



The BLUERAIL Series: Intelligent Power – alone or in a team

Flexible DIN rail power supplies

The Eplax BLUERAIL series of DIN rail power supplies are high power universal PSUs. BLUERAIL units with power interface can communicate with a control system and with each other. Independent teamwork allows connected power supplies to evenly split the total power.

Alternatively the PSUs can be computer controlled, to dynamically adapt the units output voltage. Linked within a control loop, battery charging can be optimised.

Reliable performance

A wide input range and sturdy construction guarantee high reliability in harsh environmental applications. Thus the BLUERAIL units are excellently qualified for challenging industrial applications, e.g. machine or equipment control.

The well thought out (mature) connection design ensures the economic pre-assembly of the connecting cables, and thus allows quick on site installation. The power magnet holder enables fast, tool free assembly in the narrowest space and ensures shock and vibration stability.



Certified Safety



Safety according to EN



Safety according to UL



36 Months Warranty



Power Good Signal



Overvoltage Protection



Power Magnet Holder

Overview and order codes

BR Series				Order code	
				Standard Holder	Power Magnet Holder
Model	Output		Version		
BR 120-1	24 V	5 A	without Power Interface	108-020002F	108-020001J
BR 120-1 PI	24 V	5 A	with Power Interface	108-020102A	108-020101D



BLUERAIL BR 120

120 Watt AC/DC Converter for DIN-Rail

SMPS for assembly on DIN-Rails

- Wide input range (110–253 VAC)
- >91% efficiency, no derating up to +60 °C
- Pot plug, all connections pluggable
- “Power Good” signal
- Digital voltage adjustment
- μ C battery charging with temperature compensation
- Power magnet holder
- >50 ms hold up time

Model BR 120-1 PI

- Self calibrating output voltage
- Digital adj. of output voltage without instruments through BCD switch or automatic battery charging operation
- Pro-active-load sharing or parallel switchable with programmed internal resistance
- Output voltage externally adj. over serial port
- Green power LED with flash code
- Red alarm LED with flash code
- Potential free alarm with relay, μ C programmable
- Automatic battery charging operation for 24 V lead batteries with temperature compensation



fig.: BR 120-1 PI

Model BR 120-1

- Output voltage adj. from 22–29.5 V with potentiometer
- Parallel switchable with passive load sharing
- Current limiting with U/I characteristic
- Green power LED
- Red alarm LED
- Potential free Power Good (>22 V) with relay

Specification

BR 120		General Information	
Input		Other	
Input voltage	100–253 VAC	Storage temperature	-40 °C to +85 °C
Frequency	47–63 Hz	Humidity (without condensing water)	max. 90 %
Input current	<25 A	Dimensions (B x H x T) without holder	40 x 124 x 113 mm
Surge limiting	by VDR	Weight	500 g
Environment		Standards	
Hold-up-time (at nominal values)	>50 ms (230 VAC)	CE mark according to	73/23/EWG
Efficiency	>91%	Safety according to	EN 60950-1, IEC 60950-1, UL 60950-1
Operating temperature	-25 °C to +60 °C	CE mark according to EMC directive	89/336/EWG
PFC	EN 61000-3-2	EMV emission:	EN 55022/B (0,15–30 MHz; 30–1.000 MHz)
		EMV immunity:	EN 61000-6-2

Connector Pinning

Upper Connector (from leftside)	
PIN	Function
1, 2	+V _{OUT}
3, 4	GND
5, 6	“Power Good” Relay (closed = OK)
Bottom Connector (from leftside)	
PIN	Function
1	N
2	L
3	PE

D-Sub-Connector (Power Interface)	
PIN	Function
1	U _{AUX} (24 V / 10 mA)
2	Serial out (Open Collector)
3	Serial in (TTL)
4	(nc)
5	GND
6–8	(nc)
9	Temperature-Sensor or Serial I/O



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The BLUERAIL series will be extended with additional products soon –

Please ask for accessories and variants!

Technical changes without notice · Revision: October 2006