HARMON-E MAESTRO HOME

Maestro Home Series 3

Three-phase all-in-one hybrid inverter with battery storage

Type designation	Brand	Importer / EU manufacturer
Maestro Home Type 3-10	**Harmon-e**	**Harmon-e B.V. · Kringloopweg 40, 3334 LR Hendrik-Ido-Ambacht, NL**

SYSTEM

Grid type	3-phase · 3L/N/PE · 400 V_{ac}
Rated power	10 kW
Battery capacity per module	5,22 kWh
Max. modules per cluster	4 (20,89 kWh)
Parallel operation	up to 3 clusters · 60 kWh
Max. stack height	2.270 mm

PV INPUT

Max. input power	20 kW
Rated input voltage	650 V_{dc}
Max. input voltage	1.000 V_{dc}
MPPT voltage range	160 – 950 V_{dc}
Number of MPPT	2
Max. input current	16 / 16 A
PV short-circuit current	24 / 24 A

BATTERY INPUT / OUTPUT

Battery type	Li-ion (LFP)
Rated voltage	750 V_{dc}
Battery voltage range	650 – 980 V_{dc}
Max. charging power	10 kW · 15,4 A_{dc}
Max. discharging power	10 kW · 15,4 A_{dc}

EFFICIENCY

Max. efficiency (PV to grid)	98,2 %
MPPT efficiency	99,9 %

BATTERY MODULE

Type	EHBS-P5-TH
Cell chemistry	LiFePO4
Battery designation	LFP51/161/120[16S1P]M/ -20+60/90
Rated capacity · energy	102 Ah · 5.222,4 Wh
Dimensions · weight	650 × 370 × 270 mm · 59,0 kg
Operating temperature	-20 to +55 °C

GRID

Input voltage range	320 – 480 V_{ac}
Max. input current	21,7 A_{ac}
Max. input apparent power	15 kVA
Rated output voltage	3L/N/PE · 400 V_{ac}
Rated frequency	50 / 60 Hz
Rated input / output power	10 kW
Max. output apparent power	11 kVA
Rated / max. output current	14,5 / 15,9 A_{ac}
Power factor range	0,8 leading – 0,8 lagging

BACKUP OUTPUT

Rated output voltage	3L/N/PE · 400 V_{ac}
Rated output power	10 kW · 10 kVA
Max. output current	14,5 A_{ac}
Switching time	≤ 10 ms

GENERATOR INPUT

Max. input power	10 kW · 14,5 A_{ac}

GENERAL

Protection class	Class I
Ingress protection	IP66
Ambient temperature	-25 to +60 °C
Altitude	≤ 3.000 m

STANDARDS AND CERTIFICATION MARKS

Safety (LVD)	IEC/EN 62109-1 · IEC/EN 62109-2
Functional safety	ISO 13849
UPS · conversion	IEC/EN 62040-1 · IEC 62477
EMC	EN 61000-6-1 · -6-2 · -6-3 · -6-4
Grid connection	EN 50549-1 and -10 · VDE-AR-N 4105:2018 · DIN VDE V 0124-100 · VDE 1126 · CEI 0-21 · NC RfG + PTPiREE
Battery module	IEC/EN 62619:2022 · IEC/EN 62040-1 · UN 38.3
Marking	CE

All values as stated on the product type plates. Specifications subject to change; the type plate on the delivered product prevails.