




FHC Series 40~50kW Three Phase Hybrid Inverter



<p>>20A</p> <p>Greater than 20A DC input current to better match high power panel</p>	<p>6 MPPTs</p> <p>Multi channel MPPTs design ensures PV power generation</p>	<p></p> <p>AC retrofit & easy installation</p>	<p>10 Parallel</p> <p>Supports parallel operation of up to 10 machines</p>
<p>20ms</p> <p>With UPS function switch time≤20ms</p>	<p>100%</p> <p>Support 100% three-phase unbalanced load output</p>	<p></p> <p>Type II AC & DC Surge protection</p>	<p></p> <p>Generator Interface Having an independent diesel generator engine interface</p>

Model	FHC-40KT-U2	FHC-50KT-U2
DC Input		
Max. PV Array Power [Wp]@STC	80000	100000
Max. DC Voltage [V]	1000	
MPPT Voltage Range [V]	180~850	
Rated DC Voltage [V]	600	
Start Voltage [V]	200	
Max. DC Input Current [A]	6*45	6*45
Max. DC Short Circuit Current [A]	6*56.5	6*56.5
Number of independent MPPT trackers	6	6
Number of Strings per MPPT	2	
Battery Parameters		
Battery Type	LiFePO ₄	
Battery Voltage Range [V]	180~800	
Max.Charging/Discharging Current [A]	150	
AC Output [On-grid]		
Rated AC Power [W]	40000	50000
Max. Apparent Power [VA]	44000	55000
Rated Output Current [A]@230Vac	58.0	72.5
Max. AC Output Current to Utility Grid [A]	63.8	79.8
Rated AC Voltage [V]	3+N+PE/3+PE, 380/400	
Rated Output Frequency [Hz]	50, 60	
Power Factor [cos φ]	0.8 leading-0.8 lagging	
Total Harmonic Distortion [THDi]	<3%	
AC Input [On-grid]		
Rated AC Voltage/Range [V]	3+N+PE/3+PE, 380/400	
Rated Output Frequency [Hz]	50, 60	
Max. Input Current [A]	150	
AC Output [Back-up]		
Max.Output Power [VA]	44000	55000
Peak Output Apparent Power [VA]	60000,5s	75000,5s
Rated AC Voltage [V]	3+N+PE/3+PE,380/400	
Rated Output Frequency/ [Hz]	50, 60	
Output THDv (@ Liner Load)	<3%	
AC Input [Generator]		
Max. Input Power [W]	40000	50000
Max. Input Current [A]@230V	58.0	72.5
Rated Input Voltage [V]	3+N+PE/3+PE, 380/400	
Rated Input Frequency [Hz]	50, 60	
Efficiency		
Max. Efficiency	98.0%	
Euro Efficiency	97.3%	
Max. Battery to AC Efficiency	96.0%	
Protection		
Protection	PV Reverse Polarity Protection, Anti-islanding Protection, AC Overcurrent Protection, AC Short Circuit Protection, AC Overvoltage Protection	
DC switch	Integrated	
DC Surge Protection	II	
AC Surge Protection	II	
AFCI	Integrated	
RSD	Optional	
General Parameters		
Communication	Wi-Fi/Ethernet/CAN/RS485	
Topology	Transformerless	
Operating Temperature Range	-40°C to +60°C (45°C to 60°C with derating)	
Cooling Method	Smart Fan Cooling	
Ambient Humidity	0-100% Non-condensing	
Altitude [m]	≤3000m (>3,000 m derated operation)	
Ingress Protection	IP66	
Dimensions [W*H*D, mm]	630*953*337	
Weight [kg]	93	