

RAPIDUS 111R

Klemsan

606073

Power Factor Controller

Category: Energy Management Products

Type: Reactive Power Management

Group: Electronics Products



Commercial Information

Package Unit	1 pcs.
Customs Tariff Number	903289000000
Weight Per Unit Including Packaging	0,94

Technical Information

CONNECTION DATA	
Connection Type	L-L L-N
GENERAL	
Measurement System	1Ø
LCD Screen	+
Language Support	Turkish, English

Password Protection	+
Voltage Transformer Ratio (VTR)	1 - 999.9
Current Transformer Ratio (CTR)	1 - 5.000
Number of Measurements in One Period	512
LCD/Screen Refresh Rate	<0.5 sec.
Networks	TT, TN,
Signal Waveforms	-
COMPENSATION MODES	
Rapidus (Smart Control Mode)	+
Manual	+
STEP CONFIGURATIONS	
Manual Definition	+
Predefined	1-1-1-1, 1-2-2-2, 1-2-4-4
Power (kVAr)	0.00-1000 adjustable
Type	3Ø capacitor, 1Ø capacitor
POWER FACTOR SETTINGS	
Target 1 cosØ	0.8 cap. to 0.8 ind. adjustable
Target 2 cosØ	0.8 cap. to 0.8 ind. adjustable
Dual cosØ Target	+
4 Quadrant Operation for Generators	+
ENERGY MEASUREMENT	
Multiple Sub Tariffs (Peak, On-Peak and Off-Peak)	-

1Ø Phase Energy Measurement	-
3Ø Phase Energy Measurement	-
CURRENT MEASUREMENT INPUT	
Measuring Range	10mA-6A AC
Overvoltage Category	300 V Cat III
Voltage Fluctuation Measurement	-
Power Consumption	<0.2 VA
Intermittent Overload	100A for 1 sec.
Sampling Frequency Between 45-65 Hz	25.6 kHz
VOLTAGE MEASUREMENT INPUT	
Overvoltage Category	300 V Cat III
Measuring Range L-N	120...510V AC ±10%
Measuring Range L-L	120...510V AC ±10%
Frequency Measuring Range	45-65 Hz
Power Consumption	<0.2 VA
Sampling Frequency Between 45-65 Hz	25.6 kHz
POWER QUALITY MEASUREMENTS	
THD - Voltage (as %)	+
THD - Current (as %)	+
MEASURING ACCURACY - IEC 61557-12	
Total Active Power	Class 0.5
Total Reactive Power	Class 1
Total Reactive Energy	Class 2

Frequency	Class 0.1
Current	Class 0.5
Neutral Current	Class 0.5
Voltage	Class 0.2
Power Factor	Class 0.5
THDV, THDI	Class 1
Total Apparent Power	Class 0.5
Total Active Energy	Class 0.5
MEASURING ACCURACY - IEC 62053-22	
Total Active Energy	Class 0.5S
MEASURING ACCURACY - IEC 62053-23	
Total Reactive Energy	Class 2
COMPENSATION RELAY OUTPUTS	
Number of Outputs	10
Type	NO (SPST)
Max. Switching Current	2A
Max. Switching Voltage	250VAC
Max. Switching Power	1250VA
Mechanical Operating Life	= 10.0000000 operations
Electrical Operating Life (NO side)	5×10 ⁴ (5A@250VAC) 1×10 ⁵ (5A@30VDC)
ALARM RELAY OUTPUTS	
Number of Outputs	2
Type	NO (SPST)

Max. Switching Current	4A
Max. Switching Voltage	250 VAC
Max. Switching Power	1250 VA
Mechanical Operating Life	= 10.0000000 operations
Electrical Operating Life (NO side)	5×10 ⁴ (5A@250VAC) 1×10 ⁵ (5A@30VDC)
GENERATOR / DAY-NIGHT INPUT	
Number of Inputs	1
Frequency	45-65Hz
Input	95-240VAC
INPUTS AND OUTPUTS	
Digital Outputs	--
Analog Outputs	--
POWER SUPPLY	
Backup Supply Input	--
Voltage	La-Lb den 120...510V AC ±10%
Frequency	45-65Hz
Consumption	< 10VA
MECHANICAL PROPERTIES	
Weight (g)	0,94
Protection Class	Front IP40 / Rear IP20
Mounting Type	Panel Mount
Packaging Quantity	1
CABLE CROSS-SECTIONS	

Voltage, Current, All Relay Outputs, Generator Input	2.5mm ² - 14AWG with ferrule - 4mm ² - 12AWG without ferrule, 2x1.5mm ² - 2x16AWG
RS485	1.5mm ² - 16AWG with ferrule - 1.5mm ² - 16AWG without ferrule, 2x0.75mm ² - 2x18AWG
ENVIRONMENTAL CONDITIONS	
Operating Temperature	-20°C +55°C
Storage Temperature	-30°C +80°C
Relative Humidity (Non-condensing)	Max. 95%
EMC-EMI	
EN 61000-6-1:2011	+
DIAGRAMS	
Mains Connection	+
Step Output Connections	+
COMMUNICATION	
Protocol	Modbus RTU
Baud Rate	1200-38400 bps adjustable
Parity	---
Stop Bit	1
Slave ID	1-247
Isolation	2000V RMS