



# THERMOSTAT

## TRANBERG ThermoConnect (TTC)

### 1060701/-702 Controller

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS6043 REV. B 28.09.2018



TEF1060701/702 is an electronic heat-tracing control unit featuring the benefits of local control and the capability for central monitoring. TEF1060701/702 control unit can be used for single phase circuits up to 20 A and is approved for use in hazardous areas. TEF106702 is equipped with an IEC 61508-SIL 2 classified safety temperature limiter on board (NGC-20-CL-E). It measures the temperature with up to two RTD(s) connected to the unit. The Safety temperature limiter has a dedicated temperature input. TEF1060701/702 unit is equipped with a RS-485 interface. Through this interface up to 247 TEF1060701/702 units can be networked to one serial port of standard PC running [Tranberg PlantConnect™](#) control and monitoring software.

#### 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 (1060702 only)

#### FEATURES AND BENEFITS

- Ready for [Tranberg PlantConnect™](#) (Remote control and monitoring).
- Two RTD channels for temperature controller.
- High ingress protection. IP66.
- Manufactured in acid proof stainless steel (AISI 316L).
- Control Monitoring and alarm capabilities.
  - TEF1060701/702 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 Raychem NGC-20 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.

#### TECHNICAL DATA

<b>Type designation:</b>	Stahl 8150/5, part number 1060701(controller) / 1060702 (Controller and limiter)
<b>Ex-protection:</b>	⊕ II 2 G Ex eb ib mb IIC T4 Gb
<b>Voltage range:</b>	100-254V AC +/-10%, 50/60Hz
<b>Maximum load:</b>	20A
<b>Protection:</b>	IP66
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Max. wire termination (with end sleeve):</b>	Power in: Max. 6mm <sup>2</sup> Heating cable (power out): Max. 4mm <sup>2</sup> Earth terminals: Max. 10mm <sup>2</sup>
<b>T<sub>amb</sub> (Operation):</b>	-20 to +45°C

#### APPROVALS AND CERTIFICATES

PTB 09ATEX1109

The TEF 1068702 safety temperature 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.



R. Stahl Tranberg AS

E [info@stahl-tranberg.com](mailto:info@stahl-tranberg.com) | [stahl-tranberg.com](http://stahl-tranberg.com)

Main office: Strandsvingen 6 | N-4032 Stavanger | Norway | T +47 51 57 89 00 | F +47 51 57 89 50

Office Oslo: Luhrtoppen 2 | N-1470 Lorenskog | Norway | T +47 24 08 44 10

## DESCRIPTION

	Weight	Part No.
Tranberg ThermoConnect - 1060-TTC/C - Controller	18,5 kg	1060 701
Tranberg ThermoConnect - 1060-TTC/CL - Controller/Limiter	18,5 kg	1060 702

## DESCRIPTION ACCESSORIES

A vast selection of accessories are available at [www.stahl-tranberg.com](http://www.stahl-tranberg.com).  
Including connection kits, pipe transition units, installation equipment, flexible conduits, adaptors, cable glands etc.

Description	Part No.
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
Connection kit for temperature element PT100, Wall mounted	9178 045

## DIMENSIONS

