

Product datasheet

Specifications



energy sensor, PowerTag Rope 1000A 3P/3P+N top and bottom position

A9MEM1592

Main

Range of product	PowerLogic
Product name	PowerTag R1000
Product or component type	Energy sensor
Poles	3P 3P + N
Maximum current [I_{max}]	1000 A
[I_b] basic current	150 A
Starting current	600 mA
Saturation current	2000 A
Product specific application	Energy management Overload alarm Power factor Load monitoring Circuit monitoring
Concentrator compatibility	Acti9 PowerTag Link C Acti9 PowerTag Link Acti9 PowerTag Link HD Harmony Hub EcoStruxure Panel Server Universal EcoStruxure Panel Server Advanced PrismaSet Active
Range compatibility	MasterPact MTZ switch disconnecter MasterPact NW MasterPact NT ComPact NS
Range compatibility	Acti9 TeSys
Type of measurement	Active and reactive energy Apparent energy Active and reactive power Apparent power Current Voltage Power factor Internal temperature Frequency
Accuracy class	Class 1 active energy conforming to IEC 61557-12 Class 2 reactive energy conforming to IEC 61557-12 Class 2 apparent energy conforming to IEC 61557-12 Class 1 active power conforming to IEC 61557-12 Class 2 reactive power conforming to IEC 61557-12 Class 2 apparent power conforming to IEC 61557-12 Class 1 current conforming to IEC 61557-12 Class 0.5 voltage conforming to IEC 61557-12 Class 1 power factor conforming to IEC 61557-12 Class 0.5 frequency conforming to IEC 61557-12
Metering type	Active energy E -a- IN/OUT 0...281 x 10 ^{exp} (9) kWh at total per phase

Active energy E -a- IN/OUT 0...281 x 10exp(9) kWh at partial per phase
 Active energy E -a- IN/OUT 0...281 x 10exp(9) kWh at 3-phase total
 Active energy E -a- IN/OUT 0...281 x 10exp(9) kWh at 3-phase partial
 Reactive energy E -rA- IN/OUT 0...281 x 10exp(9) kVARh at total per phase
 Reactive energy E -rA- IN/OUT 0...281 x 10exp(9) kVARh at partial per phase
 Reactive energy E -rA- IN/OUT 0...281 x 10exp(9) kVARh at 3-phase total
 Reactive energy E -rA- IN/OUT 0...281 x 10exp(9) kVARh at 3-phase partial
 Apparent energy E -apA- 0...281 x 10exp(9) kVAh at total per phase
 Apparent energy E -apA- 0...281 x 10exp(9) kVAh at partial per phase
 Apparent energy E -apA- 0...281 x 10exp(9) kVAh at 3-phase total
 Apparent energy E -apA- 0...281 x 10exp(9) kVAh at 3-phase partial
 Active power P, P1, P2, P3
 Reactive power Q, Q1, Q2, Q3
 Apparent power S, S1, S2, S3
 Current I1, I2, I3
 Calculated neutral current
 Voltage U12, U23, U31
 Voltage V1N, V2N, V3N
 Frequency 45...65 Hz
 Power factor at per phase
 Power factor at total

Mounting location	Top or bottom
Mounting support	Busbar Cables
Product destination	Switchboard
Event management	Voltage loss with measured current at voltage loss
Transmission support medium	Radio frequency 2.4...2.4835 GHz conforming to IEEE 802.15.4
Emission power	10 mW

Complementary

Mounting mode	Clip-on (DIN rail)
Electrical connection (voltage sensing & power supply)	Removable spring terminal block
Cable cross section	1 rigid cable 0.2...1.5 mm ² without cable end 1 stranded cable 0.2...2.5 mm ² without cable end 1 stranded cable 0.25...1.5 mm ² with cable end
Wire stripping length	11 mm
Cable length	1 m for sensor
Current sensor diameter	Closed: 100 mm
Supply voltage	100...277 V AC, +/- 20 %, phase to neutral 173...480 V AC, +/- 20 %, phase to phase
Network frequency	50 Hz 60 Hz
Maximum power consumption	3 VA
Standards	IEC 61557-12 IEC 61010-1 ETSI EN 301 487-1 IEC 61010-2-030 IEC 61326-1 ETSI EN 300 328
Number of 9mm pitches on Din rail	2
Height	Base unit: 105 mm
Width	Base unit: 18 mm
Depth	Base unit: 67.5 mm
Colour	White (RAL 9003)

Environment

Maximum conductor temperature	105 °C
Quality labels	CE

Directives	2014/53/EU - radio equipment directive
Operating altitude	0...2000 m
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...85 °C
Overvoltage category	IV conforming to IEC 61010-1
Measurement category	Category IV conforming to IEC 61010-2-030
IP degree of protection	IP20 conforming to IEC 60529
IK degree of protection	IK05
Pollution degree	3
Relative humidity	0...95 % at 55 °C conforming to IEC 60721-3-3
Vibration resistance	3M4 conforming to IEC 60721-3-3
Electromagnetic compatibility	Industrial electromagnetic environment conforming to IEC 61326-1 Radiated EMC conforming to ETSI EN 301 489-17 Electromagnetic emission conforming to IEC 62311
Environmental characteristics	Indoor use

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	564.0 g
Package 1 Height	8.0 cm
Package 1 width	17.5 cm
Package 1 Length	20.0 cm
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Weight	4.436 kg
Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information