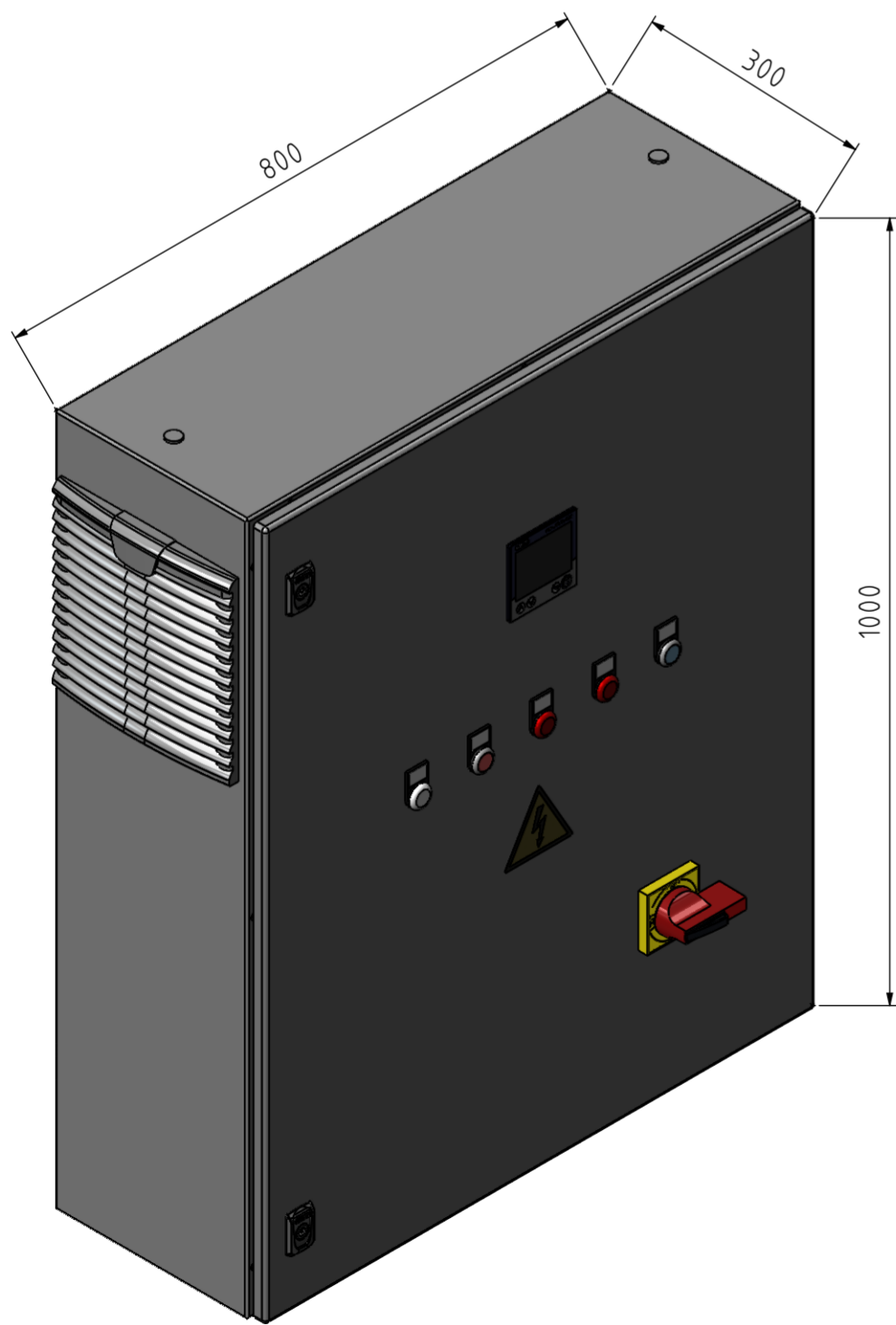
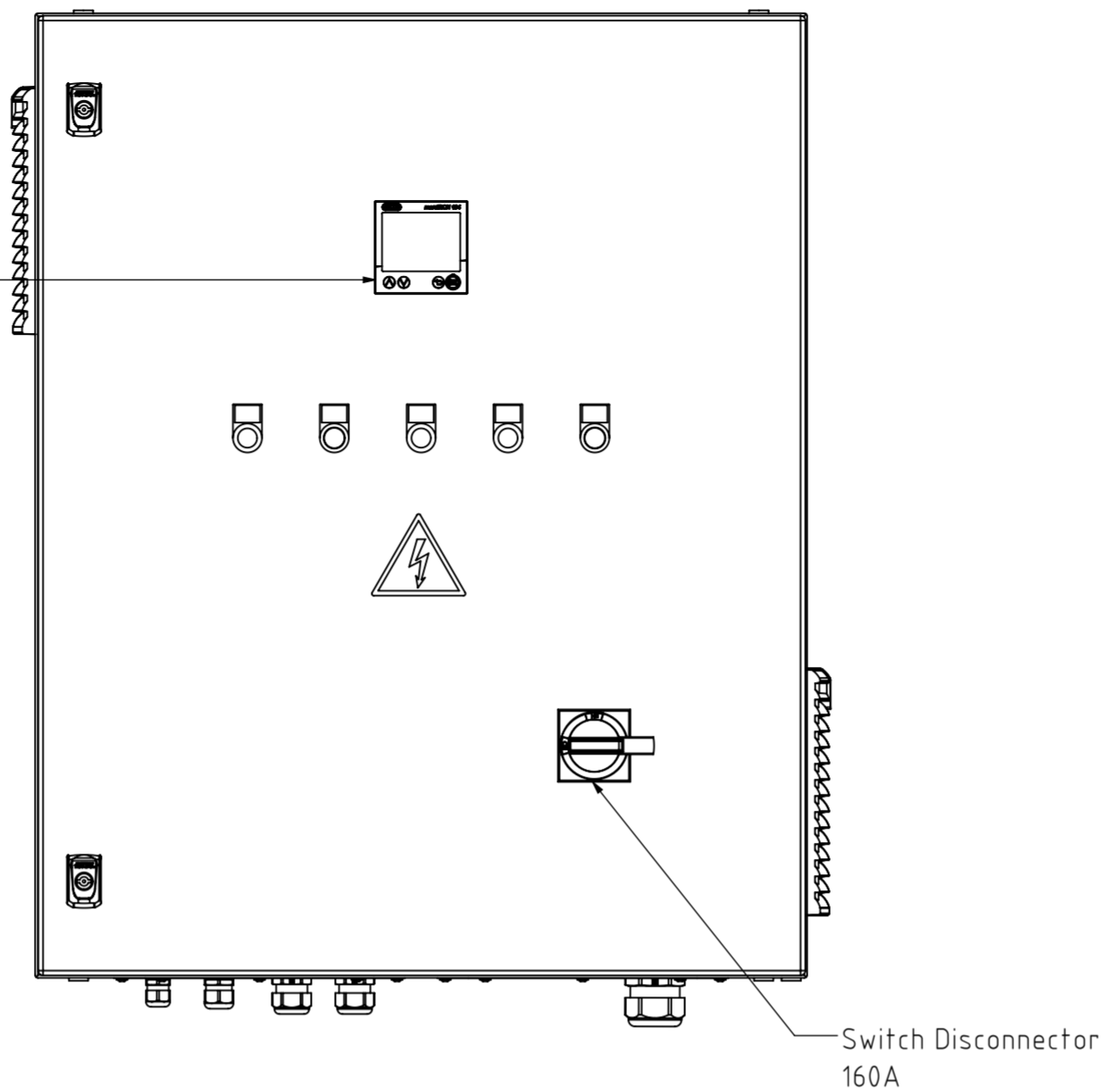


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PID-Controller
- with digital display of setpoint
and actual value



SSTR-series up to 274kW electrical power - Thyristor control Art. No. 104090

Basically, electric resistance heaters are "inert" end consumers, especially in comparison to alternative heating solutions. Typical thermostats, so-called 2-point controllers only switch off the power when a setpoint value is reached, which can lead to large temperature fluctuations around the desired setpoint, as the system "overshoots or undershoots".
At the centre of Siekerkotte SSTR controls are PID controllers. The controller compensates the inertia of the heaters, as well as other possible interfering factors, switches the heating on or off at the optimum time and ensures precise temperature control in the medium.

The heating is switched via solid state relays or thyristor controllers in the voltage zero crossing, with the following significant advantages:

1. no deterioration due to the breakway spark and the associated short service life
2. increased control accuracy, as there is no limit to the switching frequencies
3. no violation of EMC directives

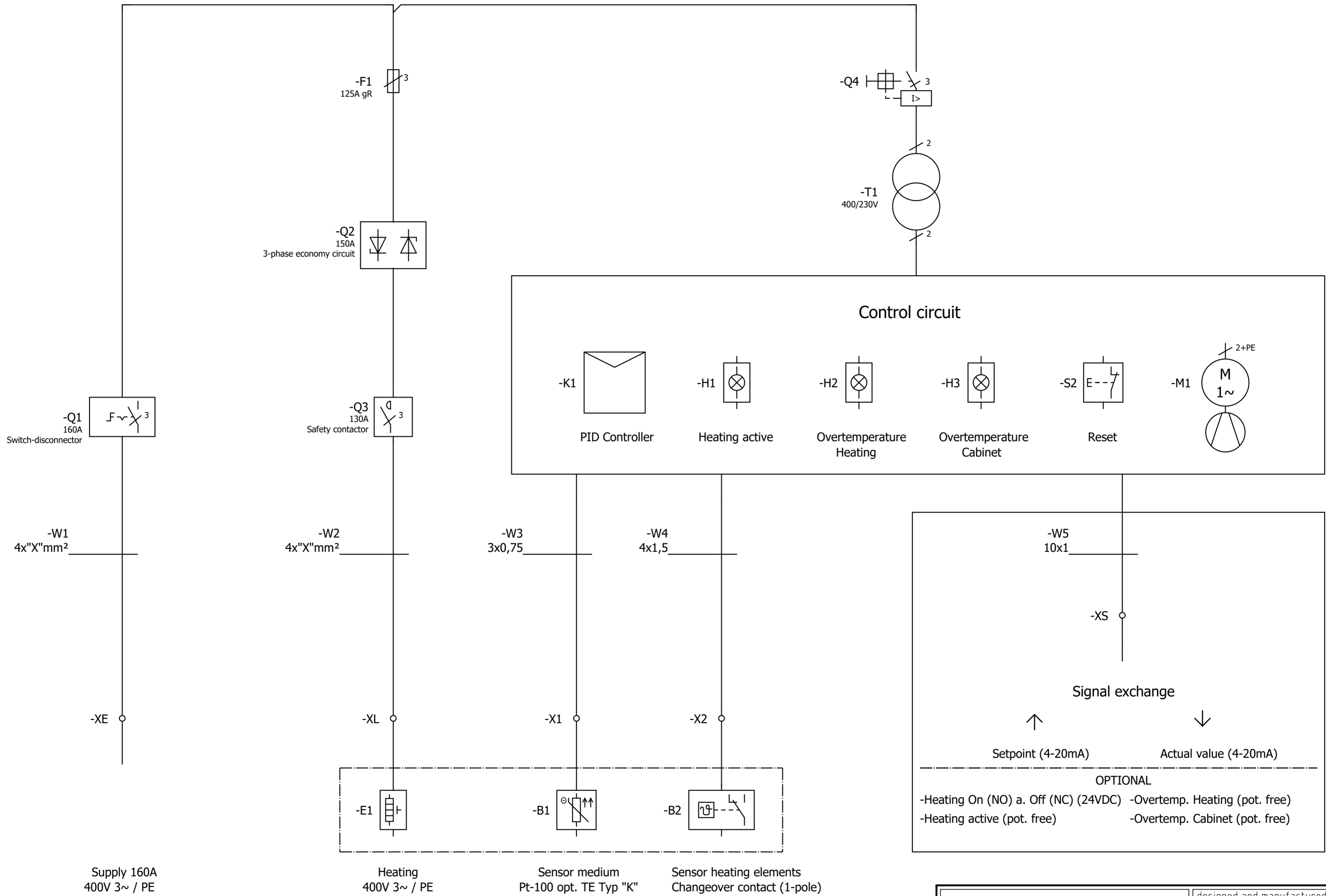
In addition to the semiconductor switching element, the heating is redundantly disconnected from the grid via an additional safety contactor. This ensures a safe shutdown.

For signal exchange with the customer's process control system, the extension or integration of all common bus connections (Profinet, Profibus, Modbus RTU / TCP-IP) is possible and therefore sustainable.

Environment	Installation	Inside, Ex-free zone	Control circuit	Transformer	400/230V
min./max.perm. temp[°C]		+5 / +32°C	PID Controller		96x96
Protection class		IP55	- local / digital:		Setpoint / Act. value
Material		Steel (RAL 7035)	- external / analog		Setpoint 4-20mA Actual value 4-20mA
Electrical Data	Supply voltage [V]	400	Control elements		
	Voltage tolerance [%]	+10 / -10	Button		Heating On
	Power	up to 72,0kW	Button		Heating Off
	Supply / Back-up fuse	160A	Indicator lights		Overtemp. Heating
			Indicator lights		Overtemp. Cabinet
Load circuit			Button		Reset
Switch-disconnector		160A	Sensors (Heating)		(By default)
Switching device		Thyristor controller	Sensor medium		Pt-100 opt.TCType "K"
- incl.		Semiconductor fuse	Sensor heating element		Changeover contact (1-pol.)
Safety contactor		Power contactor 130A	Weight approx.		82kg

designed and manufactured according to: DIN EN61439-1/2		
Customs tariff number: 8537 1091		
description Standard control SSTR 400V 3 Ph. to 50,1-72,0kW		
drawn	Date	Name
checked	22.08.2024	Marco Dück
drawing-no.	Format	Scale
DB_104090	A2	1:7
Rev.	A	
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Art. No.	104090	
Siekerkotte GmbH & Co. KG 32051 Herford, Germany Tel. +49(0) 5221 930 930 / Fax. +49(0) 5221 31261 SIEKERKOTTE ELEKTROWÄRMETECHNIK		

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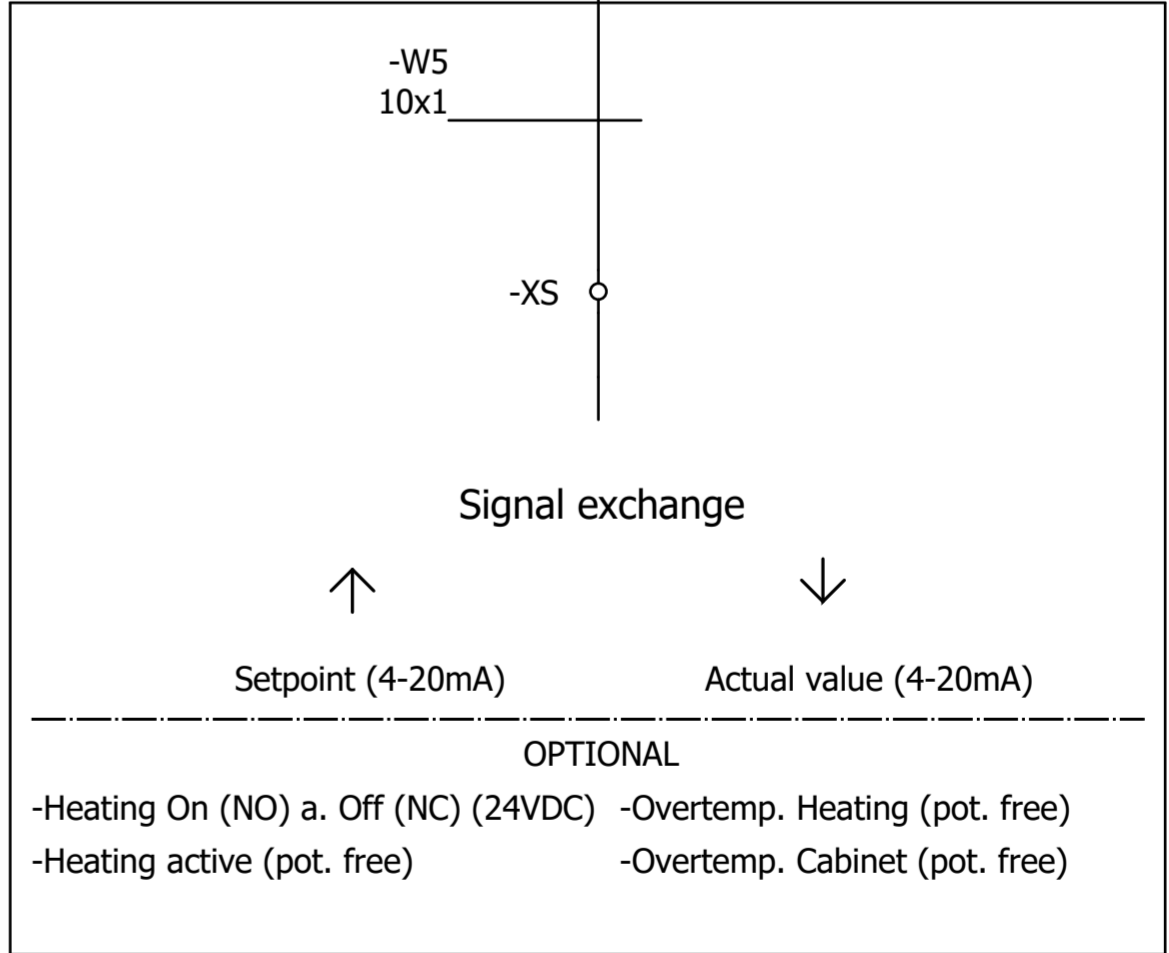


Supply 160A
400V 3~ / PE

Heating
400V 3~ / PE

Sensor medium
Pt-100 opt. TE Typ "K"

Sensor heating elements
Changeover contact (1-pole)



			designed and manufactured according to: DIN EN61439-1/2													
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