

Electrical specifications

Environmental conditions

Operating temperature	-20 to +60°C
Calibration temperature.	20...28°C
Relative air humidity	< 95% RH (non-cond.)
Protection degree	IP50

Mechanical specifications

Dimensions (HxWxD) (D is excl. pins).	80.5 x 35.5 x 84.5 mm
Weight	130 g

Common specifications

Supply voltage	19.2...28.8 VDC
Internal consumption	2.4 W
Max. consumption	2.7 W
Signal / noise ratio	Min. 60 dB
Signal dynamics, input	20 bit
Signal dynamics, output	16 bit
Proportional band (XP)	0.01...999%
Gain	0.1...10000
Integrating time (TI)	0...999 s
Differentiating time (TD)	0...999 s
Response time	< 60 ms
Updating time	20 ms
Temperature coefficient.	< ±0.01% of span/°C
Linearity error	< ±0.1% of span
Effect of supply voltage change.	< ±0.002% of span/%V
Auxiliary voltages:	
Reference voltage	2.5 VDC ±0.5% / 15 mA
EMC immunity influence	< ±0.5%

Electrical specifications - INPUT

Current input

Measurement range	0...20 mA
Min. measurement range (span)	4 mA
Max. offset	50% of selec. max. value
Input resistance	Nom. 50 Ω

Voltage input

Measurement range	0...10 VDC
Min. measurement range (span)	200 mV
Max. offset	50% of selec. max. value
Input resistance	Nom. 10 MΩ

Digital input

NPN	Pull up 24 VDC / 6.9 mA
PNP.	Pull down 0 VDC / 6.9 mA
Pulse length	> 50 ms

Pt100 input 2289B

Measurement range	-99...+850°C
Min. measurement range (span)	50°C
Max. offset	50% of selec. max. value
Cable resistance per wire (max.).	25 Ω
Sensor current	Nom. 1.25 mA
Response time	< 100 ms
Basic accuracy	< ±0.2°C
Temperature coefficient:	
span < 100°C	< ±0.01°C/°Camb.
span > 100°C	< ±0.01% of span/°Camb.

Immunity influence:

span < 100°C	< ±1% of span
span > 100°C	< ±0.5% of span
Effect of sensor cable resistance	< 0.002 Ω/Ω

Electrical specifications - OUTPUT

Current output:

Signal range.	0...20 mA
Min. signal range (span).	5 mA
Max. offset	50% of selec. max. value
Load (max.)	20 mA / 600 Ω / 12 VDC
Load stability	< ±0.01% of span/100 Ω
Current limit.	20.5 mA

Voltage output via internal shunt

Signal range.	0...10 VDC
Min. signal range (span).	250 mV
Max. offset	50% of selec. max. value
Load (min.)	500 kΩ
Voltage limit	10.25 VDC

Observed authority requirements

EMC.	2014/30/EU & UK SI 2016/1091
RoHS.	2011/65/EU & UK SI 2012/3032
EAC.	TR-CU 020/2011

Of span = Of the presently selected range