

1 PHASE HYBRID/AC INVERTER



TECHNICAL SPECIFICATIONS

Model	H1-3.0-E AC1-3.0-E	H1-3.7-E AC1-3.7-E	H1-4.6-E AC1-4.6-E	H1-5.0-E AC1-5.0-E	H1-6.0-E AC1-6.0-E
INPUT PV (FOR HYBRID ONLY)					
Max.recommended DC power [W]	3900	4680	5980	6500	7800
Max.DC voltage [V]	600				
Nominal DC operating voltage [V]	360				
Max. input current [A]	13.5 / 13.5				
Max. short circuit current [A]	15 / 15				
MPPT voltage range [V]	80-550				
No. of MPP trackers	2	2	2	2	2
Strings per MPP tracker	1	1	1	1	1
Start-up voltage [V]	75				
OUTPUT AC					
Nominal AC power [VA]	3000	3680	4600	5000	6000
Max. apparent AC power [VA]	3300	3680 / 4048(1)	4600 / 5060(2)	5500	6000 / 6600(4)
Rated grid voltage (AC voltage range) [V]	220 / 230 / 240 (180 to 270)				
Rated grid Frequency [Hz]	50 / 60, ±5				
Nominal AC current [A]	13	16	20	21.7	26.1
Max. AC current [A]	14.4	16 / 17.6(3)	22	23.9	26.1 / 28.7(5)
Displacement power factor	0.8 leading to 0.8 lagging				
Total harmonic distortion (THDI, rated power)	<3%				
INPUT AC					
Nominal AC power [VA]	3000 + 4000 (Bypass)	3680 + 4000 (Bypass)	4600 + 5000 (Bypass)	5000 + 5000 (Bypass)	6000 + 6000 (Bypass)
Nominal AC current [A]	13	16	20	21.7	26.1
Max. AC current [A]	31.8	34.9	43.7	45.5	54.6
Rated grid voltage (AC voltage range) [V]	220 / 230 / 240 (180 to 270)				
Rated grid Frequency [Hz]	50 / 60, ±5				
Power Factor	0.8 leading to 0.8 lagging				
BATTERY					
Battery voltage range [V]	85-450				
Recommended battery voltage [Vdc]	300				
Max.charge/discharge power [W]	6000				
Max.charge/discharge current [A]	40				
Communication interfaces	CAN / RS485				
Reverse connect protection	YES				
EPS OUTPUT (WITH BATTERY)					
EPS MAX power [VA]	5000	5000	6000	6000	6000
EPS rated power [VA]	4000	4000	5000	5000	6000
EPS rated voltage [V], Frequency [Hz]	230VAC, 50 / 60				
EPS rated current [A]	21.7	21.7	26.1	26.1	26.1
EPS peak power [W]	6000, 60s		7200, 60s		
Total harmonic distortion (THDv, linear Load)	< 2%				
Compatible with the generator	Yes				
Switch time [ms]	< 20				
EFFICIENCY					
MPPT efficiency	99.90%	99.90%	99.90%	99.90%	99.90%
Euro-efficiency	97.00%	97.00%	97.00%	97.00%	97.00%
Max. efficiency	97.80%	97.80%	97.80%	97.80%	97.80%
Max. efficiency (PV to BAT) @full load	98.50%	98.50%	98.50%	98.50%	98.50%
Max. efficiency (BAT to AC) @full load	97.00%	97.00%	97.00%	97.00%	97.00%
POWER CONSUMPTION					
Standby consumption [W] (idle)	<3				
Idle mode	YES				
STANDARD					
Safety	IEC62109-1 / -2 / IEC62040				
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3				
Certification	G98 / G99 / AS4777.2-2015 / EN50549-1 / CEI 0-21 / VDE-AR-N4105 / NRS097-2-1 and so on				
ENVIRONMENT LIMIT					
Ingress protection	IP65				
Operating temperature range [°C]	-25.....+60°C (derating at +45°C)				
Protective Class	Class I				
Humidity [%]	0~100 (non-condensing)				
Altitude [m]	<2000				
Storage temperature [°C]	-40.....+70°C				
Noise emission (typical) [dB]	<40				
Over voltage category	III (AC), II (DC)				
GENERAL DATA					
Dimensions (WxHxD) [mm]	430*410*178				
Weight [kg]	23				
Cooling concept	Natural				
Topology	Non-Isolated				
Communication	Ethernet, Meter, WIFI / GPRS / LAN (optional), DRM, USB, CT				
LCD display	Backlight 16*4 character				

Note:

(1) 3680 for G98,4048 for other country. (2) 4600 for VDE-AR-N4105,5060 for other country.

(3) 16 for G98,17.6 for other country. (4)(5) for Italy and Thailand.