

# TRANBERG® THERMOSTAT

Tranberg ThermoConnect (TTC) | TTC/C Controller w/ Switch | TTC/CL Controller Limiter w/ Switch  
Zone 1, Zone 2 & Safe Area



The TTC/C & the TTC/CL, are heattracing control units featuring the benefits of local control and the capability for remote monitoring. The TTC/C and TTC/CL units can be used for single phase circuits up to 20A and is approved for use in hazardous ar-

reas. Both units feature two RTD channels. The TTC/CL has an additional dedicated Safety Limiter channel. The TTC/CL is equipped with an IEC 61508-SIL 2 classified safety temperature limiter on board (Elexant 5010i Limiter).

Both units feature a Modbus RTU RS485 serial interface. Through this interface up to 247 units can be connected to one serial interface.

## Application

- Hazardous areas
- Chemical and petrochemical industries
- Industrial plants (for frost protection or temperature maintenance)
- According to NORSOK requirements
- All areas where thermal processes need to be prevented from overheating (controller limiter only)

## Features and benefits

- Two RTD channels for temperature controller.
- High ingress protection. IP66.
- Manufactured in acid proof stainless steel (AISI 316L).
- Control, monitoring and alarm capabilities.
- ° TTC/C & TTC/CL offers alarms for high temperature, high and low current, ground fault, current and voltage. The trip and warning level of the ground-fault current is user configurable and can be used as a warning and to isolate circuits. Note that certain alarms or information is only available through the serial port.
- Automated heat-tracing system check. To ensure system integrity the Elexant 5010i control unit can be configured to periodically check dormant heating cables for faults. As a consequence maintenance is systematically informed about the status of the heat-tracing system and unexpected and usually expensive downtime of important pipelines can be reduced
- Switches enable isolation of heating cables for maintenance and inspection.



## Technical Data

Type designation:	Stahl 8150/5, part number 81502353 (Controller) / 81502354 (Controller Limiter)
Ex-protection:	Ex II 2 (I) G Ex eb ia mb [ia Ga] IIC T5 Gb
Material:	AISI 316L / EN 1.4404
Protection:	IP66
Voltage range:	100-254V AC +/-10%, 50/60Hz
Maximum load:	16A
Max. wire termination (with end sleeve):	Power in: Max. 6mm <sup>2</sup> Heating cable (power out): Max. 4mm <sup>2</sup> Earth terminals: Max. 10mm <sup>2</sup>
Tamb (Operation):	-40 to +40°C

## Approvals and certificates

PTB 09ATEX1109 (8150/5)

The controller limiter meets the requirements of EN 60079-30-1. For applications installed in a hazardous area this means that the protective device shall de-energize the system to prevent exceeding the maximum permissible surface temperature. In case of an error by, or damage to the sensor, the heating system shall be de-energized before replacing the defective equipment. The protective device operates independently from the temperature controller.

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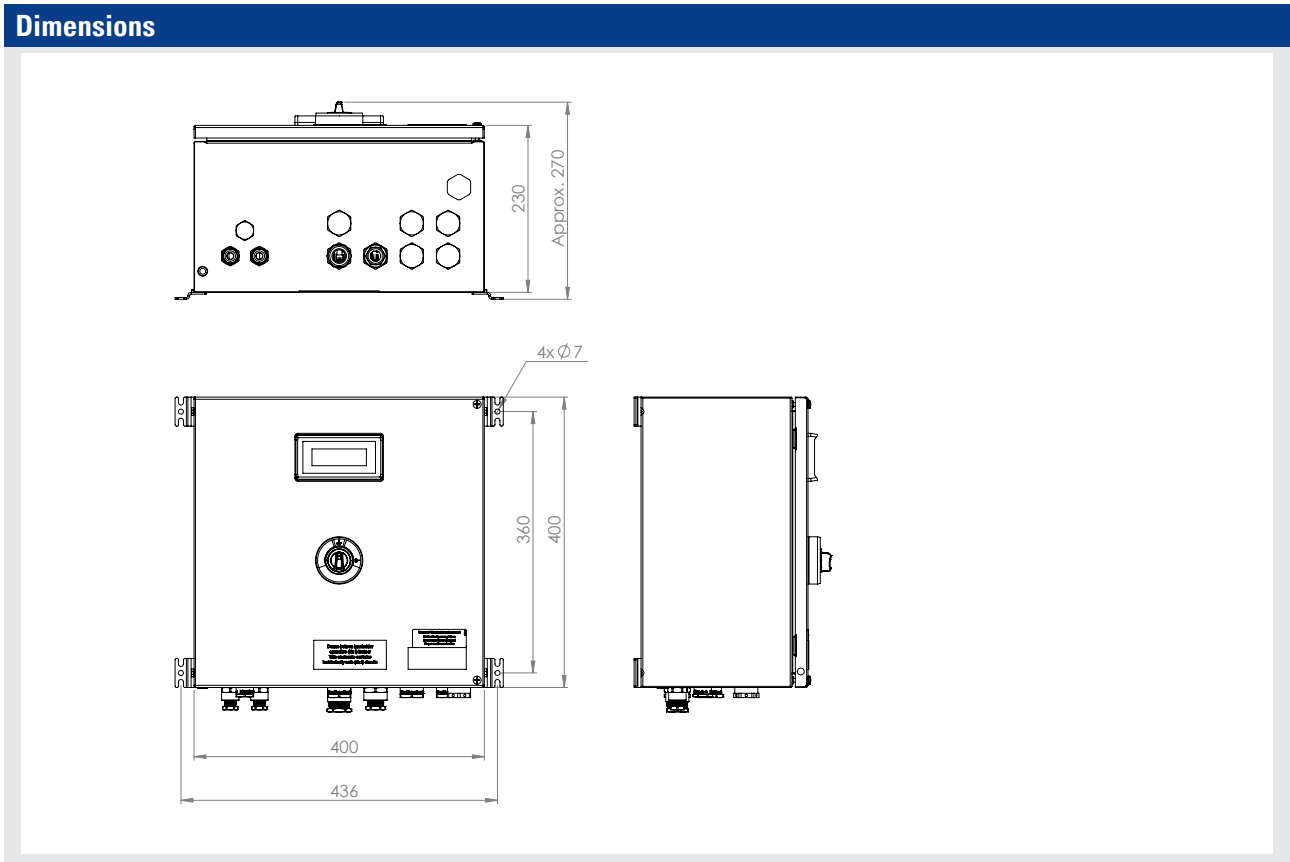
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Description	Weight	Part No.
Tranberg ThermoConnect - 8150-TTC/C/S - Controller - w/1xSwitch 16A 2 pol	19 kg	81502353
Tranberg ThermoConnect - 8150-TTC/CL/S - Controller/Limiter - w/1xSwitch 16A 2 pol	19 kg	81502354

Accessories	Part No.
A vast selection of accessories are available at <a href="http://www.stahl-tranberg.com">www.stahl-tranberg.com</a> . Including connection kits, pipe transition units, installation equipment, flexible conduits, adaptors, cable glands etc.	
Temp-sensor PT100 3-wires (Ø6x300mm element), 3 meter silicone cable	5023 9078
Temp-sensor PT100 3-wires (Ø6x300mm element), 10 meter silicone cable	5023 9086
Temp-sensor PT100 3-wires (Ø6x300mm element), 25 meter silicone cable	5023 9087
Temp-sensor PT100 3-wires (Ø6x300mm element), 5 meter silicone cable	5023 9089
Temp-sensor MONI-PT100-260/5 (Ø6x60mm element), 5 meter D4,5mm PTFE cable and M16 gland	5023 9111
Temp-sensor MONI-PT100-260/10 (Ø6x60mm element), 10 meter D4,5mm PTFE cable and M16 gland	5023 9112
Temp-sensor MONI-PT100-260/25 (Ø6x60mm element), 25 meter D4,5mm PTFE cable and M16 gland	5023 9113
Temp-sensor MONI-PT100-Exe, high temperature exposure, with MI cable and junction box	5029 1256
Temp-sensor MONI-PT100-Exe, high temperature exposure, with 2 meter MI cable and M16 gland	5029 1257
Connection kit for temperature element PT100, Wall mounted	9178 045



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