



X3-HYBRID G4 (THREE PHASE)

X3-Hybrid-5.0-D
X3-Hybrid-5.0-M

X3-Hybrid-6.0-D
X3-Hybrid-6.0-M

X3-Hybrid-8.0-D
X3-Hybrid-8.0-M

X3-Hybrid-10.0-D
X3-Hybrid-10.0-M

X3-Hybrid-12.0-D
X3-Hybrid-12.0-M

X3-Hybrid-15.0-D
X3-Hybrid-15.0-M

INPUT (DC)

Max. recommended PV power[W]	8000	10000	12000	15000	18000	18000
Max. DC voltage [V]	1000					
Nominal DC operating voltage [V]	630					
Max. input current (input A/input B) [A]	14/14	14/14	26/14	26/14	26/14	26/14
Max. short circuit current (input A/input B) [A]	16/16	16/16	30/16	30/16	30/16	30/16
MPPT voltage range[V]	180-950					
Start operating voltage[V]	200					
No. of MPP trackers / Strings per MPP tracker	2(1/1)	2(1/1)	2(2/1)	2(2/1)	2(2/1)	2(2/1)

INPUT AC

Max. apparent AC power[VA]	10000	12000	16000	20000	20000	20000
Max. AC current[A]	16.1	19.3	25.8	32.0	32.0	32.0
Nominal grid voltage(AC voltage range)[V]	415/240; 400/230; 380/220					
Nominal grid Frequency/range[Hz]	50/60					

OUTPUT AC

Nominal AC power [VA]	5000	6000	8000	10000	12000	15000
Max. apparent AC power [VA]	5500	6600	8800	11000	13200	15000
Nominal grid voltage(AC voltage range) [V]	415/240; 400/230; 380/220					
Nominal grid frequency/range [Hz]	50/60					
Nominal AC current [A]	7.2	8.7	11.6	14.5	17.5	21.8
Max. AC current [A]	8.1	9.7	12.9	16.1	19.3	24.1
Displacement power factor	0.8 leading ... 0.8 lagging					
THDi, rated power [%]	<3					

OUTPUT DC (BATTERY)

Battery type	Lead-acid/Lithium					
Battery voltage range [V]	180-650					
Recommended battery voltage[V]	400					
Max. continuous charge/discharge current [A]	30					
Communication interfaces	CAN/RS485					
Reverse connect protection	Yes					

OFF-GRID OUTPUT (WITH BATTERY)

MAX. continuous apparent power [VA]	5000	6000	8000	10000	12000	15000
Rated voltage[V],Frequency [Hz]	400/230VAC; 50/60					
MAX. continuous current [A]	7.2	8.7	11.6	14.5	17.5	21.8
Peak apparent power [VA] Duration[s]	7500 60	9000 60	12000 60	15000 60	15000 60	15000 60
Changeover time [ms]	<10					
THDv, linear Load [%]	<3					

EFFICIENCY

MPPT efficiency [%]	99.9					
Euro efficiency [%]	97.7					
Max. efficiency [%]	98.0					
Battery charge/discharge efficiency [%]	98.5/97.0					

POWER CONSUMPTION

Standby consumption (Night) [W]	<20W for hot standby,<3W for cold standby					
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STANDARD

Safety	IEC62109-1/IEC62109-2					
EMC	EN61000-6-1/EN61000-6-2/EN61000-6-3					
Certification	VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / G99 / AS4777 / EN 50549 / CEI 0-21					

ENVIRONMENT LIMIT

Degree of protection(according to IEC60529)	IP65					
Operating temperature range [°C]	-35~+60 (derating at +45, charge derating at +35)					
Max. operation altitude [m]	≤3000					
Humidity [%]	0-100 (condensing)					
Storage temperature [°C]	-35~+60					
Typical noise emission [dB]	40	40	40	40	60	60

DIMENSION AND WEIGHT

Dimensions(WxHxD) [mm]	482*417*181					
Weight[kg]	30					
Cooling concept	Natural	Natural	Natural	Natural	Fan	Fan
Topology	Non-isolated					
Communication interfaces	Meter/ CT, external control RS485, Pocket series (optional), DRM,USB					
LCD display	Backlight 20*4 character					
Standard warranty [years]	10					