

## **Three Phase Hybrid Inverter**

## INV (EU)-20/25/30/40/50K (HV)







## Technical Data \_\_\_\_\_

| Model  | INV (EU)-20K (HV)  | INV (EU)-25K (HV) | INV (EU)-30K (HV)  | INV (EU)-40K (HV)  | INV (EU)-50K (HV)  |  |
|--|--|-------------------|--------------------|--------------------|--------------------|--|
| Battery Input Data                                   |  |                   |                    |                    |                    |  |
| Battery Type   |  |                   | Li-lon             |                    |                    |  |
| Battery Voltage Range (V)                            |  | 240~800           |                    |                    |                    |  |
| Max. Charging Current (A)                            | 50   | 50 50+50          |                    |                    |                    |  |
| Max. Discharging Current (A)                         | 50 50+50   |                   |                    |                    |                    |  |
| Number of battery input                              | 1 2  |                   |                    |                    |                    |  |
| Charging Curve                                       | 3 Stages / Equalization  |                   |                    |                    |                    |  |
| Charging Strategy for Li-Ion Battery                 | Self-adaption to BMS   |                   |                    |                    |                    |  |
| PV String Input Data                                 |  |                   |                    |                    |                    |  |
| Max. DC Input Power (W)                              | 26000  | 32500             | 39000              | 52000              | 65000              |  |
| Max. DC Input Voltage (V)                            |  |                   | 1000               |                    |                    |  |
| Start-up Voltage (V)                                 | 150  |                   |                    |                    |                    |  |
| MPPT Range (V)                                       | 200-850  |                   |                    |                    |                    |  |
| Min. DC Input Voltage (V)                            | 150  |                   |                    |                    |                    |  |
| Full Load DC Voltage Range (V)                       | 360-850  | 450-850           | 360-850            | 360-850            | 450-850            |  |
| Rated DC Input Voltage (V)                           | 300 030  | 400-000           | 600                | 300-030            | 430 030            |  |
| PV Input Current (A)                                 | 26   | L36               | 36+36+36           | 26:26              | +36+36             |  |
| Max. PV ISC (A)                                      | 36+36<br>55+55   |                   | 55+55+55           |                    | +55+55             |  |
| Number of MPPT / Strings per MPPT                    | 2/2+2  |                   |                    |                    |                    |  |
| 3 1  | 2/2  | :+Z               | 3/2+2+2            | 4/2+2              | 2+2+2              |  |
| AC Output Data                                       | 20000  | 25000             | 20000              | 40000              | 50000              |  |
| Rated AC Output and UPS Power (W)                    | 20000  | 25000             | 30000              | 40000              | 50000              |  |
| Max. AC Output Power (W)                             | 22000  | 27500             | 33000              | 44000              | 55000              |  |
| AC Output Rated Current (A)                          | 30.3   | 38                | 45.6               | 60.8               | 75.8               |  |
| Max. AC Current (A)                                  | 45.5   | 50                | 60                 | 70                 | 83.3               |  |
| Max. Continuous AC Passthrough (A)                   | 150  |                   |                    |                    |                    |  |
| Peak Power (off grid)                                | 1.5 time of rated power, 10 S  |                   |                    |                    |                    |  |
| Generator input/Smart load<br>/AC couple current (A) | 30.3 / *150 / 30.3   | 38 / *150 / 38    | 45.6 / *150 / 45.6 | 60.8 / *150 / 60.8 | 75.8 / *150 / 75.8 |  |
| Power Factor   | 0.8 leading to 0.8 lagging   |                   |                    |                    |                    |  |
| Output Frequency and Voltage                         | 50/60Hz; 3L/N/PE 220/380, 230/400Vac   |                   |                    |                    |                    |  |
| Grid Type  | Three Phase  |                   |                    |                    |                    |  |
| DC injection current (mA)                            | <0.5%1n  |                   |                    |                    |                    |  |
| Efficiency   |  |                   |                    |                    |                    |  |
| Max. Efficiency                                      | 97.60%   |                   |                    |                    |                    |  |
| Euro Efficiency                                      | 97.00%   |                   |                    |                    |                    |  |
| MPPT Efficiency                                      | 99.90%   |                   |                    |                    |                    |  |
| Protection   |  |                   |                    |                    |                    |  |
| Integrated   | PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection,<br>Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection,<br>Surge protection |                   |                    |                    |                    |  |
| Certifications and Standards                         |  |                   |                    |                    |                    |  |
| Grid Regulation                                      | EN50549, AS4777.2, VDE0126, IEC61727, VDEN4105, G99, NBT32004, CEI0-21, NRS097,<br>NBR16149/16150, RD1699  |                   |                    |                    |                    |  |
| Safety EMC / Standard                                | IEC62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4  |                   |                    |                    |                    |  |
| General Data   |  |                   |                    |                    |                    |  |
| Operating Temperature Range (°C)                     | -40~60°C, >45°C derating   |                   |                    |                    |                    |  |
| Cooling  | Smart cooling  |                   |                    |                    |                    |  |
| Noise (dB)   | <45 dB   |                   |                    |                    |                    |  |
| Communication with BMS                               | RS485; CAN   |                   |                    |                    |                    |  |
| Weight (kg)  | 60   |                   |                    |                    |                    |  |
| Size (mm)  |  | 560.5W×837H×319D  |                    |                    |                    |  |
| Protection Degree                                    | IP65   |                   |                    |                    |                    |  |
| Installation Style                                   | Wall-mounted   |                   |                    |                    |                    |  |
| Warranty   | 5 years  |                   |                    |                    |                    |  |
| · · · · · · · · · · · · · · · · · · ·                | 3 years  |                   |                    |                    |                    |  |





