAN BE USED TO MAINTAIN A STRAIGHT LINE ALONG THE FRONT SURFACE IF NECESSARY. 9300 SERIES BOTTOM INLET HEATERS MUST BE MOUNTED A MINIMUM OF 3" ABOVE FINISHED FLOOR.
- 2. WHEN MULTIPLE HEATERS ARE TO BE WIRED TOGETHER, REMOVE TERMINAL BOX END KNOCKOUTS.
- 3. MOUNT THE BACK PANEL TO THE WALL USING SUITABLE FASTENERS (BY INSTALLER).
- 4. WHEN HEATER SECTIONS ARE MOUNTED END TO END, INSTALL A CHASE NIPPLE AND LOCKNUT IN THE TERMINAL BOX END KNOCKOUTS TO INSURE GROUNDING CONTINUITY AND TO PROTECT THE WIRING. WHERE HEATER SECTIONS ARE SPACED APART, RIGID CONDUIT (BY INSTALLER) SHOULD BE USED TO ENCLOSE THE WIRE AND INSURE GROUNDING CONTINUITY. USE RIGID CONDUIT (BY INSTALLER) WHEN WIRING THROUGH CORNER SECTIONS TO ENCLOSE WIRE AND INSURE GROUNDING CONTINUITY.
- 5. TO ENSURE A PROPER INSTALLATION, MAKE SURE THAT ALL PIECES ARE SECURELY SNAP FITTED. FOR EASE OF INSTALLATION, SNAP BOTTOM OF FRONT COVER FIRST AND THEN SNAP TOP PART OF THE FRONT COVER TO THE BACK PLATE. DO NOT OPERATE HEATER UNLESS FRONT COVER IS IN PLACE.

CONTROLS:

WHEN HEATERS ARE FURNISHED WITH CONTROLS. MAKE CERTAIN THAT THE HEATER OR HEATERS DO NOT EXCEED THE LOWEST AMPERAGE RATING OF THE CONTROLS FURNISHED. FOR EXAMPLE, IF A THERMOSTAT AND DISCONNECT ARE FURNISHED, THE THERMOSTAT IS RATED AT 25 AMPS @ 240 AND 277V. THE DISCONNECT IS RATED 20 AMPS @ 240 & 277V. THE COMBINATION OF HEATERS SHOULD NOT EXCEED 20 AMPS AT 240 OR 277 VOLT.

FIELD WIRING WITH INTEGRAL CONTROLS

NOTE: ONE CONTROL ALLOWED IN EACH END OF HEATER.

• INTEGRAL THERMOSTATS: WIRE ENTRY FROM EITHER END.

- DISCONNECT SWITCH: MOUNT EITHER END.
- RELAYS: MOUNTED IN CONTROL SECTION

NOTE: CONTROL SECTIONS CAN BE PROVIDED ON EITHER SIDE OF HEATER.

CONTROL DESCRIPTIONS:

DESCRIPTION: DISCONNECT SWITCH CATALOG NO.: IDS, DOUBLE POLE, RATED: 25 AMPS @ 120-277V

DESCRIPTION: S.P. THERMOSTAT, CATALOG NO.: ITS, RATED: 25 AMPS @ 120-277V, TEMPERATURE RANGE: 50-90°F, TAMPERPROOF & ADJUSTABLE, THRU DISCHARGE LOUVER WITH TOOL OR KNOB.

DESCRIPTION: D.P. THERMOSTAT, CATALOG NO.: ITD, RATED: 25 AMPS @ 120-277V, TEMPERATURE RANGE: 50-90°F, TAMPERPROOF & ADJUSTABLE THRU DISCHARGE LOUVER WITH TOOL OR KNOB.

DESCRIPTION: LOW VOLTAGE TRANSFORMER RELAY, CATALOG NO.: ATR, RATED: XX AMPS @ 120-277V, SINGLE POLE, CAN BE CONTROLLED BY REMOTE LOW VOLTAGE WALL THERMOSTAT.

DESCRIPTION: POWER RELAY, CATALOG NO.PRO-RATED:XX AMPS @ 120-277V, COIL VOLTAGE 24,120 OR 208/240 VAC (FIELD SUPPLIED). CAN BE CONTROLLED BY REMOTE SYSTEM.

THERMOSTAT OPERATION

- 1. TURN ON THE POWER SUPPLY TO HEATER.
- 2. ROTATE THERMOSTAT KNOB FULLY CLOCKWISE.
- 3. ALLOW THE ROOM TO REACH DESIRED TEMPERATURE, THEN ROTATE THERMOSTAT KNOB COUNTERCLOCKWISE UNTIL THE HEATER DE-ENERGIZES.
- 4. FOR REMOTE THERMOSTAT OPERATION, THERMOSTAT WIRING MUST BE THE SAME SIZE AS POWERSUPPLY WIRING.

CLEANING INSTRUCTIONS

AT THE BEGINNING OF EACH HEATING SEASON, IT IS RECOMMENDED THAT HEATERS BE CLEANED TO ELIMINATE ANY ACCUMULATION OF DUST OR LINT. BEFORE CLEANING, MAKE SURE THE POWER IS OFF AT THE CIRCUIT BREAKER PANEL AND THE HEATING ELEMENT COOL. DO NOT REMOVE FRONT COVER DURING CLEANING. USE THE NARROW SUCTION ATTACHMENT OF THE VACUUM CLEANER AND MOVE FROM END TO END AND ABOVE AND BELOW FINS AND CABINET. WHEN CLEANING IS COMPLETE, TURN POWER ON.

RECOMMENDATIONS FOR DRAPE PLACEMENT NEAR BASEBOARD HEATER

- 1. ALLOW MINIMUM CLEARANCE OF 1" FROM DRAPES TO CEILING AND TO TOP OF FLOOR COVERING TO PERMIT AIR CIRCULATION (EXAMPLE 1, FIGURE 1.)
- 2. HANG FULL LENGTH DRAPES TO PROVIDE A MINIMUM OF 2" AIRSPACE BETWEEN HEATER FRONT AND NEAREST DRAPE FOLD AS SHOWN IN EXAMPLE 1, FIGURE 1.
- 3. HANG SHORT DRAPES TO PROVIDE MINIMUM OF 6" CLEARANCE BETWEEN BOTTOM OF DRAPES AND TOP OF HEATER, PREFERABLY MORE (EXAMPLE 2, FIGURE 1).
- 4. DO NOT UNDER ANY CONDITION ALLOW DRAPERY TO COME IN CONTACT WITH HEATER. SOME FABRICS DISCOLOR IN TIME FROM EXPOSURE TO SUNLIGHT OR WARM AIR. CHECK TO MAKE SURE DRAPERY MATERIAL WILL NOT DISCOLOR, SHRINK, OR STRETCH UPON EXTENDED (1000 HOUR) EXPOSURE TO TEMPERATURES OF 200°F.



FIG. 1: MININUM CLEARANCES FOR DRAPES (INCHES)

TYPICAL WIRING DIAGRAMS





