

Thermotronic 61

Electronic temperature sensor



Since the viscosity of oil changes with temperature precise control of the actual temperature is most important in fluid power and lubrication systems. Depending on the application, continuous and precise control is essential.

The Thermotronic 61 series offers modern solid state electronics with an LED display for excellent visibility. This product was developed for applications in the fluid power industry.

The unit is based on a microprocessor and features up to six individually programmable alarm outputs, can be set in °C or °F and has a maximum and minimum memory. The Thermotronic allows almost all important control functions in hydraulic and lube systems such as minimum temperature, heater on/off, cooler on/off, alert, emergency off.

Operation and settings are done via three keys on the front panel. The unit can be installed as a remote display or directly attached to the sensor on the tank top.

To facilitate installation in modern plant automation systems a selection of various connectors are available.

- **freely programmable set points**
- **digital LED display**
- **maximum / minimum memory**
- **data storage in case of power supply failure**
- **display in °C or °F**
- **various cable connectors**
- **easy installation**
- **versatile combinations**

technical data

range of temperature display : from -20 to +120 °C / 4° to 248 °F
 range of alarm indication : 0 to +99 °C or 32° to 178 °F
 programmable set points : up to 6 depending on specification

housing : ABS-plastic
 depth of housing : 55 mm
 protection class : depending on model, min. IP65
 display : three digit seven segment-LED-display
 light emitting diodes for status display

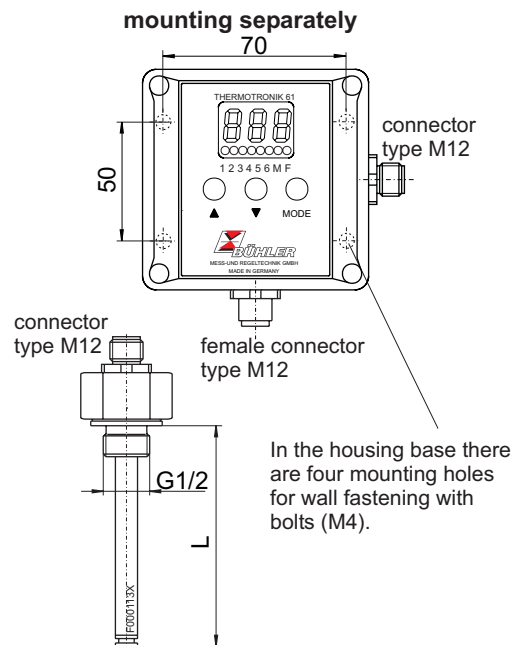
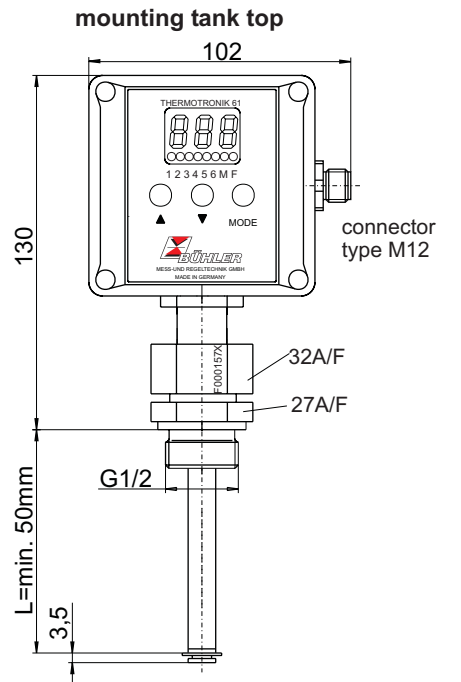
current consumption at power up : about 140 mA for 100 ms
 operating current consumption : about 30 -70 mA
 supply voltage : 24 VDC ±10 %
 output switches : max. 6 relays with
 max. 24V / 1A

ambient temperature : 0 - 70 °C
 accuracy : 1 % of end indication value
 resolution : 1 °C / 2 °F
 programming : via three touch keys
 temperature sensor : Pt 100

General description

The Thermotronic 61 is a combined microprocessor controlled display and control unit for monitoring and stabilizing the operating temperature in hydraulic systems with an input for a Pt100 temperature sensor. The temperature display is a three digit LED-display. Furthermore the Thermotronic 61 may have up to 6 switched outputs with relays. The outputs can be set to different programmable temperatures.

The actual status of the switched outputs is shown by LEDs on the front panel. Furthermore the temperature can be displayed either in degrees Celsius or Fahrenheit. Monitoring of the maximum and minimum recorded values of the sensor is also possible. The device also indicates a sensor failure or a broken wire on it's display. Setting the Thermotronic 61 is done by using the three touch keys on the front panel together with the values shown on the display. The settings are protected against unauthorized use by a key lock. The operating software of the Thermotronic 61 could be easily replaced by more advanced or customer related software.



order information

part-no.	type	length L*	description
1410199	Thermotronic 61-00V001	- L = ... mm	thermotronic controller with separate temperature sensor, 2 output switches, separate mounting, without cable
1410299	Thermotronic 61-00V002	- L = ... mm	thermotronic controller with separate temperature sensor, 4 output switches, separate mounting, without cable
1410399	Thermotronic 61-00V003	- L = ... mm	thermotronic controller with separate temperature sensor, 6 output switches, separate mounting, without cable
1411499	Thermotronic 61-00V011	- L = ... mm	thermotronic controller with separate temperature sensor, 2 output switches, direct mounting
1410599	Thermotronic 61-00V005	- L = ... mm	thermotronic controller with separate temperature sensor, 4 output switches, direct mounting
1410699	Thermotronic 61-00V006	- L = ... mm	thermotronic controller with separate temperature sensor, 6 output switches, direct mounting
1410499	Thermotronic 61-00V004		** thermotronic controller for surface mounting on devices as Nivotemp 62-2-C6F, with 6 output switches for temperature and 3 output switches for level control

*maximal length = 1000 mm.

**supplied with only thermotronic controller other versions upon request