

## B8031/B8033FXS series

### Features and benefits

- High double conversion efficiency and smart-on-line mode for low running costs and environmental impact.
- Transformer free design for light small size layout.
- Removable power modules architecture and built-in diagnostics for easy maintenance and very low MTTR.
- Hot connection/disconnection of parallel units for easy system resizing.
- Full IGBT technology and electronic PFC, ensuring 0.99 input PF and THDi<3% for maximum upstream sources compatibility.
- Accurate battery management providing ripple current minimization charge current/voltage control as per batteries manufacturers' specifications and automatic/manual battery test for maximum battery expected life preservation.
- High power battery charger, giving long autonomy and low charging time.
- Dual DSP plus microcontroller logics for top performance and reliability.
- CAN-bus based distributed parallel control ensuring high load sharing accuracy and no single point of failure in parallel systems.
- Comprehensive set of communication options for total remote monitoring of equipment operation.
- Fully compliance with all international product standards for maximum quality guarantee.

### Main options

- Isolation transformer.
- Transformers/autotransformers for voltage adjustment.
- Battery voltage temperature compensation.
- External maintenance bypass wall-mounted box.
- Battery fuse switch wall-mounted box.
- Associated battery cabinets for long autonomy times.
- Parallel kit.
- Input terminals for remote EPO, external manual bypass auxiliary contact, diesel mode.

### Backfeed protection included



### B8031FXS technical data

Rating (kVA)	10	15	20
Nominal power (kW)	9	13.5	18
UPS dimensions WxHxD (mm)	450x1200x670		
UPS weight (kg)	100	110	110
UPS weight with internal battery (kg)	Min.175 Max.285	Min.260 Max.275	Min.260 Max.275
External battery module dimensions WxHxD	500x1200x670		
Battery configuration	Internal or external, 360÷372 cells, VRLA (other options)		

#### Input

Connection type	Hardwired 4w (rectifier), 2w (bypass)
Nominal voltage	380/400/415 Vac 3-phase with neutral (rectifier) 220/230/240 Vac 1-phase (bypass)
Voltage tolerance	-20%, +15%
Frequency and range	50/60 Hz (45÷65 Hz)
Power factor	0.99
Current distortion (THDi)	<3%

#### Output

Connection type	Hardwired 2w
Nominal voltage	220/230/240 Vac 1-phase
Frequency	50/60 Hz
Voltage regulation	±1% static; dynamic: IEC EN 62040-3 Class 1
Power factor	up to 0.9, lagging or leading without power derating
Overload capacity	Inverter: 101÷125% for 10 min, 126÷150% for 30 s, >150% for 10 s; bypass: 150% continuous, 1000% for 1 cycle
Efficiency (AC/AC)*	up to 98%
Classification as per IEC EN 62040-3	VFI-SS-111

#### Connectivity and function extensions

Front panel	Graphic display, mimic LED panel and keyboard, local EPO
Remote communication	Serial RS232 and USB; terminal block for battery breaker auxiliary contact. Optional: input terminal block (remote emergency power off, battery circuit breaker aux. cont., external maintenance bypass circuit breaker aux. cont., diesel mode aux. cont.); SNMP adapter (Ethernet), Web interface (Ethernet), ModBus-TCP/IP (Ethernet); ModBus-RTU (RS485); ModBus-RTU to PROFIBUS DP adapter; SPDT contact relay board; remote system monitoring panel; UPS managing and server shutdown software
Optional function extensions	Isolation transformer; transformers/autotransformers for voltage adjustment; external maintenance bypass; custom battery cabinets; wall-mounted battery fuse switch box; battery thermal probe; parallel kit

#### System

Protection degree	IP 20
Colour	RAL 7016
Installation layout	10 cm wall-gap, side by side installation allowed
Accessibility	Front and top access, bottom cable entry

\*according to IEC EN 62040-3



## Extra options

- Separate bypass input
- Backfeed protection (optional from 30 kVA to 60 kVA, included in all other sizes)

## B8033FXS technical data

Rating (kVA)	10	15	20	30	40	50	60	80	100	
Nominal power (kW)	9	13.5	18	27	36	45	54	72	90	
UPS dimensions WxHxD (mm)	450x1200x670 *							460x1690x920		
UPS weight (kg)	100	110	110	140	140	170	170	328	333	
UPS weight with internal battery (kg)	Min.175 Max.285	Min.260 Max.275	Min.260 Max.275	350	350	-	-	-	-	
External battery module dimensions WxHxD (mm)	500x1200x670					560x1690x880				
Battery configuration	Internal or external, 360÷372 cells, VRLA (other options)					External, 360÷372 cells, VRLA (other options)				

Input	
Connection type	Hardwired 4w (separate bypass input available on request)
Nominal voltage	380/400/415 Vac 3-phase with neutral
Voltage tolerance	-20%, +15%
Frequency and range	50/60 Hz (45÷65 Hz)
Power factor	0.99
Current distortion (THDi)	<3%

Output	
Connection type	Hardwired 4w
Nominal voltage	380/400/415 Vac 3-phase with neutral
Frequency	50/60 Hz
Voltage regulation	±1% static; dynamic: IEC EN 62040-3 Class 1
Power factor	up to 0.9, lagging or leading without power derating
Overload capability	<p>Inverter: 101÷125% for 10 min, 126÷150% for 30 s, &gt;150% for 10 s; bypass: 150% continuous, 1000% for 1 cycle</p> <p>Inverter: 101÷125% for 10 min, 126÷150% for 1 min, 151÷199% for 10 s, 200% for 100 ms; bypass: 150% continuous, 1000% for 1 cycle</p>
Efficiency (AC/AC)**	up to 98%
Classification as per IEC EN 62040-3	VFI-SS-111

Connectivity and function extensions	
Front panel	Graphic display, mimic LED panel and keyboard, local EPO
Remote communication	Serial RS232 and USB; terminal block for battery breaker auxiliary contact. Optional: input terminal block (remote emergency power off, battery circuit breaker aux. cont., external maintenance bypass circuit breaker aux. cont., diesel mode aux. cont.); SNMP adapter (Ethernet), Web interface (Ethernet), ModBus-TCP/IP (Ethernet); ModBus-RTU (RS485); ModBus-RTU to PROFIBUS DP adapter; SPDT contact relay board; remote system monitoring panel; UPS managing and server shutdown software
Optional function extensions	Isolation transformer; transformers/autotransformers for voltage adjustment; external maintenance bypass; custom battery cabinets; wall-mounted battery fuse switch box; battery thermal probe; parallel kit

System	
Protection degree	IP 20
Colour	RAL 7016 (10-60 kVA) RAL 9005 (80-100 kVA)
Installation layout	10 cm wall-gap, side by side installation allowed
Accessibility	Front and top access, bottom cable entry

\*dimensions of 30 and 40 kVA with internal battery: 450x1730x670 \*\*according to IEC EN 62040-3