

WATER IMMERSION THERMOSTAT, MANUAL RESET - TWL DUAL WATER IMMERSION THERMOSTAT, CONTROL AND MANUAL RESET - TWM

The TWL and TWM thermostats are typically used in water high limit/control applications such as HWS cylinders or boilers. The TWL is a manual reset, high limit thermostat with a Single Pole Double Throw (SPDT) action.

The TWM is a combined control thermostat and manual reset, high limit thermostat allowing independent setting of both the control point and high limit temperature. The control output of the TWM and limit output are both Single Pole Double Throw (SPDT) contacts.



FEATURES

- Simple installation
- Simple commissioning
- Cable gland supplied
- IP40 head protection
- Manual reset
- Concealed setting for reset temperature
- Single Pole Double Throw (SPDT) contacts



SPECIFICATION

Types:	TWL 2302 - 65 to 85°C Water Immersion Thermostat, manual reset, concealed adjustment - Specification Number 141-2-302
	TWM 2401 - 0 to 90°C (Control), 70 to 90°C (Limit) Manual Reset Dual Water Immersion Thermostat with pocket, exposed (Control) and concealed (Limit) adjustment - Specification Number 141-2-401
Rate of Change of Temperature:	1K per Minute
Temperature Differential:	TWM (control) 5K ±1K
Temperature Tolerance:	TWL/TWM (limit) +0K -6K
Contact:	TWM (control) Single Pole Double Throw TWL/TWM (limit) Single Pole Double Throw
Contact Rating:	16A resistive, 4A inductive @ 250Vac
Ambient Temperature Limits:	Maximum Head Temperature: 80°C Maximum Bulb Sensing Temperature: 135°C

CONSTRUCTION

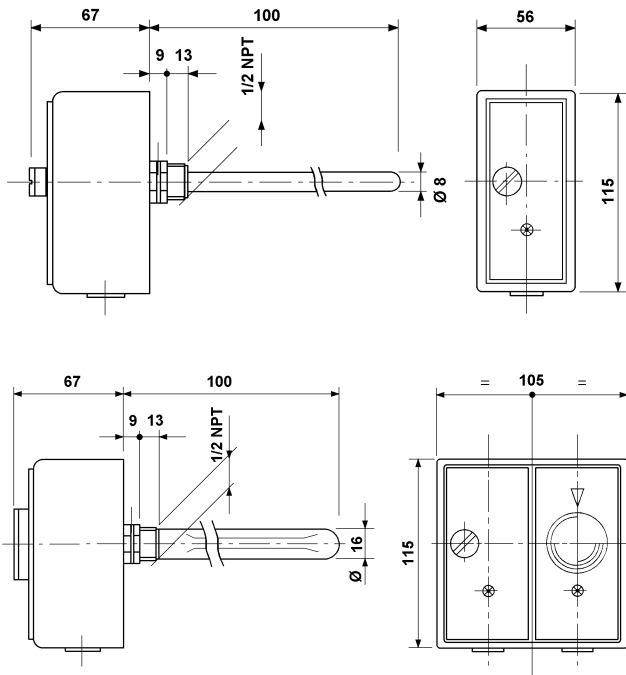
Cable Entry:	PG11, cable gland supplied
Head Protection Class:	IP 40
TWL Pocket:	100 mm x 8 mm diameter, ½" NPT pocket
TWM Pocket:	100 mm x 16 mm diameter, ½" NPT pocket
Flammability Rating:	UL94V0

ISOLATE ALL WIRING BEFORE REMOVING THE COVER AS MAINS VOLTAGES ARE PRESENT AT THE TERMINALS

INSTALLATION

1. Select a location where water can freely circulate around the thermostat pocket ensuring that the whole of the pocket is immersed in the water to be controlled.
The pocket should be plugged to prevent entry of foreign matter before the thermostat is fitted.
2. Fix thermostat pocket into pipe, 1/2" NPT fitting. Allow a sufficient length of cable to permit complete removal of the thermostat.
3. Insert thermostat and tighten fixing screws.
4. Remove the cover for access to the terminals and connect the wires as required, see fig 1 or 2. The Earth must be connected.
5. Replace the cover and tighten the fixing screws.

DIMENSION DIAGRAMS



TWL BASIC CONNECTIONS (MANUAL RESET, LIMIT) TWM DUAL

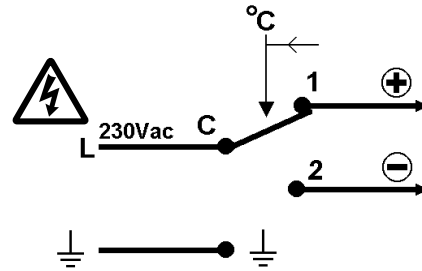
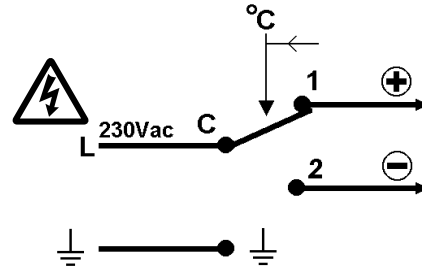


Fig.1

TWM DUAL THERMOSTAT BASIC CONNECTIONS (MANUAL RESET, LIMIT)



CONTROL

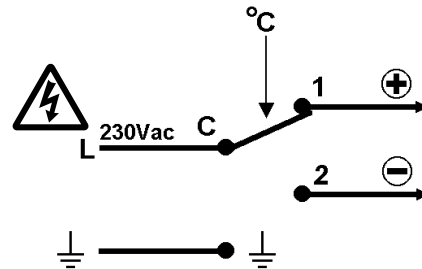


Fig.2

WARNING -
THESE THERMOSTATS ARE MAINS OPERATED DEVICES. LOCAL WIRING REGULATIONS AND USUAL SAFETY PRECAUTIONS MUST BE OBSERVED. NOTE EARTHING REQUIREMENTS.

Cautions

- Do not apply any voltages until a qualified technician has checked the system and the commissioning procedures have been completed.
- If any equipment covers have to be removed during the installation of this equipment, ensure that they are refitted after installation to comply with UL and CE safety requirements.
- Isolate all wiring before removing the cover as mains voltages are present at the terminals.
- Do not exceed the maximum ambient temperature.
- Interference with parts under sealed covers invalidates the guarantee.
- Design and performance of TAC Satchwell equipment is subject to improvement and therefore liable to alteration without notice.
- Information is given for guidance only and TAC Satchwell does not accept responsibility for the selection and installation of its products unless information has been given by the Company, in writing, relating to a specific application.
- A periodic system and tuning check of the control system is recommended. Please contact your local sales office for details.

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