SIEMENS

Data sheet

6AG1134-6GF00-7AA1



SIPLUS ET 200SP AI 8XI 2-/4-WIRE BA -40...+70°C with Conformal Coating based on 6ES7134-6GF00-0AA1 . suitable for BU type A0, A1, Color code CC01, Module diagnostics, 16 bit

Figure similar

General information		
Product type designation	Al 8xl 2-/4-wire BA	
Firmware version		
 FW update possible 	Yes	
usable BaseUnits	BU type A0, A1	
Color code for module-specific color identification plate	CC01	
Product function		
 I&M data 	Yes; I&M0 to I&M3	
 Isochronous mode 	No	
Measuring range scalable	No	
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.	25 mA; without sensor supply	
Encoder supply		
24 V encoder supply		
• 24 V	Yes	
 Short-circuit protection 	Yes	
 Output current, max. 	0.7 A; total current of all encoders/channels	
Power loss		
Power loss, typ.	0.7 W; Without encoder supply voltage	
Address area		
Address space per module		
Address space per module, max.	16 byte	
Analog inputs		
Number of analog inputs	8; Single-ended	
For current measurement	8	
permissible input current for current input (destruction limit), max.	50 mA	

Cycle time (all channels), min. In six pot Channel imput resistance (10 to 20 mA) - Imput resistance (20 mA to +20 mA) - Imput resistance (20 mA to +20 mA) - Imput resistance (20 mA to +20 mA) - Imput resistance (40 mA to 20 mA	Cycle time (all channels)	1 mg nor channel	
• 0 to 20 mA 100 02 mA 100 02 mB	Cycle time (all channels), min.	1 ms; per channel	
Input resistance (20 mA to +20 mA)	, ,	Voc	
- Input resistance (-20 mA to +20 mA)			
- A my to 20 mA - my treastance (4 mA to 20 mA) 100 Q; 15 bit 100 Q; 15			
- Input resistance (4 mA to 20 mA) Cable length		•	
shielded, max. 200 m Analog value generation for the inputs Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameterizable • Integration time, parameterizable • Integration inter, parameterizable • Integration of conversion time (per channel) • Smoothing of measured values • Number of smoothing levels • Parameterizable • For votage 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 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 5-wire transducer − Burden of 2-wire transmitter, max. • for current measurement as 6-wire transducer − Burden of 2-wire transmitter, max. • for costable between the inputs, min. 50 dB Ferenature error (relative to input range), (+/-) Operational recreation in the form of 1-m x (ff + 1 ff x) ff 1-mitterference frequency • formed, frequency • formed, frequency • for channel dage suppression for for = n x (ff + 1 ff x) ff 1-mitterference frequency • for channel dage suppression for frequency • for channel dage suppression for for mitterference frequency • for module diagnostics • for them for the channels • between the channels • between the ch			
• shielded, max 200 m		100 Ω; 15 bit	
Analog value generation for the inputs Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Integration time, parameterizable • Interference voltage suppression for interference frequency 11 in Hz • Conversion time (per channel) **Smoothing of measured values • Number of smoothing levels • Parameterizable • None; 4/8/16 times • Parameterizable **Or voltage measurement • for voltage measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for ournert 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 ournert measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 4-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 5-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 6-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 6-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 6-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 6-wire transducer — Burden of 2-wire transmitter, max. • for ournert measurement as 6-wire transducer • Current, relative to input range, (+/-) • Since some interference (peak value of interference frequency • Series mode interference (peak value of interference requency • Series mode interference (peak value of interference (requency) • Series mode interference (peak value of interference) • Diagnostics function • Since transmitter transmitter			
Resolution and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 16 bit	·	200 m	
Resolution with overange (bit including sign), max. 16 bit Yes 16,67 / 50 / 60 / 4 800 (16,67 / 50 / 60) 16,67 / 50 / 60 / 4 800 (16,67 / 50 / 60) 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms 180 / 60 / 60 / 60 / 60 / 60 / 60 / 60 /			
• Integration time, parameterizable • Interference voltage suppression for interference frequency 11 in 14z • Conversion time (per channel) • (16.67 / 50 / 60 / 4 800 (16.67 / 50 / 60) **Smoothing of measured values • Number of smoothing levels • parameterizable • Number of smoothing levels • parameterizable **Connection of signal encoders • For ovidage 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 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 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 part of the foreign of the	· ·		
• Interference voltage suppression for interference frequency 11 in 1/2 • Conversion time (per channel) 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms Smoothing of measured values	· · · · · · · · · · · · · · · · · · ·		
frequency fi in Hz conversion time (per channel) 180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms	-		
Conversion time (per channel) Smoothing of measured values Number of smoothing levels Parameterizable Parameterizable Procedor Connection of signal encoders For vortage measurement as 2-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Burden of 2-wire transmitter, max. Per current measurement as 4-wire transducer — Current fuelative to input range), (+/-) Temperature error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Out 5 % Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) Operational error limit in overall temperature range	0 11	16.67 / 50 / 60 / 4 800 (16.67 / 50 / 60)	
Smoothing of measured values • Number of smoothing levels • parameterizable • parameterizable • parameterizable • Pos Froodor 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 — Yes Frorsfacouracles Linearity error (relative to input range), (+/-) Constalk between the inputs, min.		400 / 00 / 50 / 0 005 / 07 5 / 00 5 / 40 75 \	
Number of smoothing levels year anterizable Yes Parameterizable Yes Parameterizable Yes Parameterizable Yes Parameterizable Yes Parameterizable Parameterizab		180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms	
Encoder Connection of signal encoders • for voltage 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 Errors/accuracies Linearity error (relative to input range), (+/-) Crosstalk between the inputs, min. So dB Repeat accuracy in steady state at 25 °C (relative to input range), (+/-) O.05 % Basic error limit (overall temperature range • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • O.3 % Interference voltage suppression for f = n x (ft +/- 1 %), ft = interference frequency • Current, relative to input range, min. Interrupts/diagnostics/status information Diagnostics function Ves • Diagnostics laure • No Diagnostics function • Ves • Wire-break • Short-circuit • Group error • Overflow/underflow • Carrent, relative to input range, transported	-	A. Nana, Alold Chiman	
Connection of signal encoders No	_		
Connection of signal encoders • for voltage measurement a 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), (+/-) Crosstalk between the inputs, min. Crosstalk between the inputs, min. So dB 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, (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of 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. Interrupts/diagnostics/status information Diagnostics function • Diagnostic sharction • Diagnostic sharction • Overflowinderflow • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Ves • Wire-break • Short-circuit • Group error • Ves • Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • Control of the supply voltage (PWR-LED) • Channel diagnostics • No • For channel diagnostics • For channel diagnostics • For channel diagnostics • Detween the channels • Every error the channels	<u> </u>	Yes	
• for voltage measurement • for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer Forsalcouracies Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. Fopeat 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, (+/-) Sasic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Series mode interference (peak value of interference (relative to input range), min. Interference voltage suppression for f = n x (11 +/-1 %), ft = interference frequency • Series mode interference (peak value of input range), min. Interference voltage suppression for f = n x (11 +/-1 %), ft = interference frequency • Series mode interference (peak value of input range), min. Interpretation in the supply voltage with the properties of the properti			
• for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer Frors/accuracios 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 (peak value of interference crated value of input range), (m/-) Diagnostics function Diagnostics function ■ Diagnostics alarm • Diagnostics alarm • Limit value alarm No Diagnostic short-circuit • Sond-circuit • Group error • Ves Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow • Channel status display • for channel status display • for channel diagnostics • for module diagnostics • for module diagnostics • for module diagnostics • between the channels • between the channels and backplane bus Yes • between the channels and backplane bus Yes • Current, relative to input range, (+/-) 0.05 % 0.005 %/K	-		
- Burden of 2-wire transmitter, max. • for current measurement as 4-wire transducer For surrent measurement as 4-wire transducer Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. So dB 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.5 % 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 (reak value of input range), min. Interrupts/diagnostics/status information Diagnostics function Piagnostics function Pyes Alarms • Diagnostic alarm • Limit value alarm • No Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Sensor supply to M; module by module • Group error • Overflow/underflow Diagnostics diocation LED • Monitoring of the supply voltage (PWR-LED) • Monitoring of the supply voltage (PWR-LED) • Channel slatus display • for channel slatus display • for channel diagnostics • for module diagnostics • for module diagnostics • between the channels • between the channels and backplane bus Poetnuts Separation	9		
For current measurement as 4-wire transducer ETROSFACCURACIES Linearity 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		Yes	
Linearity error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Temperature error (relative to input range), (+/-) Crosstalk between the inputs, min. So dB 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, (+/-) Saries mode interference (peak value of interference (rated value of input range), min. Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm No Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • OverflowJunderflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Monitoring of the supply voltage (PWR-LED) • Channel status display • Fes; green LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • Fes; green LED • Channel diagnostics • for module diagnostics • for module diagnostics • between the channels • between the channels on between the channels on between the channels and backplane bus Yes	 Burden of 2-wire transmitter, max. 	650 Ω	
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, (+/-) Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference (requency) • Series mode interference (peak value of input range), min. Interrupts/diagnostics/status information Diagnostics function • Diagnostic alarm • Diagnostic alarm • Diagnostic alarm • Wes • Monitoring the supply voltage • Wire-break • Wire-break • Wire-break • Wore-break • Wore-break • Short-circuit • Group error • Overflow/underflow • Coverflow/underflow • Coverflow/underflow • Coverflow/underflow • Yes; green LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • between the channels • between the channels and backplane bus • Step in the supple of the channels and backplane bus • between the channels and backplane bus	for current measurement as 4-wire transducer	Yes	
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, (+/-) OS sasic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) OS series mode interference (peak value of interference frequency • Series mode interference (peak value of interference frequency) • Diagnostics function Diagnostics function Potential separation Wire-break • Wire-break • Wore-break • Monitoring the supply voltage • Wesforulated for the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • between the channels and backplane bus 0.05 %	Errors/accuracies		
Crosstalk between the inputs, min. 50 dB	Linearity error (relative to input range), (+/-)	0.01 %	
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 (poerational 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 input range), min. Interrupts/diagnostics/status information Diagnostics function • Diagnostics function • Diagnostics function • Monitoring the supply voltage • Wire-break • Wire-break • Wire-break • Short-circuit • Group error • Overflow/underflow • Overflow/underflow Possignostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • between the channels • between the channels • between the channels • between the channels and backplane bus • Ves • Ves • Ves • Ves • Ves • Ves • Ves • Overthow/underflos • Detween the channels • between the channels • between the channels and backplane bus	Temperature error (relative to input range), (+/-)	0.005 %/K	
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 input range), min. Interrupts/dlagnostics/status information Diagnostics function Alarms • Diagnostic slarm • Limit value alarm • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/funderflow • Overflow/funderflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • Fer green LED • Channel diagnostics • For module diagnostics • between the channels • between the channels • between the channels and backplane bus • Short-circuit • Short-c	Crosstalk between the inputs, min.	50 dB	
Operational error limit in overall temperature range		0.05 %	
• Current, relative to input range, (+/-) 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 input range), min. Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm No Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • between the channels • between the channels • between the channels and backplane bus			
Basic error limit (operational limit at 25 °C) • Current, relative to input range, (+/-) • Current, relative to input range, (+/-) • Series mode interference (peak value of input range), min. • Series mode interference (peak value of input range), min. Interrupts/diagnostics/status information Diagnostics function Alarms • Diagnostic alarm • Limit value alarm • No Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • between the channels • between the channels • between the channels and backplane bus	· · · · · · · · · · · · · · · · · · ·		
Current, relative to input range, (+/-) Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency Series mode interference (peak value of input range), min. 70 dB; With conversion time 67.5 / 22.5 / 18.75 ms: 40 dB interference < rate d value of input range), min. 10		0.5 %	
Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency • Series mode interference (peak value of input range), min. Interrupts/diagnostics/status information Diagnostics function • Diagnostic alarm • Diagnostic alarm • Limit value alarm • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for module diagnostics • for module diagnostics • between the channels • between the channels • between the channels and backplane bus	· · · · · · · · · · · · · · · · · · ·		
Series mode interference (peak value of input range), min. Interrupts/diagnostics/status information Diagnostics function Pes Diagnostic alarm Diagnostic alarm Diagnostic alarm Elimit value alarm Ono No Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Overflow/underflow Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display For channel diagnostics For module diagnostics Yes; green LED Potential separation Potential separation channels Diagnoses 70 dB; With conversion time 67.5 / 22.5 / 18.75 ms: 40 dB No Yes Ves Ves Ves Ves Ves Ves Ves			
interference < rated value of input range), min. Interrupts/diagnostics/status information Diagnostics function Poliagnostic alarm • Diagnostic alarm • Limit value alarm No Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow Potential separation Potential separation channels • between the channels and backplane bus Yes Yes Yes Yes Yes Yes Yes Y	, , , , , , , , , , , , , , , , , , , ,	· · ·	
Interrupts/diagnostics/status information Diagnostics function Alarms Diagnostic alarm Diagnostic alarm Limit value alarm No Diagnoses Monitoring the supply voltage Wire-break Short-circuit Seroup error Overflow/underflow Ves Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display For channel diagnostics For module diagnostics For module diagnostics Fotential separation Potential separation Potential separation channels between the channels and backplane bus Yes Possible Alarms Yes No Yes Sensor supply to M; module by module Yes; Sensor supply to M; module by module Yes Sensor supply to M; module by module Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye		70 dB; With conversion time 67.5 / 22.5 / 18.75 ms: 40 dB	
Diagnostics function Alarms Diagnostic alarm Limit value alarm No Diagnoses Monitoring the supply voltage Wire-break Short-circuit Scrup error Overflow/underflow Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display For channel diagnostics For module diagnostics For module diagnostics Determination Potential separation Potential separation channels between the channels and backplane bus Yes Yes No Yes Yes Yes Yes Yes Yes Yes Ye			
Alarms Diagnostic alarm Limit value alarm No Poiagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Overflow/underflow Ves Monitoring of the supply voltage (PWR-LED) Channel status display For channel diagnostics For module diagnostics For module diagnostics Potential separation Potential separation channels between the channels between the channels and backplane bus Potential separation Yes No		Voc	
Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error 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 Elimit value alarm No		res	
Limit value alarm No Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Overflow/underflow Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics for module diagnostics Fotential separation Potential separation channels between the channels between the channels and backplane bus No Yes Yes Yes Sensor supply to M; module by module Yes; genen LED Yes; green LED Yes; green LED Yes; green LED No Yes; green LED No Yes; green LED No Yes; green/red DIAG LED		Voc	
Diagnoses • Monitoring the supply voltage • Wire-break • Short-circuit • Group error • Overflow/underflow Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • for module diagnostics • between the channels • between the channels and backplane bus Yes Yes Yes Yes Yes Yes Yes Y			
Monitoring the supply voltage Wire-break Short-circuit Group error Overflow/underflow Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics for module diagnostics Potential separation Monitoring of the number of the supply voltage (PWR-LED) Shop of the supply voltage (PWR-LED) S		INU	
Wire-break Short-circuit Yes; Sensor supply to M; module by module Group error Ves Overflow/underflow Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes; at 4 to 20 mA Yes; Sensor supply to M; module by module Yes Yes Yes Yes Yes Yes Yes Ye		Voc	
Short-circuit Group error Overflow/underflow Potential separation Short-circuit Yes; Sensor supply to M; module by module Yes Yes Yes Yes Yes Yes Yes Yes			
 Group error Overflow/underflow Yes Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics Yes; green LED No for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes 			
Overflow/underflow Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes Yes Yes Yes Yes Yes Yes Y			
Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics Ves; green LED Yes; green LED No Yes; green LED No Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes	•		
Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics for module diagnostics Yes; green LED No Yes; green LED		Tes	
Channel status display for channel diagnostics for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes; green/red DIAG LED No Yes; green/red DIAG LED	9	Voc. groon LFD	
 for channel diagnostics for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes 			
for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels between the channels and backplane bus Yes			
Potential separation Potential separation channels • between the channels • between the channels and backplane bus Yes			
Potential separation channels • between the channels • between the channels and backplane bus Yes		Yes; green/red DIAG LED	
 between the channels between the channels and backplane bus Yes 			
between the channels and backplane bus Yes	Potential separation channels		
		No	
• between the channels and the power supply of the No		Yes	
	 between the channels and the power supply of the 	No	

electronics	
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
horizontal installation, min.	-40 °C; = Tmin (incl. condensation/frost)
 horizontal installation, max. 	70 °C; = Tmax
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m
Ambient air temperature-barometric pressure- altitude	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
Relative humidity	
With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
 to biologically active substances according to EN 60721-3-3 	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Against mechanical environmental conditions acc. to EN 60721-3-3	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
Use on ships/at sea	
 to biologically active substances according to EN 60721-3-6 	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Against mechanical environmental conditions acc. to EN 60721-3-6	Yes; Class 6M4 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
Usage in industrial process technology	Vac. Class 2 (avaluating triphlers thulans)
Against chemically active substances acc. to EN 60654-4 The incommental conditions for process.	Yes; Class 3 (excluding trichlorethylene)
 Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
 Coatings for printed circuit board assemblies acc. to EN 61086 	Yes; Class 2 for high reliability
 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection
 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Discoloration of coating possible during service life
 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	Yes; Conformal coating, Class A
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	31 g
last modified:	12/18/2020 🗗