www.borri.it

B8031FXS - B8033FXS
3/1-PHASE and 3/3-PHASE UPS from 10 to 20 kVA



English



90 YEARS
SINCE 1932

B8031FXS - B8033FXS BROCHURE

YOUR CRITICAL POWER SOLUTION PARTNER.

The Borri Group has been developing and building uninterruptible power systems since 1932 and is a global provider of power electronics systems and solutions for harsh industrial and demanding critical power requirements.

— Borri's R&D vast expertise in all facets of firmware, power electronics and mechanical design provides innovative solutions for tomorrows problems in Industrial and Critical Power applications.

— The company prides itself on its first-class service and superior engineering disciplines. To ensure sustained quality, Borri manages all its processes in house from feed studies to design, production and after sales service technology.

— Based in Bibbiena, Italy with over 15,000 m² production area, Borri operates across all five continents with subsidiaries in USA, Canada, Germany, UAE, India and Malaysia.

— It has also established a strong distributor network, able to deliver on site support and technical guidance indicative of our own capabilities.



90 YEARS
SINCE 1932

Critical Power Solutions

Designing and building mission critical UPS's 1- and 3-Phase up to 21 MW.

Industrial Power Solutions

Designing, engineering and building customised AC and DC power supply systems for harsh industrial applications.

Service

Borri team of experts support you to the highest standards no matter where you are in the world.



UPS **3/1-PHASE** and **3/3-PHASE**

B8031FXS
B8033FXS

from **10 kVA** —— to **20 kVA**





Applications

Network & Server

Industrial controls & process automation

Medical equipment

Building automation

Robust and compact

Full IGBT technology providing smooth sinusoidal input current cuts all upstream oversizing costs.

Low running costs

High efficiency and ECO mode reduce overall power losses and thus energy costs.

Easy to install and maintain

Removable power modules and simple handling for low installation and mean time to repair.

Robust, customisable and easy-to-maintain UPS, available as either 3-phase in/1-phase out or 3-phase in/3-phase out. B8031 FXS and B8033 FXS series is suitable for server rooms, IT equipment, industrial controls, medical equipment and process automation.

B8031FXS - B8033FXS: featuring extremely small dimensions and one of the smallest footprint in its range.



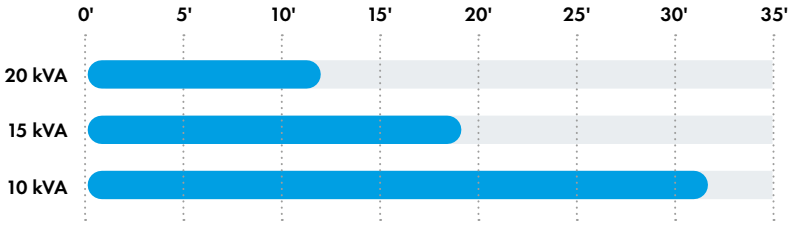


Features and benefits

- High double conversion efficiency and ECO 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 low THDi for maximum upstream sources compatibility.
- Wide range of configurations with internal batteries for low TCO compact solutions.
- High power battery charger, suiting long autonomy applications.
- 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.
- Comprehensive set of communication options for total remote monitoring of equipment operation.
- Included bypass contactor for complete backfeed protection and operators' safety without additional installation costs.
- Fully compliant with all international product standards for maximum quality guarantee.



Back up time wth internal batteries



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 redundant up to 6 units for system redundancy
- Load-sync option.
- Input terminals for remote EPO, external manual bypass auxiliary contact, diesel mode.
- Separate bypass input for B8033FXS.

B8031FXS - B8033FXS technical data

Rating (kVA)	**10**	**15**	**20**
Nominal Power (kW)	**9**	**13.5**	**18**
UPS dimensions WxDxH (mm)	450x640x1200		
UPS weight (kg)	100	110	110
UPS weight with internal battery (kg)	247	257	257
External battery module dimensions WxDxH (mm)	500x640x1200		
Battery configuration	Internal or external, 360 to 372 cells, VRLA (other options)		
Max autonomy with int. battery 70% load (min)	**32**	**19**	**12**

Input	**B8031FXS (10-15-20 kVA)**	**B8033 FXS (10-15-20 kVA)**
Connection type	Hardwired 4w (rectifier), 2w (bypass)	Hardwired 4w
Nominal voltage	400 Vac 3-phase with neutral (rectifier) 220/230/240 Vac 1-phase (bypass)	400 Vac 3-phase with neutral (rectifier) 380/400/415 Vac 3-phase with neutral (bypass)
Voltage tolerance	-20%, +15% (rectifier); ±10% (bypass)	
Frequency and range	50/60 Hz, 45 to 65 Hz	
Power factor	0.99	
Current distortion (THDi)	<4%	

Output	**B8031FXS (10-15-20 kVA)**	**B8033 FXS (10-15-20 kVA)**
Connection type	Hardwired 2w	Hardwired 4w
Nominal voltage	220/230/240 Vac 1-phase	380/400/415 Vac 3-phase with neutral
Frequency	50/60 Hz	
Voltage regulation	Static: ±1% ; Dynamic: IEC/EN 62040-3 Class 1	
Power factor	Up to 0.9, without power derating	
Overload capacity	Inverter: 125% for 10 min, 150% for 30 s ; Bypass: 150% continuous, 1000% for 1 cycle	
Efficiency (AC/AC)*	Up to 98%	
Classification by IEC/EN 62040-3	VFI-SS-11	

Connectivity and function extensions	
Front panel	Graphic display, mimic LED panel and keyboard, local EPO
Remote communication	**Included:** serial RS232 and USB; terminal block for battery breaker auxiliary contact. **Optional:** input terminal block (remote emergency power off, external maintenance bypass circuit breaker aux. cont., diesel mode aux. cont.); SNMP adapter (Ethernet), Web interface (Ethernet), ModBus-TCP/IP (Ethernet), ModBus-RTU (RS485), from 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, load-sync for single UPS; other options on request

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

*according to IEC/EN 62040-3

Other features

Environmental	
UPS operating temperature range	0°C to +40°C
UPS storage temperature range	-10°C to +70°C
Altitude (AMSL)	< 1000 m without power reduction, > 1000 m with reduction of 0.5% per 100 m
Audible noise at 1 m (dBA)	< 52

Standards and certifications	
Quality assurance, environment, health and safety	ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007
Safety	IEC/EN 62040-1
EMC	IEC/EN 62040-2
Environment aspects	IEC/EN 62040-4
Test and performance	IEC/EN 62040-3
Protection degree	IEC 60529
Marking	CE

SERVICE



Customer's expectation defines Borri's priority from the early analysis of the project requirements to a worldwide commissioning and service. Many thousands of systems have been successfully installed and maintained globally, with continuous support from a highly trained team of expert, certified technicians and engineers. From the professional set-up of Borri's training centre or on site, the training and service team stand ready to provide support and contribute to tailored training at Borri or on site.You can be assured of Borri support to the highest standards no matter where in the world you are.

Planning, installation, commissioning

Borri assist you in every single step of your project. Our R&D team can analyse and develop solutions to a wide range of edge system requirements.

Analytical tests

Borri undertakes a series of analytical tests in order to guarantee higher efficiency and continuity to your system operation.

Repair & spare parts

All spare parts supplied by Borri are original, tested and guaranteed to be fully compliant with Borri solutions.

Remote monitoring

Guardian Net remote monitoring system allows you to detect any deviation from optimum operation and trigger proper and immediate response, so that anomalies don't evolve into issues.

Maintenance

Preventive maintenance guarantees uninterrupted operations and optimised system efficiency.

Battery tests

Batteries have a limited time life and their proper maintenance is of high importance to guarantee efficiency to the UPS and avoid potential failures. Borri delivers high quality and performing batteries to assure smooth operations.

Training

Borri offers distributors and customers a service training structured in 3 levels. Courses can be held in Borri training centres or on-site.

Since 1932, securing your power with passion and commitment.



Extract from
OMG60326revC | 07-2022
Due to our policy of continuous development, data in this document is subject to change without notice and becomes contractual only after written confirmation

www.borri.it

BORRI HEADQUARTERS AND FACTORY

Borri S.p.A

Via 8 Marzo, 2
52011 Bibbiena (AR)
Italy
Tel. +39 0575 5351
Fax +39 0575 561811
info.borri.it@legrand.com

BORRI SUBSIDIARIES AND SERVICE CENTRES

Americas

Borri Power (US) Inc.

9000 Clay Road, Suit 104
Houston, Texas, 77080
USA
Tel. +1 346 212 2686
Fax +1 346 980 8875
info.borripower@legrand.com

India

Borri Power India Pvt. Ltd.

Plot No. 69, Ground Floor
Nagarjuna Hills, Panjagutta
Hyderabad, 500 082
India
Tel. +91 40 2335 4095
info.borri.it@legrand.com

Asia Pacific

Borri Asia Pacific
Engineering Sdn. Bhd.

No.13, Jalan Serendah 26/41,
Sekitar 26, Seksyen 26,
40400 Shah Alam, Selangor
Malaysia
Tel. +60 3 5191 9098
Fax +60 3 5103 8728
sales@borri-asia.com

Middle East and Africa

Borri Power
Middle East FZCO

1-151, Techno Hub
PO Box: 342036
Dubai Silicon Oasis, Dubai UAE
Tel. +971 4 3200528
Fax +971 4 3200529
info.borri.it@legrand.com