



RPI M10A

High efficiency 3-phase transformerless inverters for the European market -
Perfect choice for small commercial PV systems

Versatile applications

- Aluminium housing ensures long lasting protection against moisture and corrosion
- Wide input voltage range
- Suitable for indoor and outdoor applications (IP65)
- Compact design for simplified installation – exceptional power density-to-size ratio

Maximum profitability

- Peak efficiency of 98.3 %
- Fanless design for reduced maintenance costs
- 2 MPP trackers with symmetrical and asymmetrical loading possible (33/67 %)

10 kVA transformerless solar inverters

Technical data RPI M10A

INPUT (DC)	RPI M10A
Max. recommended PV power	12.5 kW _p ¹⁾
Nominal power	10.8 kW ²⁾
Voltage range	200 ... 1000 V
Startup voltage	250 V
Full power MPP range	415 ... 800 V
Max. current	25 A (15A / 10 A per MPP tracker)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers
Input load	Symmetrical and asymmetrical (33/67 %)

OUTPUT (AC)	
Nominal apparent power	10 kVA ²⁾
Voltage range	3 x 230 / 400 V (± 20%) ³⁾ 3 / PE or 3 / N / PE
Nominal current	14.5 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz ³⁾
Power factor adjustable	0.8 cap ... 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power

GENERAL SPECIFICATION

Model name	RPI M10A
Part number Delta	RPI103FA0E1000
Max. efficiency	98.3 %
Efficiency EU	98.0 %
Operating temperature	-25 ... +60 °C
Full power without derating	-25 ... +40 °C
Storage temperature	-25 ... +60 °C
Humidity	0 ... 95 %
Max. operating altitude	2000 m (above sea level)
Standard guarantee	5 years (guarantee extension available upon request)

MECHANICAL DESIGN

Size (L x W x D)	510 × 445 × 117 mm
Weight	26 kg
Cooling	Convection cooling
AC connector	Amphenol C16-3
DC connector	3 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485
DC disconnecter	Integrated
Display	2 LEDs, 4-line LCD

SAFETY / STANDARDS	RPI M10A
Protection degree	IP65
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation; power limitation
Anti-islanding protection / Grid regulation	VDE 0126-1-1; VDE-AR-N 4105
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12
Safety	IEC62109-1 / -2; CE compliance

1) When operated with symmetrical input load (50/50 %)

2) Cos Phi = 1 (VA = W)

3) AC voltage and frequency range will be programmed according to the individual country requirements.

International

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