SIEMENS

Data sheet

6ES7134-6PA01-0BU0



SIMATIC ET 200SP, analog input module, AI Energy Meter CT ST, for 1A or 5A current transformer, suitable for BU type U0, channel diagnostics

Product type designation Firmware version Firmware version For you by date possible usable BaseUnits Color code for module-specific color identification plate Vesupported power supply systems TT, TN, IT Product function Voltage measurement without current transformer with voltage transformer with voltage transformer with voltage transformer with voltage transformer with current transformer with current transformer with current-voltage-converter No Energy measurement Frequency measurement Frequency measurement Power measurement Reactive power measurement Power measurement Reactive power measurement Reactive power compensation Line analysis No Line analysis No Line analysis No Engineering with STEP 7 TIA Portal configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFIBUS from GSD ver	General information	
PW update possible usable BaseUnits BU type U0 Color code for module-specific color identification plate CC20 Supported power supply systems TT, TN, IT Product function Voltage measurement — without voltage transformer — with voltage transformer — with voltage transformer — without current transformer — without current transformer — without current transformer — with current transformer — with current transformer — with current voltage-converte No Prequency measurement Prequency measurement Power measurement Power measurement Power factor measurement Power factor measurement Active power measurement Power factor measurement Power factor measurement Pes Active power compensation Line analysis No Line analysis No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 TIA Portal configurable/integrated from version STEP 7 TIA Portal configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFIBU	Product type designation	Al Energy Meter CT ST
usable BaseUnits Color code for module-specific color identification plate Supported power supply systems T, TN, IT Product function Voltage measurement - with outlage transformer - with voltage transformer - with outlage transformer - with out urrent transformer - with out urrent transformer - with out urrent transformer - with current transformer - with current transformer - with gogwski coil - With current-voltage-converter No - with current-voltage-converter - With Rogowski coil - With current-voltage-converter - Frequency measurement - Frequency measurement - Frequency measurement - Frequency measurement - Active power measurement - Active power measurement - Active factor measurement - Active factor measurement - Active factor measurement - Seactive power compensation - Line analysis - I&M data - Isochronous mode - STEP 7 TIA Portal configurable/integrated from version - STEP 7 TIA Portal configurable/integrated from version - PROFIBUS from GSD version/GSD revision - PROFIBUS from GSD version/GSD revision - PROFINET from GSD version/GSD revision - PROFINET from GSD version/GSD revision - PROFINET from GSD version/GSD revision - Switching between operating modes in RUN - Cyclic measured value access - Acyclic measured value access - Yes	Firmware version	V8.0
Color code for module-specific color identification plate Supported power supply systems Product function Ves without voltage transformer - with voltage transformer - with out current transformer - with out current transformer - with current transformer - with current voltage-converter - With Rogowski coil - With current-voltage-converter No Energy measurement Power measurement - Reactive power measurement Power measurement Reactive power compensation - Reactive power compensation - Reactive power compensation - Reactive power compensation - Reactive power operating mode - StEP 7 Ton Configurable/integrated from version - PROFIBUS from GSD version/GSD revision - PROFIBUS from GSD version/GSD revision - Syes - Acyclic measured value access - Acyclic measur	 FW update possible 	Yes
Supported power supply systems Product function Voltage measurement — without voltage transformer — with voltage transformer — with voltage transformer — with out current transformer — with Rogowski coil — With current-voltage-converter No Energy measurement Frequency measurement Power measurement Active power measurement Power factor measurement Power factor measurement Reactive power compensation Reactive power compensation Reactive power compensation Reactive power operating mode Istanton of the provision STEP 7 TIA Portal configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision STEP 7 which is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Yes Yes Acyclic measured value access Yes	usable BaseUnits	BU type U0
Product function ◆ Voltage measurement — with voltage transformer — with voltage transformer — with voltage transformer	Color code for module-specific color identification plate	CC20
Voltage measurement — without voltage transformer — with voltage transformer — with voltage transformer Current measurement — without current transformer — with current transformer — with current transformer — with current transformer — With Rogowski coil — With current-voltage-converter No Energy measurement Power measurement Power measurement Active power omeasurement Active power omeasurem	Supported power supply systems	TT, TN, IT
- without voltage transformer - with voltage transformer - with voltage transformer • Current measurement - without current transformer - with current transformer - with current transformer - With Rogowski coil - With Carrent-voltage-converter • Energy measurement • Frequency measurement • Frequency measurement • Power measurement • Reactive power measurement • Active factor measurement • Power factor measurement • Reactive power compensation • Line analysis • Ialm data • Isochronous mode • StEP 7 TIA Portal configurable/integrated from version • STEP 7 TIA Portal configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • Switching between operating modes in RUN • Cyclic measured value access • Acyclic measured value access • Yes Yes Yes Yes Yes Yes Yes Yes	Product function	
 with voltage transformer Current measurement without current transformer with current transformer with Rogowski coil With Rogowski coil With current-voltage-converter No Energy measurement Frequency measurement Power measurement Active power measurement Power factor measurement Power factor measurement Active power measurement Power factor measurement Active factor measurement Active factor measurement Active factor measurement Active factor measurement Reactive power compensation Active factor measurement Active factor measured from version Active factor measured from version Active factor measured from version Active factor measured value access Acyclic measured value access 	 Voltage measurement 	Yes
Current measurement - without current transformer - with current transformer - With Rogowski coil - With current-voltage-converter Energy measurement Frequency measurement Active power measurement Power measurement Reactive power measurement Power factor measurement Power factor measurement Reactive power ompensation Active factor measurement Pes Reactive power compensation Line analysis Reactive power compensation Engineering with STEP 7 TIA Portal configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Pes; Na. 3 + neutral conductor No Ves; 1 A or 5 A current transformer Yes; 1 A or 5 A current transformer Yes; 1 A or 5 A current transformer Yes No No Engrend Pres SEP 7 Wes STEP 7 Wes STEP 7 Wes STEP 7 Wes STEP 7 V16 or higher with HSP Configurable via GSD file One GSD file each, Revision 3 and 5 and higher Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Yes Acyclic measured value access	 — without voltage transformer 	Yes
- without current transformer - with Current transformer - With Rogowski coil - With Rogowski coil - With Current-voltage-converter - Energy measurement - Frequency measurement - Frequency measurement - Power measurement - Reactive power measurement - Power factor measurement - Pess - Reactive power compensation - Propertial Portal configurable/integrated from version - STEP 7 TIA Portal configurable/integrated from version - PROFIBUS from GSD version/GSD revision - PROFIBUS from GSD version/GSD revision - PROFINET from GSD version/GSD revision - Switching between operating modes in RUN - Ves; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user - Cyclic measured value access - Acyclic measured value access - Acyclic measured value access - Yes	 — with voltage transformer 	Yes
- with current transformer - With Rogowski coil - With Current-voltage-converter No Energy measurement Frequency measurement Frequency measurement Power measurement Power measurement Reactive power measurement Power factor measurement Power factor measurement Reactive power compensation Reactive power compensation Reactive power compensation Reactive power of Mata Pess Reactive power of Mata Reactive power measurement Pess Reactive power measurement Pess Reactive power measurement Pess Reactive power compensation Reactive power compensation Pess Reactive power measurement Pess Reactiv	 Current measurement 	Yes; max. 3 + neutral conductor
- With Rogowski coil - With current-voltage-converter • Energy measurement • Frequency measurement • Frequency measurement • Power measurement • Active power measurement • Reactive power measurement • Power factor measurement • Reactive power compensation • Reactive power compensation • Line analysis • I&M data • Isochronous mode • STEP 7 TIA Portal configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • PROFINET from GSD version/GSD revision • Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user • Cyclic measured value access • Acyclic measured value access	 — without current transformer 	No
- With current-voltage-converter Energy measurement Frequency mea	 — with current transformer 	Yes; 1 A or 5 A current transformer
Energy measurement Frequency measurement Power measurement Active power measurement Reactive power measurement Active factor measurement Active factor measurement Active factor measurement Active factor measurement Active power compensation Active factor measurement Active factor	- With Rogowski coil	No
Frequency measurement Power measurement Active power measurement Reactive power measurement Power factor measurement Active factor measurement Reactive power compensation End analysis Isochronous mode Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Cyclic measured value access Acyclic measured value access Yes Acyclic measured value access Yes Acyclic measured value access Yes Yes Yes Yes Yes Yes Yes	 With current-voltage-converter 	No
Power measurement Active power measurement Reactive power measurement Power factor measurement Yes Active factor measurement Active factor measurement Yes Reactive power compensation Reactive power compensation Ves Line analysis No IkM data Sochronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 tonfigurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Pes; IkM0 to IkM3 No STEP 7 V16 or higher with HSP Configurable via GSD file One GSD file One GSD file each, Revision 3 and 5 and higher V2.3 Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Yes	 Energy measurement 	Yes
Active power measurement Reactive power measurement Power factor measurement Active factor measurement Active factor measurement Reactive power compensation Yes No STEP 7 VI6 or lack of lack o	 Frequency measurement 	Yes
Reactive power measurement Power factor measurement Reactive factor measurement Reactive power compensation Line analysis Reactive power compensation Yes Reactive power compensation Yes Reactive power compensation Yes No Step 7 to la Mo to la M3 No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 to Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision V2.3 Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Yes Acyclic measured value access	 Power measurement 	Yes
Power factor measurement Active factor measurement Reactive power compensation Line analysis Isochronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Yes STEP 7 V16 or higher with HSP Configurable via GSD file One GSD file each, Revision 3 and 5 and higher V2.3 Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Acyclic measured value access Yes	 Active power measurement 	Yes
 Active factor measurement Reactive power compensation Line analysis I&M data Isochronous mode STEP 7 TIA Portal configurable/integrated from version STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Cyclic measured value access Acyclic measured value access Yes Yes Yes Yes Yes 	 Reactive power measurement 	Yes
 Reactive power compensation Line analysis I&M data Isochronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 V16 or higher with HSP One GSD file PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision Operating mode Switching between operating modes in RUN Cyclic measured value access Acyclic measured value access Yes Yes Yes Yes Yes Yes 	 Power factor measurement 	Yes
 Line analysis I&M data Isochronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Switching between operating modes in RUN Cyclic measured value access Acyclic measured value access Yes 	 Active factor measurement 	Yes
I&M data Isochronous mode Isochronous	 Reactive power compensation 	Yes
 Isochronous mode Engineering with ◆ STEP 7 TIA Portal configurable/integrated from version ◆ STEP 7 configurable/integrated from version ◆ STEP 7 configurable/integrated from version ◆ PROFIBUS from GSD version/GSD revision ◆ PROFINET from GSD version/GSD revision ◆ PROFINET from GSD version/GSD revision ✓ V2.3 Operating mode ◆ Switching between operating modes in RUN ★ Switching between operating modes in RUN ★ Cyclic measured value access ★ Acyclic measured value access ★ Acyclic measured value access ★ Acyclic measured value access 	Line analysis	No
Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 Configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision SWitching between operating modes in RUN STEP 7 V16 or higher with HSP Configurable via GSD file One GSD file each, Revision 3 and 5 and higher V2.3 V2.3 V2.3 Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Yes Acyclic measured value access Yes	I&M data	Yes; I&M0 to I&M3
 STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Switching between operating modes in RUN Switching between operating modes in RUN Cyclic measured value access Acyclic measured value access Yes Yes Yes Yes Yes Yes Yes 	 Isochronous mode 	No
version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision V2.3 Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Cyclic measured value access Acyclic measured value access Yes	Engineering with	
 PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Operating mode Switching between operating modes in RUN Every control of the property of the pr	ŭ ŭ	STEP 7 V16 or higher with HSP
 PROFINET from GSD version/GSD revision Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Cyclic measured value access Acyclic measured value access Yes 	 STEP 7 configurable/integrated from version 	Configurable via GSD file
Operating mode Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Cyclic measured value access Acyclic measured value access Yes	 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
 Switching between operating modes in RUN Yes; For module version 32 I/20 Q, it is possible to dynamically switch between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user Cyclic measured value access Acyclic measured value access 	 PROFINET from GSD version/GSD revision 	V2.3
between 25 user data variants, 23 of which are pre-defined and 2 of which can be defined by the specific user • Cyclic measured value access • Acyclic measured value access Yes	Operating mode	
Acyclic measured value access Yes	Switching between operating modes in RUN	between 25 user data variants, 23 of which are pre-defined and 2 of
	 Cyclic measured value access 	Yes
Fixed measured value sets Yes	 Acyclic measured value access 	Yes
	 Fixed measured value sets 	Yes

 Freely definable measured value sets 	Yes; For cyclic and acyclic measured value access
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
Calibration possible in RUN	Yes
Installation type/mounting	
Mounting position	any
Supply voltage	any and a second a
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, lower limit (DC)	28.8 V
Input current	20.0 V
	12.5 mA
Current consumption (rated value) Current consumption, max.	17.5 MA
·	17 IIIA
Power loss	A W. O. F. A issued suggest Ov. 200 V A O
Power loss, typ.	1 W; 3x 5 A input current, 3x 230 V AC
Address area	
Address space per module	0501.4
• Inputs	256 byte
Outputs	20 byte
Hardware configuration	
Automatic encoding	Yes
 Mechanical coding element 	Yes
Type of mechanical coding element	С
Selection of BaseUnit for connection variants	
2-wire connection	BU type U0
Time of day	
Operating hours counter	
• present	Yes
Analog inputs	
Cycle time (all shapes als) to a	50 ms; Time for consistent update of all measured and calculated
Cycle time (all channels), typ.	volves (evelie und expelie data)
	values (cyclic und acyclic data)
Cable length	values (cyclic und acyclic data)
Cable length • shielded, max.	values (cyclic und acyclic data) 200 m
Cable length • shielded, max. • unshielded, max.	values (cyclic und acyclic data)
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs	values (cyclic und acyclic data) 200 m 200 m
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max.	values (cyclic und acyclic data) 200 m
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information	values (cyclic und acyclic data) 200 m 200 m
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value)
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics Integrated Functions	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics Integrated Functions Measuring functions	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Cable length • shielded, max. • unshielded, max. Analog value generation for the inputs Sampling frequency, max. Interrupts/diagnostics/status information Alarms • Diagnostic alarm • Limit value alarm • Hardware interrupt Diagnoses • Supply voltage • Hardware interrupt lost • Parameter assignment error • Module fault • Channel not available • Overflow/underflow • Overload current Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics Integrated Functions	values (cyclic und acyclic data) 200 m 200 m 2 048 kHz Yes Yes Yes; Monitoring of up to 16 freely selectable process values (exceeding or undershooting of value) Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye

 Type of measured value acquisition 	seamless
Curve shape of voltage	Sinusoidal or distorted
 Buffering of measured variables 	Yes
Parameter length	128 byte
Bandwidth of measured value acquisition	3.2 kHz; Harmonics: 63 / 50 Hz, 52 / 60 Hz
Measuring range	
 Frequency measurement, min. 	40 Hz
 Frequency measurement, max. 	70 Hz
Measuring inputs for voltage	
 Measurable line voltage between phase and neutral conductor 	277 V
 Measurable line voltage between the line conductors 	480 V
 Measurable line voltage between phase and neutral conductor, min. 	3 V
 Measurable line voltage between phase and neutral conductor, max. 	300 V
 Measurable line voltage between the line conductors, min. 	6 V
 Measurable line voltage between the line conductors, max. 	519 V
 Internal resistance line conductor and neutral conductor 	1.5 ΜΩ
 Power consumption per phase 	60 mW; 300 V AC
 Impulse voltage resistance 1,2/50μs 	2.5 kV
Measurement category for voltage measurement in accordance with IEC 61010-2-	CAT II
030	
Measuring inputs for current	
 measurable relative current (AC), min. 	1 %; Relative to measuring range; 1 A, 5 A
 measurable relative current (AC), max. 	100 %; Relative to the secondary rated current 5 A
 Continuous current with AC, maximum permissible 	5 A
 Apparent power consumption per phase for measuring range 5 A 	0.6 V·A
 Rated value short-time withstand current restricted to 1 s 	100 A
 Input resistance measuring range 0 to 5 A 	25 m Ω ; At the terminal
— Surge strength	10 A; for 1 minute
 Zero point suppression 	0 20%, referred to the nominal current
Accuracy class according to IEC 61557-12	
 Measured variable voltage 	0,2
 Measured variable current 	0,2
 Measured variable apparent power 	0.5
Measured variable active power	0.5
Measured variable reactive power	1
 Measured variable power factor 	0.5
Measured variable active energy	0.5
Measured variable reactive energy	1
Measured variable reactive energy	0,2
Measured variable heatral current Measured variable phase angle	±0.5 °; not covered by IEC 61557-12
Measured variable priase angle Measured variable frequency	0.05; only valid for the permissible voltage measuring range
. ,	5.55, only valid for the porthissible voltage measuring range
Potential separation	
Potential separation channels	Ne
between the channels between the channels and healthless but	No Voc
between the channels and backplane bus	Yes Vaculation FF
Between the channels and load voltage L+ Isolation	Yes; Including FE
Isolation tested with	Between channels and backplane bus, 24 V supply: Routine test, 1 920 V AC, 2 s; between backplane bus and 24 V supply: Type test, 707 V DC
Ambient conditions	
Ambient temperature during operation	

 horizontal installation, min. 	-30 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	3 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	20 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	45 g
Other	
Data for selecting a voltage transformer	
 Secondary side, max. 	300 V
Data for selecting a current transformer	
 Burden power current transformer x/1A, min. 	As a function of cable length and cross section, see device manual
 Burden power current transformer x/5A, min. 	As a function of cable length and cross section, see device manual

11/2/2021 🗗

last modified: