

EK60 H3 2.9–6K Single Phase Hybrid Inverter

EK60 H3, SAJ's latest hybrid inverter for EU, an ultralight energy solution supports 18A PV input with 200% oversizing and 140A fast charging for peak performance. Featuring plug-and-play backup and 10-unit parallel scalability, it integrates intelligent energy management for heat pumps and solar systems, delivering a powerful, space-saving solution for both on-grid and off-grid applications.



- ❑ AC coupling to retrofit existing solar system
- ❑ Plug and play eu-socket backup for future
- ❑ Max. 18A PV input current; DC/AC access oversizing up to 200%
- ❑ Max 140A fast charge/discharge current
- ❑ Max. 10 pcs parallel for on-grid and off-grid operation, Support multiple batteries parallel
- ❑ IP66 protection degree, support indoor and outdoor installation
- ❑ Integrated intelligent energy management with heat pump, solar system
- ❑ Ultralight for easy installation and space-saving

EK60 H3-2.9K-LS2 | EK60 H3-3K-LS2 | EK60 H3-3.6K-LS2
 EK60 H3-4K-LS2 | EK60 H3-4.6K-LS2 | EK60 H3-5K-LS2
 EK60 H3-6K-LS2 | EK60 H3-6K-LS2-IE

MODEL	EK60 H3-2.9K-LS2	EK60 H3-3K-LS2	EK60 H3-3.6K-LS2	EK60 H3-4K-LS2	EK60 H3-4.6K-LS2	EK60 H3-5K-LS2	EK60 H3-6K-LS2	EK60 H3-6K-LS2-IE
DC Input								
Max. PV Array Power [Wp]@STC	5800	6000	8000	9200	7000	10000	12000	12000
Max. PV Input Power	4640	4800	6400	7360	5760	8000	9600	9600
Max. DC Voltage [V]	600							
MPPT Voltage Range [V]	80 ~ 520							
Rated DC Voltage [V]	360							
Start Voltage [V]	80							
Max. DC Input Current [A]	18/18							
Max. DC Short Circuit Current [A]	25/25							
No. of MPPT	2							
Battery Parameters								
Battery Type	LiFePO4							
Battery Voltage Range[V]	40 ~ 60							
Max. Charging/Discharging Current [A]	80	80	90	100	110	120	140	140
Charging strategy for Li-ion battery	Self-adaption to BMS							
Communication	CAN							
AC Output [On-grid]								
Rated AC Power [W]	2940	3000	3680	4000	4600	4999	6000	5750
Max. Apparent Power [VA]	2940	3300	3680	4400	4600	4999	6600	5750
Rated Output Current [A]	13.4/12.8	13.6/13.0	16.7/16.0	18.2/17.4	20.9/20	22.7/21.7	27.3/26.1	25.0
Max. Output Current [A]	13.4/12.8	15/14.3	16.7/16.0	20/19.1	20.9/20	22.7/21.7	30/28.7	25.0
Rated AC Voltage/Range [V]	L+N+PE, 220, 230, 240							
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65							
Power Factor [cos φ]	0.8 leading ~ 0.8 lagging							
Total Harmonic Distortion [THDi]	<3%							
AC Input [On-grid]								
Rated AC Voltage/Range [V]	L+N+PE, 220, 230, 240/180 ~ 280							
Rated Input Frequency [Hz]	50,60							
Max AC Input (A)	12.8	15	16.4	20	20	25	30	30
AC Output [Back-up EU Socket]								
Max. Output Power [VA]	2940	3300	3680	3680	3680	3680	3680	3680
Max. Output Current [A]	13.4/12.8	15/14.3	16	16	16	16	16	16
Peak Output Apparent Power [VA]	1.6 Times,10s							
Rated AC Voltage/Range [V]	L+N+PE, 220, 230, 240							
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65							
Output THDv (@ Linear Load)	<3%							
Efficiency								
Max. Efficiency	97.6%							
Euro Efficiency	97.0%							
Protection								
Battery Input Reverse Polarity Protection	Integrated							
Over load Protection	Integrated							
AC Short Circuit Current Protection	Integrated							
DC Surge Protection	Type II (Optional)							
AC Surge Protection	Type II (Optional)							
Anti-islanding Protection	Integrated							
AFCI Protection	Optional							
RSD Protection	Optional							
Interface								
PV Connection	MC4							
AC Connection	OT terminal							
Battery Connection	OT terminal							
Display	LED+APP							
Communication	Wi-Fi/Ethernet/4G (Optional)							
General Parameters								
Topology	Non-isolated							
Operating Temperature Range	-40°C to +60°C (45°C to 60°C with derating)							
Cooling Method	Nature							
Ambient Humidity	0-95% Non-condensing							
Altitude [m]	3000							
Noise [dBA]	<40							
Ingress Protection	IP66							
Dimensions [H*W*D] [mm]	460*350*232							
Weight [kg]	19.5							
Warranty [Year]	10							
Standard	EN 62109-1/2, EN 61000-6-2/4, IEC 62116, IEC 61727, PEA&MEA, NBR 16149, NBR 16150, PORTARIA N° 140							