# Sterlco® TC130 SERIES

## Water Temperature Control Unit

*Advanced M5 Controller*

# Technical Specifications

The Sterlco® TC130 Series is the most advanced TCU from Sterling. This latest innovation features increased options for maximum flexibility, along with state-of-the-art controls and a 3.5" HMI color screen.

These advanced controls provide predictive maintenance features as well as intelligent capabilities like Pressure Adaptive Technology utilizing digital pressure transducers. Troubleshooting is made easy via USB data logging and remote monitoring. All of this comes with the longevity and reliability you've come to expect from Sterling TCUs.

**INTELLIGENT DESIGN**

- Pressure adaptive technology
- State-of-the-art M5 controller
- Digital pressure transducers

**PREDICTIVE**

- Contactor cycle life indicator
- USB data logging for improved analysis & troubleshooting
- Automatically cycles between half & full heat

**RELIABLE**

- Better controls
- Predictive maintenance
- Expanded warranty

## Features

**Standard Features**

- Compact design with easy-access side panels for rapid maintenance
- Programmable auto vent sequence to automatically vent air from the system at start-up
- Independent high temperature safety thermostat to protect from heater overload
- Motor branch circuit overcurrent/ overlead protection
- Integrated cooling solenoid valves for efficient unit cooling
- Pressure transducers with digital readout
- 9kW dual circuit immersion heater with IEC contactors
- Operating temperature up to 250° F (121° C)
- New M5 controller with 3.5" color screen HMI
- Operator friendly PID temperature controller with Process and Setpoint readouts and straightforward unit performance data
- 150 psig (10.3 bars) pressure relief valve
- SICB/carbon pump seal to maximize pump life
- 0.75" water supply connection, 1.5" process connections; valve size matches drain size
- USB data logging
- Pressure adaptive technology
- Contactor cycle life monitoring
- Quick cool for rapid unit cooling
- Non-fused lockable rotary through door disconnect
- 1 year warranty- factory labor
- 2 year warranty - parts
- 3 year warranty - controller

**Optional Features**

- Remote monitoring
- 12 kW, 18 kW, or 24 kW heater options, 36 kW & 48 kW for upright units
- Maintained START/STOP switch
- Closed loop heat exchanger, model varies with unit sizes
- General fault audio/visual alarm to alert operators of unit issues
- Pressure regulator/relief valve for water supply
- Auto system water purge
- Y-strainer to protect unit from high particulate fluid
- 300°F (149°C) operations, includes silicon carbide/silicon carbide seal

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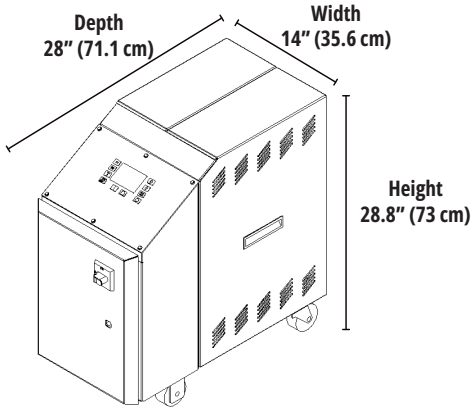
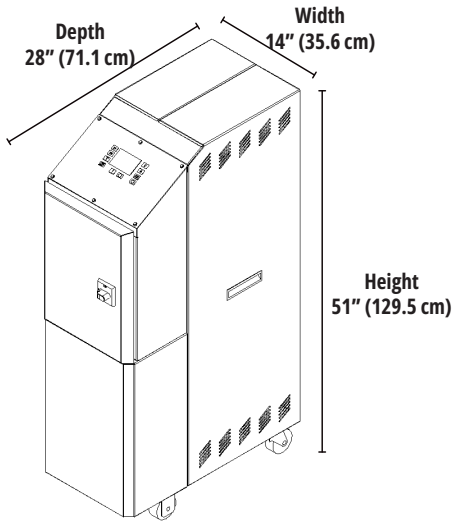
## Product Diagrams

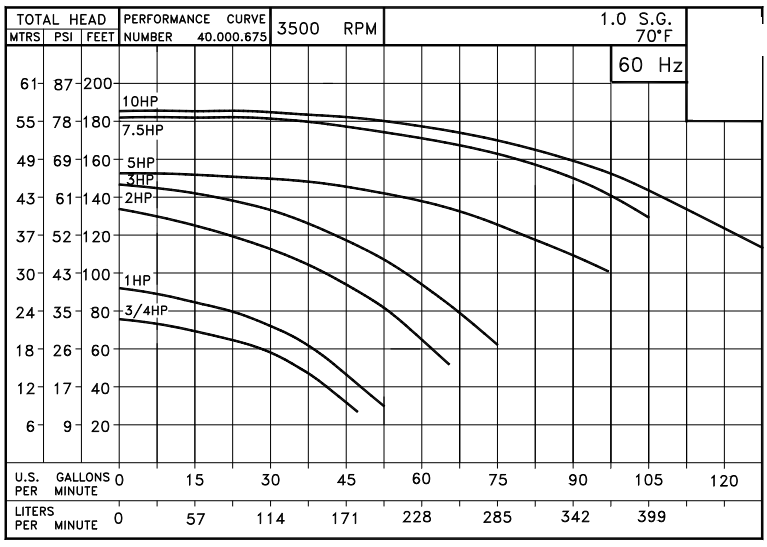
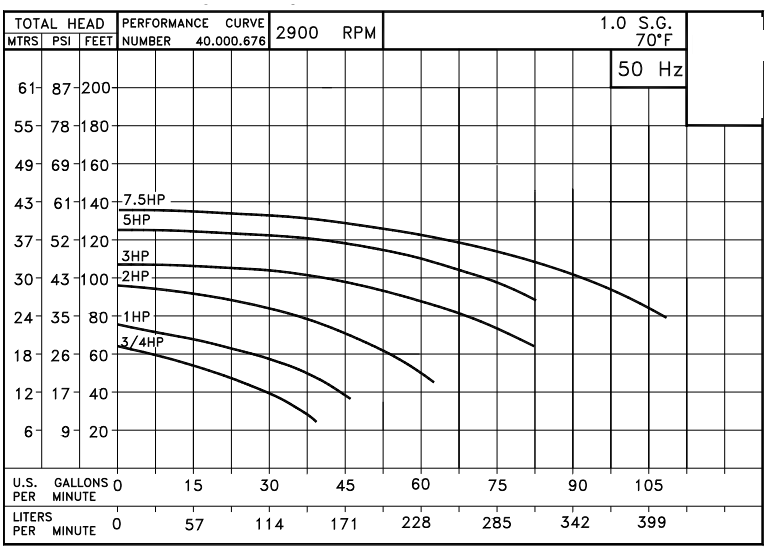
TC130 Compact




TC131 Upright




## Pump Curves

Charts show flows and pressures that are available for the standard pump options. Custom pumps available upon request.

| Pump HP (kW) | Flow GPM (LPM) | Pressure PSIG (bar) |
|---|---|---|
| 0.75 (.56) | 30 (114) | 25 (1.72) |
| 1.0 (0.75) | 35 (133) | 30 (2.07) |
| 2.0 (1.5) | 50 (189) | 30 (2.07) |
| 3.0 (2.24) | 60 (227) | 40 (2.76) |
| 5.0 (3.76) | 75 (284) | 54 (3.72) |
| 7.5 (5.6) | 90 (341) | 63 (4.34) |
| 10 (7.5) | 120 (454) | 55 (3.79) |