

Temperature Sensitive Relay (TSR)

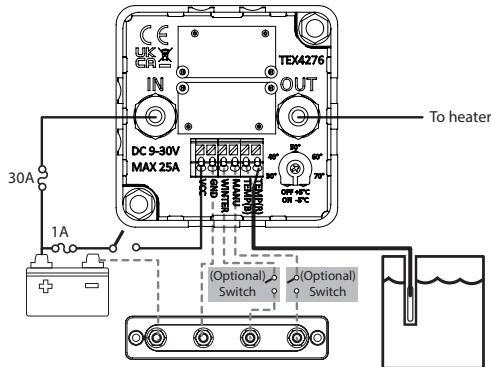
- Automatically turn on the heater when temperature drops below 55°C, cut off when temperature rises above 65°C (Programmable).
- Optional Winter mode automatically heating water when water temperature drops below 3°C (anti-freezing - automatically turn off when > 7°C).
- Manual override allowing force turn on heater manually.
- Robust Glass Fiber reinforced Nylon enclosure.
- Built-in LED indication (ON when TSR engages).
- Surface or panel mount options provides flexibility when installing.

Product Specifications

- Voltage Rating | DC 11V -30V
- ON / OFF Temperature |
< 55°C / > 65°C @Normal Mode*
< 3°C / > 7°C @ Winter Mode
- Continuous Current Rating | max. Current 25A
(600W max)
- Electrical/mechanical cycle life (min) | 50k
- Terminal Studs | M6(1/4")

* ON / OFF threshold is adjustable by knob

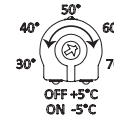
Wiring Diagram:



※ Wiring Diagrams are for reference only, consult professionals for wiring suits your needs.

Installation Instructions:

1. Disconnect positive terminal from battery.
2. To Adjust ON / OFF threshold, use a flat-head screwdriver to turn the arrow on knob to desired level (ON = reading - 5°C / OFF = +5 °C)



3. Mount the TSR onto desired surface (surface mount) or panel (panel mount).
4. Connect Power Source to the IN terminal stud and connect the OUT terminal to the heater's (or other device's) input power.
5. Connect the DC power positive and ground to VCC and GND Port on the terminal block.
6. Connect the two outputs of Temperature Probe Cable to the TEMP(R) and TEMP(B) Port on the terminal block, respectively.
7. (Optional) [Winter Mode] Connect the WINTER Terminal to the GND via a ON-OFF switch. When switch turned ON, winter mode will be activated.
8. (Optional) [Manual Override] Connect the MANU Terminal to the GND via a ON-OFF switch. When switch turned ON, TSR will be forced to combine and turns on the heater.

