



LHS-LV-5/6K F2

Single Phase Hybrid Inverter

- Safety protection with integrated AFCI function, which actively detects arc faults in the PV array
- UP to 16A of MPPT current input
- Up to 125A/6kW max. charge/discharge rating with industry highest level 6kW of backup loads support capability
- UPS level switching time (<10ms) supporting critical loads all the time
- Supports pure off grid applications with generator communication support

MODEL	LHS-LV-5K F2	LHS-LV-6K F2
Input DC (PV side)		
Max. Input Power (kW)	8.0	9.6
Rated PV Input Voltage (V)	330	
Max. Input Voltage (V)	600	
Start-up Voltage (V)	90	
MPPT Voltage Range (V)	90~520	
PV Input Current (A)	2x16	
Max. PV Isc (A)	2x24	
No. of MPP Trackers	2	
No. of Strings per MPP Tracker	1	
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	42~58	
Max. Charging/Discharging Current (A)	105	125
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaptation to BMS	
Output AC (Back up)		
Rated Output Power (kW)	5.0	6.0
Max. Apparent Output Power	7kVA, 60 sec	8kVA, 60 sec
Back-up Switch Time (ms)	<10	
Rated Output Voltage (V)	1/N/PE 220/230	
Rated Frequency (Hz)	50/60	
Max. Output Current (A)	36.5	40.0
THDv (@linear load)	<2%	
Input AC (Grid side)		
Input Voltage Range (V)	187-253	
Max. Input Current (A)	34.1	40.0
Frequency Range (Hz)	45~55/55~65	
Features		
DC Connection	Stäubli MC4 EVO 2	
AC Connection	Quick Connection Plug	
Display	LED	
Communication	RS485; CAN, Optional: Wi-Fi, GPRS, LAN, BT	

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Output AC (Grid side)		
Rated Output Power (kW)	5.0	6.0
Max. Apparent Output Power (kVA)	5.5	6.6
Operating Phase	1/N/PE	
Rated Grid Voltage (V)	220/230	
Rated Grid Frequency (Hz)	50/60	
Rated Grid Output Current (A)	22.7/21.7	27.3/26.1
Max. Output Current (A)	25.0	30.0
Power Factor	>0.99 (0.8 leading to 0.8 lagging)	
THDi	<2%	
Protection		
DC Reverse-Polarity Protection	Yes	
Ground Fault Monitoring	Yes	
Integrated AFCI (DC arc-circuit protection)	Yes ¹⁾	
Protection Class/Overvoltage Category	I/II	
General Data		
Dimensions (WxHxD mm)	405x480x205	
Weight (kg)	24.2	
Operating Temperature Range (°C)	-25~60	
Ingress Protection	IP66	
Cooling Concept	Natural Convection	
Max. Operation Altitude (m)	4000	
Grid Regulation	G98, G99, VDE-AR-N-4105,VDE V 0124,C10-11,VDE 0126 UTE C 15/VFR: 2019, UNE217002, NBR16149/NBR16150, RD 1699/RD244/UNE206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018 .2, IEC61727, IEC62116, IEC 60069, IEC61683, EN50530, EN50549-1, MEA, PEA,	
Safety EMC / Standard	IEC/EN 62109-1/2, EN 61000-6-1/2/3/4	
Topology	High frequency insulation (for battery)	
Efficiency		
Max. Efficiency	97.5%	
Euro Efficiency	96.2%	

1) Activation required.