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INSTRUCTIONS KDSA Series (2 kW to 5 kW)



WARNING



When using electrical appliances, basic precautions should always be taken to reduce the risk of fire, electrical shock and injury, including the following:

Read carefully these instructions before installation, operation of the heater. Failure to adhere to the instructions could result in fire, electric shock, serious personal injury, and death or property damage. Review frequently for continuing safe operation and instruction of future users, if necessary.

IMPORTANT INSTRUCTIONS

- 1- Read all instructions before installing or using this heater.
- 2- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, like furniture, pillows, bedding, papers, clothes, and curtains at least 36 in. (915 mm) from the front of the heater.
- 3- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 4- Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
- 5- Do not use outdoors.
- 6- 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.
- 7- Do not block air intakes or exhaust in any way whatsoever.
- 8- This heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 9- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury.
- 10- The heater has been designed and certified for ambient heating only. The maximum ambient operating temperature is 30 °C (86 °F).
- 11- The heater is not designed for use in a humid environment where condensation may form on the device.
- 12- **AMERICAN VERSION ONLY:** This heater includes a visual alarm to warn that parts of the heater are getting excessively hot. If the light turns on, immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. If no obstruction is visible, the heater must be checked by a qualified person. **DO NOT OPERATE THE HEATER WHEN THE ALARM LIGHT IS ON.**
- 13- The thermostat should not be considered an infallible device in cases where maintaining a temperature is considered critical. Examples: Hazardous material storage, computer server room, etc. In these particular cases, it is imperative to add a monitoring system to avoid the consequences of a thermostat failure.

SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

The installation of this heater must be executed by a qualified person, where required by law.

- The installation must be executed by a qualified technician.
- Must be installed solidly. This heater could weight up to 25 lb (11 kg).
- We recommend installing this product on an outside ceiling to avoid vibrations spreading to an adjacent room.
- The motor is thermally protected.
- All wiring must be in accordance with National and local Electrical Codes.
- Heater must be grounded as a precaution against possible shock.
- To avoid possible electrical shock, disconnect all power at the main panel prior to wiring.
- Verify the power supply voltage coming to the heater matches the heater nameplate rating before energizing heater.
- When installed, heater must be electrically grounded in accordance with the National Electrical Code.

CAUTION:

- High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 36 in. (915 mm) from the front of the heater. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
- In addition to ensuring that the clearance distances set out above are respected, ensure that the framing materials, insulation and finishing which are likely to be in contact with or close to the device can withstand temperatures of at least 90 °C (194 °F).
- **WARNING:** Do not install the unit directly on vinyl. This practice is strictly prohibited, as the heat generated by the unit may deform the vinyl.
- Ceiling installation only.
- Use copper wire only.

STANDARD CEILING MOUNTING

- 1- Never install the air-forced diffuser at less than 8 ft. (250 cm) from the floor and 12 in. (30 cm) from adjacent walls.
- 2- Provide an exit for the power supply wires in the ceiling, under the heater.
- 3- Mount the ceiling support using provided screws. For drop ceiling mounting, the necessary kit is not provided.
- 4- Suspend the heater at the hangers of the ceiling support.
- 5- Convey the wires of power supply to the junction box of the heater and connect the heater leads to the supply leads according to the local and national codes. See wiring diagram.
- 6- Fold back the heater toward the ceiling and fix it using the screw provided..
- 7- Install the front cover using the 3 screws provided.

DROP CEILING MOUNTING with T-BAR option

- 1- Install the T-BAR on the ceiling using chains, steel wires or bar.
- 2- Mount the ceiling support on the T-BAR option.
- 3- Follow instructions 4 to 7 as above for STANDARD CEILING MOUNTING.

OPTIONS

See installation pamphlet provided with the various options for the installation of those options.

IMPORTANT

Connect the control (thermostat or relay) to the T1-T2 position on the terminal block. Do not interrupt power supply to control this heater.

OPERATING INSTRUCTIONS

The heater must be properly installed before it is used.

START UP

- Turn the power on at the circuit breaker panel.
- Electronic thermostat: be sure to set it on the fan mode.
- Built-in tamperproof thermostat: the setting can be done with a small slotted screwdriver.
- On a call for heat from either remote thermostat or unit mounted thermostat, the elements and fan will be energized.
- When the thermostat is satisfied, elements will be deenergized.
- The fan will continue to run until the residual heat is removed from the heater. Then the fan will stop.

Automatic Reset Thermal High Limit

The heater has an automatic reset thermal high limit that will deenergize the heating elements if the interior temperatures of heater exceed its setting. The limit will automatically reset when the heater interior temperatures fall below its setting.

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