JOULE ENERGY SOLUTIONS
Energy. Efficient.

ALL-IN-ONE ESS SOLUTION

INV076

POWER CONVERSION SYSTEM

QOMA SERIES

QOMA33H / QOMA33H-R | **33KVA / 33KW**

Paralleled to 330KW three phase

OVERVIEW

Qoma series is a power conversion system which is suitable for mini-grid, off-grid systems, and grid-tied energy storage systems. It supports multiple energy input, such as wind, solar, diesel and grid and boasts 0ms UPS class transfer time to guarantee uninterrupted power supply for the system. With flexible configuration, it can be used in the fields like energy demand response management, grid support, load balancing, diesel hybrid and new energy generation and storage. The power supply mode is compatible with TN, TT and IT systems, and supports three-phase four-wire and three-phase three-wire power supply mode.

FEATURES & BENEFITS

- Support up to 10 units in parallel
- Wide battery range, compatible with lithium and lead acid batteries
- Support independent battery bank or battery bank shared by multiple devices
- Support constant current, constant voltage and constant power charging
- Support constant current and constant power discharging
- Support 100% unbalanced load
- 1.5 times 30S overload capability
- Embedded EMS functionality, while supporting external EMS management
- LED + Bluetooth HMI
- Support system parameter configuration on the APP or upper computer
- Boast reverse polarity protection, overheat protection and overvoltage protection
- Support grid monitoring and ground fault monitoring
- Support insulation monitoring
- IP 65 protection index
- Possess relevant energy storage and grid connection certification

TBB POWER

QOMA SERIES	Qoma33H	Qoma33H-R
Product Code	INV076	
Max. DC voltage (V)	850	
Min. DC voltage (V)	400	
DC voltage range for nominal power (V)	500~850	
Max. DC current (A)	62	
Max. DC power (kW)	34	
AC SIDE (GRID)		
AC output power	33 kVA @ 45°C / 30 kVA @ 50°C	
Max. AC current (A)	50	
Nominal AC voltage (V)	400/230	
AC voltage range	-20%~15%	
Nominal grid frequency / Grid frequency range (Hz)	50Hz: 47Hz-52Hz; 60Hz: 57Hz-62Hz	
AC current THD	< 3 % (At nominal power)	
DC current injection	0.5%	
Power factor at nominal power / Adjustable power factor	> 1 leading -1 lagging	
Adjustable reactive power	-100%~100%	
AC SIDE (MICRO- GRID)		
Nominal AC voltage (V)	400/230	
AC voltage THD	< 1.5 % (Resistance load)	
Unbalance load capacity	100%	
Nominal voltage frequency / Voltage frequency range (Hz)	50Hz: 47Hz-52Hz; 60Hz: 57Hz-62Hz	
AC output power	45KW/30S	
EFFICIENCY		
Max. charge efficiency	98.0%	
PROTECTION		
Reverse polarity protection	Yes	
DC switch	Yes	No
AC switch	Yes	No
Overvoltage protection	DC Type II / AC Type III	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
GENERAL DATA		
Dimensions (mm)	520 x 750 x 220	520 x 580 x 220
Weight (kg)	37	35
Installation	Wall mount	Rack mount
Degree of protection	IP65	
Operating ambient temperature range	-25 to 60˚(> 45˚derating)	
Allowable relative humidity range (non- condensing)	0~100 %	
Cooling method	Temperature controlled forced air cooling	
Max. operating altitude	4000m (> 3000m derating)	
Display	LED, Bluetooth	
Self-consumption at stop (W)	< 10	
Communication	RS485 / Ethernet / CAN	
Communication protocol	Modbus-RTU / Modbus TCP, CAN2.0B	
Compliance	IEC/EN62477-1, IEC/EN62040-1; EN61000-6-1/-2/-3/-4; IEC62116+IEC 61727, NRS097-2-1	
Grid support	LVRT, active & reactive power control and power ramp rate control	