YASKAWA

Data sheet
SM 031 - Analog input (031-1PA00)

Technical data

Order no.	031-1PA00
Type	SM 031 - Analog input
Module ID	0882 2880
General information	
Note	-
Features	AI1x 3Ph 230/400 V 1 A Remanent storage of the energy values | diagnostic function Resolution measurement 24 Bit 3-phase and N-conductor Electrical efficiency | elektrical work Harmonic harmonics Phase delay cos Frequency
Current consumption/power loss	
Current consumption from backplane bus	60 mA
Power loss	0.9 W
Rated load voltage	-
Status information, alarms, diagnostics	
Status display	yes
Interrupts	yes, parameterizable
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	yes, parameterizable
Diagnostics information read-out	possible
Module state	green LED
Module error display	red LED
Channel error display	-
Isolation	
Between channels	-
Insulation tested with	AC 2200 V
Energy measurement	
Number of channels for measuring	1* 1..3 phases U/I
Voltage measuring range	0..300 V each phase
Coupling voltage measurement	directly
Current range	0..1 A each phase
Coupling current measurement	Transformer
Frequency range	46...64 Hz
Measurement accuracy	1 %
Available measurement	Active energy Voltage RMS Current RMS Active power Reactive power Apparent power Cos phi Harmonic voltage RMS Harmonic current RMS Temperature Frequency

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Adjustable limits	Voltage RMS min/max Current RMS min/max Cos phi min Temperature max. Frequency min/max
Datasizes	
Input bytes	16
Output bytes	16
Parameter bytes	28
Diagnostic bytes	20
Housing	
Material	PPE / PPE GF10
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm
Net weight	57 g
Weight including accessories	57 g
Gross weight	71 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	-
KC certification	-
UKCA certification	-
ChinaRoHS certification	-

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