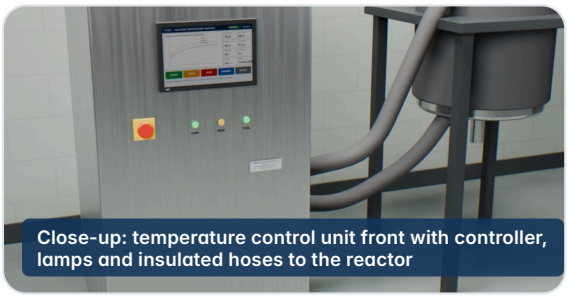
PRODUCT DATASHEET

Reactor Temperature Control Unit (TCU)

Single-fluid heating and cooling unit for reactor jackets and process vessels

Product page





Close-up: temperature control unit front with controller, lamps and insulated hoses to the reactor

OVERVIEW

The Tech Inc. Reactor Temperature Control Unit (TCU) heats and cools a reactor or process vessel through its jacket using one heat-transfer fluid.

TYPICAL DESIGN DATA

Temperature range	Set by the heat-transfer fluid and the duty
Control	Cascade control on reactor temperature, or jacket control; ramps and programs
Heater	Electric, thyristor controlled, with sheath and outlet high-limits
Codes and standards	PED 2014/68/EU for pressure parts as required; CE marking
Cooling	Exchanger on cooling or chilled water; refrigeration stage on the low-temperature unit
Wetted parts	Stainless steel; seals compatible with the fluid
Hazardous area	Ex build available

MODELS AND CAPACITIES

- **TI-TCU-M** – mobile unit on castors for pilot and kilo-lab reactors
- **TI-TCU-F** – fixed skid for production reactors
- **TI-TCU-L** – low-temperature unit with refrigeration stage

Units are built to the reactor volume, temperature range and fluid.

ORDERING CODE

Example **TI-TCU-M-12**: **M** type: M mobile, F fixed, L low temperature; **12** heater power in kW.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: refrigeration stage for sub-zero work; ex build for hazardous areas; nitrogen blanket on the expansion tank.

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**
Offices: Chennai · Toronto · Tallinn · Al Khobar
mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

How to cite: Reactor Temperature Control Unit (TCU). (Tech Inc., Vaughan, Ontario, Canada). www.techincresearch.com/product-page/reactor-temperature-control-unit

Disclaimer: All products, designs and content are the property of Tech Inc. Tech Inc. reserves the right to change specifications and details without notice. Images are for representation only; the supplied equipment may differ in appearance. Values are typical and can change; performance depends on the fluids, operating conditions, usage and operation in line with the operation manual. Final configuration to client specification.