

Integrated Power

DC Power

Miniflex 1 to 6 kVA rack & Static Switch

1 to 6 kVA

Features and benefits

- High efficiency, Patented technology
- Hot swap capability
- Full Digital Signal Processing control
- Parallel operation in True Redundant System
- Active load sharing and several disconnection levels
- Systems of 2, 4 or 6 modules with or without static switch



Miniflex, 6 kVA rack



Miniflex & Static Switch

Emerson Network Power is now launching the Miniflex range, a brand new inverter for 48 V DC applications with 120 or 230 V AC output. State-of-the-art technology has been integrated in this product to ensure high reliability and efficiency, while the cost per VA has been reduced to the minimum. Active load sharing and high level of local intelligence (full DSP control) will guarantee the reliability and efficiency you require for your applications.

This High Density Inverter can be used in different configurations, and supply loads up to 6 k VA. Each module has an output power of 1000 VA, and the racks system allows connecting in parallel up to 6 modules. Static switch can be ordered as an option, and will be integrated in specific rack system with included manual by-pass.

Several distribution options exists, from the simple bulk output to specifically designed racks with breakers or standard plugs.

Technical Specifications, Integrated Power 1 to 6 kVA

Module Specifications

Product code	120 VAC output EES ref : BMS 404 030/21	230 VAC output EES ref : BMS 404 030/1
1. Input specifications		
Operating voltage range, adjustable	40 VDC to 60 VDC	
Maximum Input current @40VDC, 800W	23 A	
lin max. at Uin=48V, 100% overload	37 A	
Inrush current	<1 nom.	
2. Output specifications		
Nominal output voltage	120VAC (108 to 127VAC)	230VAC (208 to 240VAC)
Output voltage tolerance	± 3% of adjusted nominal voltage	
Output voltage frequency	50Hz or 60 Hz selectable (±0.01Hz)	
Overall distortion rate	<3% on linear load	
Total transient recovery time	<0,3 msec (Typical)	
Turn on delay	<3 sec	
Nominal value of output current	8,3 A	4,4 A
Short circuit output current (Typical)	23A	12,3 A
Crest factor at nominal power	3:1	
Response time	< 500 µSec for 0 to 100% or 100 to 0% load transient	
3. Output power		
Nominal value	800W / 1000VA	
Permanent overload (rated in W)	125%	
Overload (+/- 15%, 5 sec. Max, Selfprotected)	2000W / 2000VA	
Power factor influence	Full power output (1000VA) with Pf from 0 to 0,8 Limited to 800W with Pf from 0,8 to 1	
4. Electro magnetic compatibility		
Standards applied for immunity	EN 61000 – 4-2 / 4-3 / 4-4 / 4-5 / 4-6	
Standards applied for emission	ETS300-132-2 EN55022 ClassB	
5. Efficiency (@ full load)		
> 90%		
6. Temperature		
Storage temperature	-40° to 80°C	
Permissible ambient temperature	-20° to 50°C	
7. MTBF (according MIL-HDBK 217F)	>177.000h fans included (> 258.000h without fans)	
8. Dielectric strength	4300 Vdc input/output - 4300 Vdc output/ground 2100 V DC input/ground EN 60950 / UL 1950	
9. Safety		
10. Dimensions / Weight	19 inches wide / 1U height / 350mm depth / 5Kgs	

Static switch specifications

Product code	BMP 604 030 / 21 120 VAC output	BMP 604 030 / 1 230 VAC output
1. Input specifications		
Operating voltage range	90 to 150 Vrms	180 to 275 Vrms
Input frequency range (Selectable)	47,5 ... 52,5 Hz or 57,5 ... 62,5 Hz	
2. Maximum permanent current		
50A (natural cooling conditions)		
3. Transfer performance		
Maximum voltage interruption	0 to 6 msec (Typical : 3 msec)	
Total transient voltage duration (max)	1 to 12 msec (Typical : 5 msec)	
4. Efficiency (@ full load)		
> 98%		
5. Voltage conformity (rms)		
Maximum mains, adjustable	130 ... 150V	245 ... 265V
Minimum mains, adjustable	90 ... 110V	120 ... 215V
Maximum inverters, adjustable	130 ... 150V	245 ... 265V
Minimum inverters, adjustable	90 ... 110V	120 ... 215V
Load level to come back after overload	97%	
6. Electro magnetic compatibility		
Standards applied for immunity	EN 61000 – 4-2 / 4-3 / 4-4 / 4-5 / 4-6	
Standards applied for emission	FCC Patr 15 class A / CISPR22 ClassB	
7. Temperature		
Storage temperature	-40° to 80°C	
Permissible ambient temperature	-20° to 50°C	
8. MTBF (according MIL-HDBK 217F)	> 400 000h	
9. Supervision possibility	With controller	
10. Signalling and measurements	11 LEDs 2 free potential contacts NO/NC – all contacts are doubled	
11. Safety	EN 60950 / UL 1950 / UL 1778 (Rack)	
12. Dimensions (WxDxH, mm) / Weight	316 x 360 x 86mm (2U) / 4 Kgs	

Subrack specifications

	With Static Switch	Without Static Switch
2 modules* (W x D x H / Weight)	480 x 380 x 177,2mm / 5 Kgs Prod. number: BFL901030/1	480 x 380 x 87,5mm / 3 Kgs Prod. number: BFL901030/4
4 modules* (W x D x H / Weight)	480 x 380 x 265,2mm / 6,5 Kgs Prod. number: BFL901030/2	480 x 380 x 178,2mm / 4,5 Kgs Prod. number: BFL901030/5
6 modules* (W x D x H / Weight)	480 x 380 x 353mm / 8 Kgs Prod. number: BFL901030/3	480 x 380 x 266mm / 6 Kgs Prod. number: BFL901030/6

* 23" mounting accessories available as an option

**Emerson Network Power
Energy Systems AB**
SE-141 82 Stockholm, Sweden
Phone: +46 8 721 60 00
Fax: +46 8 721 71 77

For global contact, visit:
www.emersonenergy.com

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