



## 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 for system design flexibility and maximum yield

# 10 kVA transformerless solar inverters

## Technical data RPI M10A

INPUT (DC)	RPI M10A
Max. recommended PV power	12.5 kW <sub>P</sub> <sup>1)</sup>
Maximum power	11 kW <sup>2)</sup>
Voltage range	200 ... 1000 V
MPP operating voltage range	200 ... 1000 V
Startup voltage	250 V
Voltage range for maximum power	415 ... 800 V : with symmetrical load (50/50 %)
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 (40/60 %) <sup>2)</sup>

OUTPUT (AC)	RPI M10A
Max. apparent power	10.5 kVA <sup>3)</sup>
Nominal apparent power	10 kVA <sup>3)</sup>
Voltage range	230 ± 20% / 400 V ± 20% <sup>4)</sup> 3 phase + PE or 3 phase + N + PE
Nominal current	14.5 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz <sup>4)</sup>
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 ... 100 % non-condensing
Max. operating altitude	2000 m (above sea level)
Standard guarantee	5 years (guarantee extension available upon request)

### MECHANICAL DESIGN

Size (W x H x D)	510 × 445 × 177 mm
Weight	26 kg
Cooling	Convection cooling
AC connector	Amphenol C16-3
DC connector	3 pairs of Multi-Contact MC4
Communication interfaces	2 x RS485, 1 x dry contact, 1 x emergency power-off (EPO), 6 x digital inputs
DC disconnect	Integrated
Display	2 LEDs, 4-line LCD

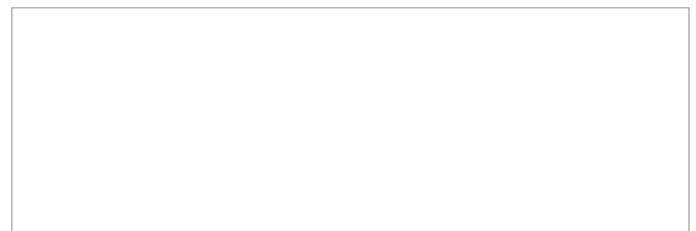
SAFETY / STANDARDS	RPI M10A
Protection degree	IP65
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation; power limitation
Anti-islanding protection / Grid regulation	VDE 0126-1-1; VDE-AR-N 4105; EN 50438:2007; Synergrid C10/C11 06/2012; ÖNORM E8001-4-712 + A1 : 04/2014; UTE C 15-712-1 VDE 0126-1-1/A1 VFR 2014; French Islands 50 Hz
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) Max. 7.0 kW for DC input 1 and 5.4 kW for DC input 2

3) Cos Phi = 1 (VA = W)

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



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