SIEMENS

Data sheet

6ES7134-6GD01-0BA1



SIMATIC ET 200SP, ANALOG INPUT MODULE, AI 4XI 2-/4-WIRE STANDARD, PACKING UNIT: 1 PIECE, FITS TO BU-TYPE A0, A1, COLOR CODE CC03, MODULE DIAGNOSIS, 16BIT, +/-0,3%

General information	
Product type designation	Al 4xl 2-/4-wire ST
HW functional status	From FS02
Firmware version	
FW update possible	Yes
usable BaseUnits	BU type A0, A1
Color code for module-specific color identification plate	CC03
Product function	
• I&M data	Yes; I&M0 to I&M3
 Isochronous mode 	No
Measuring range scalable	No
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V14 / -
 STEP 7 configurable/integrated from version 	V5.6 and higher
 PCS 7 configurable/integrated from version 	V8.1 SP1
 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
 PROFINET from GSD version/GSD revision 	GSDML V2.3
Operating mode	
 Oversampling 	No
• MSI	No
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
Calibration possible in RUN	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	37 mA; without sensor supply
Encoder supply	
24 V encoder supply	
• 24 V	Yes
Short-circuit protection	Yes
 Output current, max. 	20 mA; max. 50 mA per channel for a duration < 10 s
Power loss	
Power loss, typ.	0.85 W; Without encoder supply voltage
Address area	
Address space per module	
Address space per module, max.	8 byte; + 1 byte for QI information

Automatic encoding • Mechanical coding element • Type A Selection of Bisselful if or connection wriants • 2-wire connection • 4-wire connection • 5-wire connection • 5-wire connection • 6-wire connection • 7-wire connection • 6-wire connection • 7-wire connection • 7-wi	Hardware configuration	
* Nechanical coding element * Type A Selection of Bisselvini for connection wateries * 2 veri connection * 2 veri connection * 3 Uppe A0, A1 * 8 Uppe A0, A1 * 8 Uppe A0, A1 * Analog inputs * Analog inputs * Analog inputs * Provided (and analog inputs) * Analog inputs * Analog inputs * Provided (analog inputs) * Analog inputs * On A * On A * Input resistance (b to 20 mA) * — Input resistance (b to 20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (20 mA to +20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Input resistance (40 mA to 20 mA) * — Insurance (40 mA to 40 mA) * — Insurance (40 mA) * — Insurance (Yes
Pype A Selection of Basellant for connection variants • 2-wire connection Analogy inputs Number of analog inputs Very fire (all channels), min. Cycle time (all channels), min. On 20 nA — Input resistance (0 to 20 nA) • 10 0 20 nA — Input resistance (10 to 20 nA) • 20 nA to 20 nA — Input resistance (20 nA to +20 nA) • 20 nA to 20 nA — Input resistance (20 nA to +20 nA) • 20 nA to 20 nA — Input resistance (20 nA to +20 nA) • 30 nA to 20 nA — Input resistance (20 nA to 20 nA) • 30 nA to 20 nA — Input resistance (20 nA to 20 nA) • 4 nA to 20 nA — Input resistance (20 nA to 20 nA) • 5 ne Insulation (20 nA to 20 nA) • 5 ne Insulation (20 nA to 20 nA) • 6 ne Insulation (20 nA) • 6 ne Insulation (20 nA to 20 nA) • 7 ne Insulation (20 nA to 20 nA) • 7 ne Insulation (20 nA to 20 nA) • 8 ne Insulation (20 nA to 20 nA) • 100 0 n Analogy value generation for the lenists Oomersion method of at the analog hout integration and conversion three lenists • 8 resolution with overrange (30 nA to 40 na) • 100 0 n Analogy value generation for the lenists • 10 overrand with overrange (30 nA to 40 na) • 10 overrand (30	<u> </u>	Yes
Author of markey inputs Number of analog inputs Number of analog inputs Number of analog inputs Author of analog inputs Cycle time (all channels), min. Out 20 mA Input resistance (0 to 20 mA) - Input resistance (0 to 20 mA) - Input resistance (0 to 20 mA) - Input resistance (20 mA) to 40 mA) - Input resistance (20 mA) to 40 mA) - Input resistance (20 mA) to 50 mA - Input resistance (20 mA) to 50 mB - Institute (20 mA)	Type of mechanical coding element	Type A
Author of annion inputs Number of annion inputs Number of annion inputs Cycle time (all channels), min. Figure (all channels),		
Number of analog inputs 4, Differential inputs	2-wire connection	BU type A0, A1
Number of analog inputs permissible input current for current input (destruction limit), permissible input current for current input (destruction limit), permissible input currents Cycle time (all charmels), min. Cycle time (all charmels), min. Figure (all charmels), min. F	• 4-wire connection	BU type A0, A1
Demissible input current for current input (destruction limit), max. Sum of the basic conversion times and additional processing times (depending on the parameterization of the active channels)	Analog inputs	
Trans. Cycle time (all channels), min. Sum of the basic conversion times and additional processing times (depending on the parameterization of the active channels) Input ranges (rated values), currents • 0 to 20 mA — Input resistance (20 mA to +20 mA) — Input resistance (20 mA to +20 mA) — Input resistance (20 mA to +20 mA) — Input resistance (4 mA to 20 mA) — Service (4 mA) — Service	Number of analog inputs	4; Differential inputs
on the parameterization of the active channels) • 0 to 20 mA — input ranges (rated values), currents • 0 to 20 mA — input resistance (0 to 20 mA) — input resistance (20 mA to +20 mA) — input resistance (20 mA to +20 mA) — input resistance (4 mA to 20 mA) — shielded, max. — 1000 m Analog value generation for the inputs — conversion method of at the analog input — integration and conversion timelresolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameterizable • Interference voltage suppression for interference frequency ff in 1½ • Conversion filme (per channel) Smoothing of measured values • Number of smoothing levels • Number of smoothing levels • Foroilage measurement • For outnern measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • For outlage measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • Corourent measurement as 4-wire transducer • Coronection of signal encoders. • For oltage measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • Corourent measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • Corourent measurement as 4-wire transducer • Coronection of signal encoders. • Coronection of signal encoders. • Foroilage measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • Oo Current, relative to input range), (+/-) — 0.005 % M Corostable between the inputs, min. • Coronomo mode interference pass value of interference < rated value of input range), (+/-) — 0.05 % M • Current, relative to input range, (+/-) — 0.05 % • Current, relative to input range, (+/-) — 0.06 given between the inputs, min. • Coronomo mode interference with interference < rated value of input range), min. • Coronomo mode interference with interference	1 1 7	50 mA
- 0 to 20 mA - Input resistance (0 to 20 mA) - Input resistance (20 mA to +20 mA) - Input resistance (20 mA to +20 mA) - Input resistance (40 mA to +20 mA) - Input resistance (4 mA to 20 mA) - Integration and conversion time/resolution per channel - Resolution with overange (bit including sign), max Integration and conversion time/resolution per channel - Resolution with overange (bit including sign), max Integration time, parameterizable - Interference voltage suppression for interference frequency fit in Hz - Conversion time (per channel) - Resolution with overange (bit including sign), max Integration massured values - Number of smoothing levels - Parameterizable - Number of smoothing levels - Parameterizable - Number of smoothing levels - Parameterizable - For voltage measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer - Burden of 2-wire transmitter, max For unrant measurement as 2-wire transducer	Cycle time (all channels), min.	
- Input resistance (0 to 20 mA) • 20 mA to + 20 mA • 20 mA to + 20 mA • Input resistance (20 mA to +20 mA) • 4 mA to 20 mA — Input resistance (4 mA to 20 mA) • 4 mA to 20 mA — Input resistance (4 mA to 20 mA) • 5 main tresistance (4 mA to 20 mA) • 100 Ω; 4 approx. 0.7 V diode forward voltage in 2-wire operation Cable length • 5 mickled, max. • 1000 m Analog value generation for the inputs conversion method / at the analog input integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameterizable • Integration time, parameterizable • Integration inde (per channel) Smoothing of imeasured values • Number of smoothing levels • parameterizable • Ves Finceder Connection of signal encoders • for current measurement a 2-wire transducer — Burlan of 2-wire transducer — Solo Q • for current measurement as 4-wire transducer — Burlan of 2-wire transducer — Burlan of 2-wire transducer — Constalk between the input range), (+/-) Crosstalk between the input range, (+/-) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of interference × rated value of input range), (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of interference × rated value of input range), (+/-) • Series mode interference (peak value of interference × rated value of input range), (+/-) • Series mode interference (peak value of interference × rated value of input range), (+/-) • Common mode interference, (peak value of interference × rated value of input range), (+/-) • Series mode interference (peak value of interference × rated value of input r	Input ranges (rated values), currents	
- 20 mA to +20 mA to +20 mA to +20 mA) Yes 100 Ω	• 0 to 20 mA	Yes; 16 bit incl. sign
- Input resistance (-20 mA to +20 mA) • Individual resistance (-20 mA to +20 mA) • Individual resistance (-20 mA to +20 mA) - Input resistance (-20 mA to 20 mA) - Input resistance (-20 mA) - Input resis	— Input resistance (0 to 20 mA)	100 Ω ; + approx. 0.7 V diode forward voltage in 2-wire operation
+ 4 mA to 20 mA — Input resistance (4 mA to 20 mA) 100 Ω + approx. 0.7 V diode forward voltage in 2-wire operation Cable length • shielded, max. 1000 m Analog value generation for the inputs conversion method / at the analog input integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 16 bit • Resolution with overrange (bit including sign), max. 16 bit • Interference voltage suppression for interference frequency f in Hz • Conversion time (per channel) 180 / 60 / 50 ms Smoothing of measured values • Number of smoothing levels 4; None; 4/8/16 times • parameterizable Yes • parameterizable Yes • Tor voltage measurement No • for current measurement as 2-wire transducer Yes • Burden of 2-wire transducer Yes • For current measurement as 4-wire transducer Yes • For current measurement as 4-wire transducer Yes • Temperature error (relative to input range), (+-) 0.01 % Temperature error (relative to input range), (+-) 0.005 % K Constalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range) (+-) 0.5 % Basic error limit in overall temperature range • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Querational error limit in overall temperature range • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+1-) 0.5 % • Common mode interference,	• -20 mA to +20 mA	Yes
- Input resistance (4 mA to 20 mA) Cable length • shielded, max, 1 000 m Analog value generation for the inputs conversion method / at the analog input • Resolution with overrange (bit including sign), max. • Integration man, parameter/zable • Resolution with overrange (bit including sign), max. • Integration time, parameter/zable • Interference voltage suppression for interference frequency 11 in Hz. • Conversion time (per channel) Smoothing of measured values • Number of smoothing levels • parameter/zable • Parameter/zable • No • for current measurement as 2-wire transducer — Burden of 2-wite transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wite transducer — Burden of 2-wite transducer — Burden of 2-wite transducer — Frorsfaccuracies Linearity error (relative to input range), (+/-) Crossalls between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range) • Current, relative to input range, (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input and parameters error limit in overall temperature range • Current, relative to input and parameters error limit in overall temperature range	— Input resistance (-20 mA to +20 mA)	100 Ω
Cable length • shielded, max. Analog value generation for the inputs conversion method / at the analog input integrating (Sigma-Delta) integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameterizable (an integration of the parameterizable (bit including sign), max. • Integration time, parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Conversion time (per channel) (bit integration) (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of the parameterizable (bit including sign), max. • Integration of signal encoders • Integr	• 4 mA to 20 mA	Yes; 15 bit
• shielded, max. Analog value generation for the inputs conversion method / at the analog input integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameter/able • Interference voltage suppression for interference frequency f1 in Hz • Conversion time (per channel) **Number of smoothing levels • parameter/able • Parameter/able • Parameter/able • Parameter/able • Number of smoothing levels • parameter/able • for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournent measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournent measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournent measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournent measurement as 4-wire transducer **Properatione error (relative to input range), (+/-) **Temperature error (relative to input range), (+/-) **Operational error limit in overall temperature range **Ournent, relative to input range, (+/-) **Operational error limit in overall temperature range **Ournent, relative to input range, (+/-) **Operational error limit in overall temperature range **Ournent, relative to input range, (+/-) **Operational error limit in overall temperature range **Ournent, relative to input range, (+/-) **Ournent, relative to input range, (+/-) **Common mode voltage / with interference < roll relative to input range, (+/-) **Outment, relative to input range, (+/-) *		100 Ω ; + approx. 0.7 V diode forward voltage in 2-wire operation
Analog value generation for the Inputs conversion method / at the analog input integrating and conversion time/resolution per channel Resolution with overrange (bit including sign), max. Integration and conversion time/resolution per channel Resolution with overrange (bit including sign), max. Integration time, parameterizable Yes Interference voltage suppression for interference frequency f1 in Hz Conversion time (per channel) 180 / 60 / 50 ms Smoothing of measured values Number of smoothing levels Yes Number of smoothing levels Yes Parameterizable Yes Connection of signal encoders of or voltage measurement as 2-wire transducer Yes For voltage measurement as 2-wire transducer Yes of or urent measurement as 2-wire transducer Yes For surface of 2-wire transmitter, max. of or current measurement as 4-wire transducer Yes Errors/accuraciss Linearity error (relative to input range), (+/-) 0.01 % Temperature error (relative to input range), (+/-) 0.05 %/K Crosstalk between the inputs, min. Repeat accuracy in sleady state at 25 °C (relative to input range), (+/-) 0.5 % Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) 0.3 % Interference voltage suppression for f= n x (f1 +/-1 %), f1 = interference fequency Series mode interference (peak value of interference < rated value of input range, min. common mode interference (peak value of interference < rated value of input range, min. common mode interference, min. Polagnostic alarm Claims Pes		
conversion method / at the analog input integrating (Sigma-Delta) Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 16 bit • Integration time, parameterizable Yes • Interference voltage suppression for interference frequency If in Hz 16.6 / 50 / 60 Hz • Conversion time (per channel) 180 / 60 / 50 ms Smoothing of measured values 4: None; 4/8/16 times • Number of smoothing levels 4; None; 4/8/16 times • parameterizable Yes • Connection of signal encoders No • for voltage measurement No • for current measurement as 2-wire transducer Yes — Burden of 2-wire transmitter, max. 650 Ω • for current measurement as 4-wire transducer Yes — Enrors/accuracles Yes ***Crosstalk between the inputs, min. 50 08; Applies to up to ±5 V overvoltage in other channels Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) 0.05 %/K **Current, relative to input range, (+/-) 0.5 % **Basic error limit (operational limit at 25°C) • Current, relative to input range, (+/-) 0.3 % interference voltage suppression for f = n x (f1 +/-1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min.		1 000 m
Resolution with overrange (bit including sign), max. 16 bit		
Resolution with overrange (bit including sign), max. Integration time, parameterizable Integration time, parameterizable Interference voltage suppression for interference frequency f1 in Hz Conversion time (per channel) Italy 60 / 50 ms Smoothing of measured values Number of smoothing levels parameterizable Ves Number of smoothing levels parameterizable Ves Connection of signal encoders for voltage measurement for ournent measurement as 2-wire transducer Gonection of signal encoders for current measurement as 4-wire transducer For current measurement as 4-wire transducer For current measurement as 4-wire transducer For current encoder For current encoder For current measurement as 4-wire transducer For current error (relative to input range), (+/-) Out 50 % K Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Os % Sacies error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Common mode voltage yupression for f = n x (ft +/- 1 %), ft = interference frequency Series mode interference (peak value of interference < rated value of input range, min. Common mode voltage / with interference voltage suppression for maximum Common mode voltage / with interference voltage suppression from maximum Common mode voltage / with interference voltage suppression for fan x (ft +/- 1 %), ft = interference frequency Series mode interference (peak value of interference frequency Common mode voltage / with interference voltage suppression for fan x (ft +/- 1 %), ft = interference frequency Common mode voltage / with i	ŭ i	integrating (Sigma-Delta)
Interference voltage suppression for interference frequency ff in Hz 16.6 / 50 / 60 Hz 180 / 60 / 50 ms 180 / 60 / 60 / 60 / 60 / 60 / 60 / 60 /		
 Interference voltage suppression for interference frequency ff in Hz Conversion time (per channel) 180 / 60 / 50 ms Smoothing of measured values Number of smoothing levels parametrizable Encoder Connection of signal encoders for voltage measurement as 2-wire transducer for ournet measurement as 2-wire transducer For current measurement as 4-wire transducer for current measurement as 4-wire transducer for current measurement as 4-wire transducer Yes Entroes/accuracies Linearity error (relative to input range), (+/-) 0.01 % Temperature error (relative to input range), (+/-) 0.005 %/K Crosstalk between the inputs, min. 50 dB; Applies to up to ±5 V overvoltage in other channels Repeat accuracy in steady state at 25 °C (relative to input range) Current, Inelative to input range, (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Series mode interference (peak value of interference < rated value of input range), min. common mode voltage suppression for f = n x (11 +/-1 1 %), f1 = interference frequency Series mode interference, min. ob dB Interrupts/diagnostics/status information Diagnostics function Ves Diagnostics function Ves Alarms Limit value alarm No Diagnoses		
frequency f1 in Hz Conversion time (per channel) 180 / 60 / 50 ms Smoothing of measured values Number of smoothing levels parameterizable Fincoder Connection of signal encoders for voltage measurement for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. for current measurement as 4-wire transducer Yes Frors/accuracios Linearity error (relative to input range), (+/-) Crosstalk between the inputs, min. 50 dB; Applies to up to ±5 V overvoltage in other channels Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) O.05 %/// Repeat accuracy in steady state at 25 °C (relative to input range) Current, relative to input range, (+/-) O.5 % Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Series mode interference (peak value of interference < rated value of input range, (+/-) Series mode interference (peak value of interference < rated value of input range, (+/-) Common mode voltage / with interference voltage suppression / maximum Common mode interference, min. Obagnostics function Pes Limit value alarm No Diagnostics function Limit value alarm No Diagnosses		
Number of smoothing levels • Number of smoothing levels • parameterizable Pres Connection of signal encoders • for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current, (relative to input range), (+/-) O.005 %/K Crosstalk between the inputs, min. So dd; Applies to up to ±5 V overvoltage in other channels • Current, relative to input range, (+/-) O.5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of interference < rated value of input range, min. • common mode voltage // with interference voltage suppression for f = n x (ft +/-1 %), ft = interference frequency • Series mode interference, peak value of interference < rated value of input range, min. • common mode lottage // with interference voltage suppression / maximum • Common mode lottage // with interference voltage suppression / maximum • Common mode lottage // with interference voltage suppression // maximum • Diagnostics function Pyes Alarms • Diagnostics function Pyes • Limit value alarm No Diagnoses	•	16.6 / 50 / 60 Hz
Number of smoothing levels	Conversion time (per channel)	180 / 60 / 50 ms
Parameterizable Finoder Connection of signal encoders • for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer Ferrors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. 50 dB; Applies to up to ±5 V overvoltage in other channels Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Department (operational limit at 25 °C) • Current, relative to input range, (+/-) Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference, min. • common mode voltage / with interference voltage suppression for maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm No Diagnoses		
Encoder Connection of signal encoders • for voltage measurement as 2-wire transducer Yes — Burden of 2-wire transmitter, max. 650 Ω • for current measurement as 4-wire transducer Yes Errors/accuracies Linearity error (relative to input range), (+/-) 0.01 % Temperature error (relative to input range), (+/-) 0.005 %//K Crosstalk between the inputs, min. 50 dB; Applies to up to ±5 V overvoltage in other channels Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) 0.5 % Basic error limit in overall temperature range • € Current, relative to input range, (+/-) 0.5 % Basic error limit (operational limit at 25 °C) • € Current, relative to input range, (+/-) 0.3 % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • € common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes • Limit value alarm • Limit value alarm PYes • Limit value alarm No	 Number of smoothing levels 	4; None; 4/8/16 times
Onnection of signal encoders • for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer • for current measurement as 4-wire transducer Ferrors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Series mode interference (peak value of interference < rated value of input range), min. • Common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 10 Jiagnostics function Alarms • Limit value alarm No Diagnoses	·	Yes
• for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer • for current measurement as 4-wire transducer • for current measurement as 4-wire transducer Frors/accuracies Linearity error (relative to input range), (+/-) 1 cmperature error (relative to input range), (+/-) Crosstalk between the inputs, min. 8 cepeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (poerational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 10 V Suppression for maximum • Common mode interference, min. Pes Alarms • Diagnostics function Yes Limit value alarm No Diagnoses		
• for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Os 3 % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Diagnostics function Alarms • Diagnostics function Diagnoses	-	N-
- Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer Frors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Sasic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Diagnostics function Pes Alarms • Diagnostic alarm • Limit value alarm No Diagnoses		
• for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Os % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Interrupts/diagnostics/status information Diagnostics function Pes • Diagnostics alarm • Diagnostics alarm • Limit value alarm No Diagnoses	■ for current measurement as ∠-wire transducer	
Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Os 5 % Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) 0.3 % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Diagnostics function Pyes Alarms • Diagnostic alarm Yes • Limit value alarm No	Durdon of 2 wire transmitter man	
Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range, / min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Diagnostics function Pes Interrupts/diagnostics/status information Diagnostics function Pes Limit value alarm No Diagnoses	,	650 Ω
Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Diagnostics function P'es Alarms • Diagnostic alarm • Limit value alarm No Diagnoses	for current measurement as 4-wire transducer	650 Ω
Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. • Common mode interference, min. Diagnostics function Alarms • Diagnostic alarm • Limit value alarm No Diagnoses	for current measurement as 4-wire transducer Errors/accuracies	650 Ω Yes
Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) O.3 % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms • Diagnostic alarm • Limit value alarm No	for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-)	650 Ω Yes 0.01 %
range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) O.3 % Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < 70 dB rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms • Diagnostic alarm Yes • Limit value alarm No	for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-)	650 Ω Yes 0.01 % 0.005 %/K
Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency Series mode interference (peak value of interference < rated value of input range), min. common mode voltage / with interference voltage suppression / maximum Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms Diagnostic alarm Limit value alarm No Diagnoses	• for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min.	$650~\Omega$ Yes $0.01~\%$ $0.005~\%/K$ $50~dB;~Applies~to~up~to~\pm5~V~overvoltage~in~other~channels$
Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of interference < 70 dB rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms • Diagnostic alarm • Limit value alarm No Diagnoses	• for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input	$650~\Omega$ Yes $0.01~\%$ $0.005~\%/K$ $50~dB;~Applies~to~up~to~\pm5~V~overvoltage~in~other~channels$
Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency Series mode interference (peak value of interference < 70 dB rated value of input range), min. common mode voltage / with interference voltage suppression / maximum Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms Diagnostic alarm Limit value alarm No Diagnoses	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-)	$650~\Omega$ Yes $0.01~\%$ $0.005~\%/K$ $50~dB;~Applies~to~up~to~\pm5~V~overvoltage~in~other~channels$
Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency Series mode interference (peak value of interference < 70 dB rated value of input range), min. common mode voltage / with interference voltage suppression / maximum Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Yes Alarms Diagnostic alarm Yes Limit value alarm No Diagnoses	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 %
Series mode interference (peak value of interference < rated value of input range), min. Common mode voltage / with interference voltage suppression / maximum Common mode interference, min. Interrupts/diagnostics/status information Diagnostics function Alarms Diagnostic alarm Limit value alarm No Diagnoses	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range ● Current, relative to input range, (+/-)	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 %
rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm No Diagnoses	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range ● Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C)	 650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 %
suppression / maximum Common mode interference, min. 90 dB Interrupts/diagnostics/status information Diagnostics function Alarms Diagnostic alarm Limit value alarm No Diagnoses	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range ● Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) ● Current, relative to input range, (+/-)	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 %
Interrupts/diagnostics/status information Diagnostics function Alarms Diagnostic alarm Limit value alarm No Diagnoses	 for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference mode interference (peak value of interference < 	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency
Diagnostics function Alarms Diagnostic alarm Limit value alarm Diagnoses Yes No	 for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference value of input range), min. common mode voltage / with interference voltage 	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB
Alarms • Diagnostic alarm • Limit value alarm No Diagnoses		650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V
 Diagnostic alarm Limit value alarm Diagnoses Yes No	 for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference voltage suppression for input range), min. common mode voltage / with interference voltage suppression / maximum Common mode interference, min. 	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V
Limit value alarm No Diagnoses		650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V 90 dB
Diagnoses		650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V 90 dB
v	● for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range ● Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) ● Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference voltage suppression for interference < rated value of input range), min. ● common mode voltage / with interference voltage suppression / maximum ● Common mode interference, min. Interrupts/diagnostics/status information Diagnostics function Alarms	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V 90 dB
Monitoring the supply voltage Yes		650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V 90 dB Yes
	for current measurement as 4-wire transducer Errors/accuracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range • Current, relative to input range, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference voltage suppression / maximum • Series mode interference (peak value of interference < rated value of input range), min. • common mode voltage / with interference voltage suppression / maximum • Common mode interference, min. Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm	650 Ω Yes 0.01 % 0.005 %/K 50 dB; Applies to up to ±5 V overvoltage in other channels 0.05 % 0.5 % 0.3 % ference frequency 70 dB 10 V 90 dB Yes

Short-circuit Storup error Group error Overflow/underflow Poss Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display For channel status display For channel diagnostics For module diagnostics For module diagnostics Potential separation Potential separation Potential separation channels between the channels and backplane bus between the channels and the power supply of the electronics Petween the channels and the power supply of the electronics Potential separation Potential separation Potential separation the channels between the channels and backplane bus between the channels and the power supply of the electronics Potential separation Potential separation For the separation the channels and backplane bus between the channels and the power supply of the electronics Potential separation 10 V DC Isolation Isolation tested with 70 V DC (type test) Ambient temperature during operation horizontal installation, min. horizontal installation, min. horizontal installation, max. For C No C as of FS02 Installation, max. For C Altitude during operation relating to sea level Installation altitude above sea level, max. For C Midth It is mm Height Fight Figh	Wire-break	Yes; at 4 to 20 mA
Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics Potential separation Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • vertical installation, max. • vertical installation relating to sea level • Installation altitude above sea level, max. Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	Short-circuit	
Monitoring of the supply voltage (PWR-LED) • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • for module diagnostics • for module diagnostics • for module diagnostics • potential separation Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the installation difference between the installation moditions Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, min. • vertical installation relating to sea level • Installation altitude above sea level, max. 5 00 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm	Group error	Yes
Monitoring of the supply voltage (PWR-LED) Channel status display For channel diagnostics No For module diagnostics For module diagnostics Potential separation Potential separation Potential separation channels between the channels between the channels and backplane bus between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) 10 V DC Isolation Isolation tested with 707 V DC (type test) Ambient conditions Ambient temperature during operation horizontal installation, min. on "C; < 0 °C as of FS02 horizontal installation, min. vertical installation, min. vertical installation, min. vertical installation, max. vertical installation max. vertical installation max. vertical installation max. vertical installation operation to sea level installation altitude above sea level, max. So 0°C Altitude during operation relating to sea level installation altitude above sea level, max. So 00 m; Restrictions for installation altitudes ≥ 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Woights	Overflow/underflow	Yes
Channel status display For channel diagnostics for module diagnostics Formodule diagnostics Potential separation Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • orizontal installation, min. • vertical installation relating to sea level • Installation altitude above sea level, max. Isolation Isolation Solo °C Altitude during operation relating to sea level • Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width Isom Height 73 mm Depth Solomic Service LED No Yes; green LED No Yes; green/red LED Yes; green/red LED Yes; green/red LED Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group Yes; channel group-specific between 2-wire current input group Yes; channel group-specific between 2-wire group Yes; channel group-specific between 2-wire current input	Diagnostics indication LED	
• for channel diagnostics • for module diagnostics • for module diagnostics Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) 10 ∨ DC Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation set vertical installation, max. • vertical installation set vertical installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Depth Popth Verights	 Monitoring of the supply voltage (PWR-LED) 	Yes; green LED
• for module diagnostics Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics between the inputs (UCM) Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, min. • vertical installation, max. • vertical installation, max. • vertical installation max. • vertical installation max. • vertical installation altitude above sea level • Installation altitude above sea level, max. Dimensions Weights Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; only for 4-wire transducer Yes onl	Channel status display	Yes; green LED
Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation tested with Ambient conditions Ambient emperature during operation • horizontal installation, min. • horizontal installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation altitude above sea level • Installation altitude above sea level, max. Dimensions Potential separation Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group and 4-wire voltage input group Yes; channel group-specific between 2-wire current input group Yes; channel group-specific between 2-wire current input group Yes; channel group-specific between 2-wire current input group Yes; only for 4-wire transducer Permissible potential difference 10 V DC Isolation 10 V	 for channel diagnostics 	No
Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation relating to sea level • Installation relating to sea level • Installation altitude above sea level, max. Dimensions Width I5 mm Height 73 mm Depth Weights	 for module diagnostics 	Yes; green/red LED
between the channels between the channels and backplane bus between the channels and backplane bus between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. horizontal installation, min. vertical installation, min. vertical installation, max. vertical installation, max. Isolation temperature during operation In the perature during operation	Potential separation	
• between the channels and backplane bus • between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. ■ vertical installation, max. Altitude during operation relating to sea level • Installation altitude above sea level, max. Dimensions Width 15 mm Height 73 mm Depth Weights	Potential separation channels	
between the channels and the power supply of the electronics Permissible potential difference between the inputs (UCM) Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • Installation altitude above sea level, max. Dimensions Width 15 mm Height 73 mm Depth Weights	between the channels	
electronics Permissible potential difference between the inputs (UCM) Isolation Isolation tested with 707 V DC (type test) Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, min. • vertical installation, max. • vertical installation, max. • vertical installation relating to sea level • Installation altitude above sea level, max. Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	 between the channels and backplane bus 	Yes
between the inputs (UCM) Isolation Isolation Isolation tested with 707 V DC (type test) Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. • vertical installation, max. 50 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights		Yes; only for 4-wire transducer
Isolation Isolation tested with 707 V DC (type test) Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, max. • vertical installation, min. • vertical installation, max. • vertical installation, max. 50 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	Permissible potential difference	
Isolation tested with 707 V DC (type test) Ambient conditions Ambient temperature during operation • horizontal installation, min30 °C; < 0 °C as of FS02 • horizontal installation, max. 60 °C • vertical installation, min30 °C; < 0 °C as of FS02 • vertical installation, max. 50 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	between the inputs (UCM)	10 V DC
Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. 50 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	Isolation	
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, max. • vertical installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation max. • to °C as of FS02 • vertical installation max.	Isolation tested with	707 V DC (type test)
 horizontal installation, min. -30 °C; < 0 °C as of FS02 horizontal installation, max. 60 °C vertical installation, min. -30 °C; < 0 °C as of FS02 vertical installation, max. 50 °C Altitude during operation relating to sea level Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights 	Ambient conditions	
 horizontal installation, max. vertical installation, min. -30 °C; < 0 °C as of FS02 vertical installation, max. 50 °C Altitude during operation relating to sea level Installation altitude above sea level, max. 5000 m; Restrictions for installation altitudes > 2000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights 	Ambient temperature during operation	
 vertical installation, min. -30 °C; < 0 °C as of FS02 vertical installation, max. 50 °C Altitude during operation relating to sea level Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width Height 73 mm Depth 58 mm Weights 	 horizontal installation, min. 	-30 °C; < 0 °C as of FS02
 ◆ vertical installation, max. Altitude during operation relating to sea level ◆ Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width Height Depth 58 mm Weights 	 horizontal installation, max. 	60 °C
Altitude during operation relating to sea level Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	 vertical installation, min. 	-30 °C; < 0 °C as of FS02
● Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	vertical installation, max.	50 °C
Dimensions Width 15 mm Height 73 mm Depth 58 mm Weights	Altitude during operation relating to sea level	
Width 15 mm Height 73 mm Depth 58 mm Weights	 Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Height 73 mm Depth 58 mm Weights	Dimensions	
Depth 58 mm Weights	Width	15 mm
Weights	Height	73 mm
	Depth	58 mm
Weight, approx. 31 g	Weights	
	Weight, approx.	31 g

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