

【C-19-01-221229】

# Tape Heater and Jacket heater User's Manual

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Thank you for purchasing our "Tape Heater and Jacket Heater."

Please read this user's manual carefully to gain a thorough understanding of the content before using the product.

It is also recommended that this user's manual be kept close to hand when working with the product.

The product has been designed for use mounted on various devices. When using the product, please refer to both the user's manuals of devices on which the product is to be mounted and this manual.

Because the tape heater and jacket heater are made-to-order products, the manufacturer accepts no responsibility for damage caused by improper handling, changes to specifications or the return of products. We kindly ask for your understanding.

In the interest of improving design, ratings and design may be changed without notice.

The manufacturer is not responsible for any accidents resulting from use of the product by the user contrary to procedures set out in this user's manual.

Please contact the manufacturer if any defects are discovered with the Tape Heater and Jacket Heater or if there are any other matters of concern.

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# Customer Safety

- ◎Do not attempt to disassemble or modify the tape heater or jacket heater. Doing so may cause malfunctions and is extremely dangerous as it causes electrocution.
- ◎The tape heater and jacket heater are not explosion-proof and must never be used in places where there are any inflammable gases such as propane, city gas or gasoline, or easily ignited substances (e.g. Alcohol, benzene, thinner, kerosene, LP gas). Doing so may result in serious accidents such as explosions or fires.
- ◎The surface of the heaters becomes extremely hot during the heating process. Never touch heaters directly. Doing so is extremely dangerous and may result in burns.
- ◎The tape heater and jacket heater are not waterproof. Do not use heaters in water, pour water on heaters, or use or store heaters outdoors or in places where they may be exposed to humidity. Please note that humidity or drip proof models are also not water proof.
- ◎Do not use the heaters with voltage directly from the power supply. Control devices such as a variable autotransformer or thermostat should be used. Failure to do so may result in abnormal rises in temperature, causing damage to heaters or accidents.
- ◎Always install sensors in the tape heater and jacket heater. In cases where sensors that may cause abnormal rises in temperature caused by contacts melting due to phenomena such as overcurrent (e.g. Bimetal or Sensbey sensors), use separate thermal fuses.

## Caution

Tape heaters and jacket heaters may produce odors or smoke immediately after purchase.

Smoke or odors are produced when adhesive paste used in manufacturing processes burns.

# Tape Heater and Jacket heater Installation

©Check for damage to cords.

Before proceeding with installation, check power cords, plugs and connectors for visible damage or deformation. Using damaged cords, plugs or connectors may result in fire or electrocution.

Checks must also be carried out every day before starting work. If any damage or deformation is discovered, discontinue work immediately and contact the manufacturer.

©Switch off power before proceeding with installation.

Always switch off the power supply and check that there is no passage of electric current before proceeding with tape heater and jacket heater installation. Working with the power switched on may result in electrocution and is extremely dangerous.

©Do not expose heater to excessive shock.

Never expose the tape heater and jacket heater to excessive shock (e.g. Placing objects on heaters, standing on heaters, dropping, pulling, rubbing, bending or wrenching heaters). Doing so may not only damage sensors, but also sever heater wires.

©Do not stack heaters.

Never stack heaters one on top of another, Doing so may cause abnormal temperature rises in overlapping parts, resulting in problems such as severed heater wires or electric leakage.

©Do not install heaters unsecured.

Make sure that the tape heater and cover are firmly secured in place. Failure to do so will result in abnormal temperature rises in places where there is a degraded temperature efficiency ratio, leading to dangerous problems such as severed heater wires and electric leakage.

©Use the same types of heaters under the same environmental conditions.

Avoid settings for the tape heater and jacket heater that will result in different ambient temperatures (e.g. Settings with thermal insulation only in some parts, setting with only some parts exposed to air conditioning, installation of heaters stacked one on top of another, settings with only some parts near a heat source). Such settings may cause problems such as failure to reach the set temperature, or excessive rises in temperature, resulting in malfunctions.

# Securing the Tape Heater and Jacket heater

If necessary, prepare the following items before proceeding with installation.

- Heat-resistant adhesive tape (Select tape to match the operating humidity)
- Several cloths for wiping
- Sensors
- Insulation materials
- Earth wires

## ◆ Tape Heater

- ① Check for any accumulations of water, oil, dust or other contaminants on the part where the heater is to be installed. Wipe off any accumulation with a cloth.
- ② Secure the lead wire side of the tape heater with adhesive tape (if one side of the lead is protruding).
- ③ The heater must be installed securely so that there is no overlapping or looseness.  
(Be careful not to twist or pull too hard on the heater.)
- ④ Secure at several points depending on the length.  
(As a rough guide, 2 or 3 points per 1 meter of pipe)
- ⑤ Install the sensor (In principle, at the center).
- ⑥ Secure the tip.
- ⑦ If necessary, set insulation material in place evenly.
- ⑧ Install an earth wire on the device to be heated.
- ⑨ Connect the lead wire after completing steps ① through ⑧.

## ◆ Jacket Heater

- ① Check for any accumulations of water, oil, dust or other contaminants on the part where the heater is to be installed. Wipe off any accumulation with a cloth.
- ② The heater must be installed securely so that there is no overlapping or looseness.  
(Use Magic Tape, hooks, string, etc., as specified)
- ③ Install the sensor (In principle, at the center).
- ④ If necessary, set insulation material in place evenly.
- ⑤ Install an earth wire on the device to be heated.
- ⑥ Connect the lead wire after completing steps ① through ⑤.