



## M30A Flex

High-efficiency three-phase solar inverters for residential and commercial PV systems.



Wide input voltage range  
(200 to 1000 V)

- Low noise levels — perfect for use in PV systems on residential or commercial buildings
- Stable performance up to 50 °C ambient



Peak efficiency

- 3 MPP trackers for more flexibility when designing the PV system
- Commissioning and monitoring with smartphone app via integrated Wi-Fi

# 33 kVA solar inverters

| Input (DC)                                    | M30A Flex                         |
|-----------------------------------------------|-----------------------------------|
| Max. input voltage <sup>1)</sup>              | 1000 V <sub>DC</sub>              |
| Operating voltage range                       | 200 to 1000 V <sub>DC</sub>       |
| MPP voltage range                             | 200 to 1000 V <sub>DC</sub>       |
| MPP voltage range with max. power             | 480 to 900 V <sub>DC</sub>        |
| Nominal voltage                               | 600 V <sub>DC</sub>               |
| Max. current (per MPP tracker/total)          | 30 A/72 A                         |
| Max. short-circuit current I <sub>SC</sub>    | 50 A per MPP tracker              |
| Max. number of MPP trackers                   | 3                                 |
| Max. number of module strings per MPP tracker | 2                                 |
| DC surge protection devices                   | Type 2 (EN 50539-11), replaceable |

| Output (AC)                             | M30A Flex                                                       |
|-----------------------------------------|-----------------------------------------------------------------|
| Max. apparent power <sup>2)</sup>       | 33 kVA                                                          |
| Max. active power <sup>2)</sup>         | 33 kW                                                           |
| Nominal apparent power <sup>2)</sup>    | 30 kVA                                                          |
| Voltage range <sup>3)</sup>             | 230/400 V <sub>AC</sub> -20%/+30%; 3 ph. + PE or 3 ph. + N + PE |
| Max. output current                     | 50 A                                                            |
| Frequency range <sup>3)</sup>           | 50/60 Hz ± 5 Hz                                                 |
| Adjustment range of power factor        | 0.8 cap to 0.8 ind                                              |
| Total harmonic distortion (THD)         | < 3% at nominal apparent power                                  |
| Consumption in night mode <sup>4)</sup> | < 2 W                                                           |
| AC surge protection devices             | Type 2 (EN 61463-11), replaceable                               |

| General specifications                   | M30A Flex                                           |
|------------------------------------------|-----------------------------------------------------|
| Delta model name                         | M30A_230                                            |
| Delta part number                        | RPI303M230100                                       |
| Peak efficiency                          | 98.6%                                               |
| Efficiency EU                            | 98.2%                                               |
| Operating temperature range              | -25 to +60°C                                        |
| Temperature range without power derating | -25 to +40 °C                                       |
| Storage temperature range                | -25 to +60°C                                        |
| Relative humidity                        | 0 to 100%, non-condensing                           |
| Max. operating altitude                  | 4000 m (above sea level)                            |
| Topology                                 | Without transformer                                 |
| Standard warranty                        | 5 years (warranty extension available upon request) |

| Mechanical design       | M30A Flex                                     |
|-------------------------|-----------------------------------------------|
| Dimensions (H x W x D)  | 651 × 520 × 220 mm                            |
| Weight                  | 42 kg                                         |
| Cooling                 | Natural convection                            |
| Mounting options        | Wall mounting <sup>5)</sup>                   |
| Disconnectors           | 1 mechanical DC disconnecter                  |
| Connection type AC side | 1 AC plug <sup>6)</sup>                       |
| DC connection type      | 6 pairs of DC plugs Amphenol H4 <sup>6)</sup> |

| Communication               | M30A Flex                                                                      |
|-----------------------------|--------------------------------------------------------------------------------|
| Communication interfaces    | 2 x RS485, 2 x dry contacts, 1 x external power-off, 6 x digital inputs, Wi-Fi |
| Data visualization          | DeltaSolar app, MyDeltaSolar Cloud                                             |
| Display of operating status | 3 LEDs                                                                         |

| Safety/Standards                          | M30A Flex                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------|
| Protection class                          | IP66                                                                                    |
| Safety class                              | I                                                                                       |
| Configurable trip parameters              | Yes                                                                                     |
| Insulation monitoring                     | Yes                                                                                     |
| Overload behavior                         | Current limitation, power limitation                                                    |
| Anti-islanding protection/grid regulation | VFR 2019 (Enedis-PRO-RES_10E/_64E), VDE-AR-N 4105/4110, EN50549-1, C10/11, Netbeheer NL |
| EMC                                       | EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12                                |
| Safety                                    | IEC 62109-1/-2; CE compliance                                                           |

- 1) The max. voltage withstand is 1000 VDC. The inverter starts working when the input voltage drops below 1000 VDC.
- 2) Cos Phi = 1 (VA = W)
- 3) AC voltage and frequency range are programmed based on the respective country regulations.
- 4) Night-time consumption with standby communication
- 5) Mounting plate included in scope of delivery
- 6) Included in scope of delivery



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