

REVO residential energy storage inverters

# Three-phase hybrid inverter

R12KL3



## KEY STRENGTHS

- PV compatible with 20A high-current string.
- Sustained 1.1x AC overload capability.
- Supports diesel generator connection for seamless grid-to-gen set transfer.
- Maximum charge/discharge current up to 240A.
- 100% unbalanced load capability.
- Supports parallel operation of multiple units.

Model	R8KL3	R10KL3	R12KL3
<b>PV input data</b>			
Max. power (kW)	12	15	18
Start-up voltage (V)		200	
Max. DC Voltage		1,000	
MPPT voltage range (V)		200~850	
Rated voltage (V)		600	
PV(Isc) (A)		30+30	
Max. input current per component (A)		20+20	
No. of MPPT trackers		2	
No. of strings per MPPT trackers		2	

Model	R8KL3	R10KL3	R12KL3
<b>AC output data (On-grid)</b>			
Rated output power (kW)	8	10	12
Rated output current (A)	11.6	14.5	17.5
Rated grid voltage (V)	220 / 380; 230 / 400		
Grid voltage range (V)	340~440		
Rated grid frequency (Hz)	50/60		
Grid frequency range(Hz)	45-55 / 55-65		
THDi	< 3%		
Grid type	L+N+PE		

**AC output data (Off-grid)**

Rated output power (kW)	8	10	12
Max. AC Input Output (kVA)	8.8	11	13.2
Rated output voltage (V)	220 / 380; 230 / 400		
Rated output current (A)	11.6	14.5	17.5
Max. input output current (A)	11.6/12.8	14.5/16	17.5/19.2
Rated output frequency (Hz)	50/60		
Peak output power	2 time of rated power, 10S		
Back-up switch time (ms)	Up to 10 ms		
THDu	3%(Normal linear load)		
Max. continuous passthrough current (A)	50		
Load unbalance degree	100% unbalanced load output, 50% of the rated maximum output power per phase		

**Battery data**

Battery voltage range (V)	40~60		
Max. charging voltage (V)	60		
Max. charging / discharging current (A)	160/160	200/200	240/240
Communication interface	CAN/RS485		

**Efficiency**

Max. efficiency	97.6%		
European efficiency	97.0%		
MPPT efficiency	> 99%		

**Protection**

PV reverse polarity protection	Supported		
PV input DC switch	Supported		
DC/AC surge protection	DC Type II / AC Type III		
Insulation resistance	Supported		
RCD testing	Supported		
AC output short-circuit protection	Supported		
Grid monitoring	Supported		
Anti-islanding protection	Supported		
Arc fault detection	Optional		

**General data**

Dimensions W*D*H (mm)	420*262*650		
Weight (kg)	<40		
Ingress protection	IP65		
Noise emission (dB)	<55		
Operating temperature range (°C)	-25~+60(>45 Derating)		
Cooling	Forced air cooling		
Relative humidity	0~95%(Non-condensing)		
Operating altitude (m)	3,000(>2,000 Power derating)		
Isolation transformer	None		
Communication	RS485/Wifi/GPRS/CAN		
Display	4.3"(Optional)		
Warranty (5 years / 10 years)	Optional		