

**Data sheet**  
**SM 031 (031-1PA00)**
**Technical data**

<b>Order no.</b>	<b>031-1PA00</b>
Type	SM 031
Module ID	0882 2880

**General information**

Note	-
Features	voltage, current frequency 230/400 V 1 A remanent storage of the energy values   diagnostic function resolution measurement 24 Bit 3-phase and N-connector electrical efficiency   electrical work harmonic harmonics phases delay cos j

**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	-
Coupling current measurement	Transformer
Frequency range	46...64 Hz
Measurement accuracy	1 %

Available measurement

Active energy  
 Temperature  
 Frequency  
 Voltage RMS  
 Current RMS  
 Active power  
 Reactive power  
 Apparent power  
 Cos phi  
 Harmonic voltage RMS  
 Harmonic current RMS

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	-