

DEVICE DESCRIPTION

EPI type converters are designed for use in an uninterruptible DC power supply systems, as power suppliers with rated DC voltage of 24V, 48V, 110V, 220V, or other voltages compatible with device's specifications.

Enclosure of modular rectifiers APS Energia has a height of 4U or 6U and is designed for industrial cabinets 19".

Power supply of DC users can be carried out either without battery as a simple DC/DC conversion or with a battery and controlling software to ensure correct battery charging.

Converter's Parameters:

- High stability of voltage and output current;
- Low ripple of voltage and output current;
- Small size and weight;
- Low noise operation;

Converter Provides:

- Monitoring of each pole isolation status;
- Monitoring of the battery charging current;
- Logging events and operation status (SD card);
- Temperature compensation of the battery charging voltage;

- Galvanic isolation of battery power supply;
- Communication interface RS485, USB;
- Events logging - all events are recorded in the converter's memory;
- Output ground fault monitoring (optionally);
- Configurable alarm outputs (contact outputs);
- High efficiency and reliability - self-test system;
- Electromagnetic compatibility - EMI filters;



- Electronic protection against short circuit, overload, overheating;
- Minimizing of generated interference, also due to the use of multi-stage noise suppression filters;
- Data logging - flash memory;

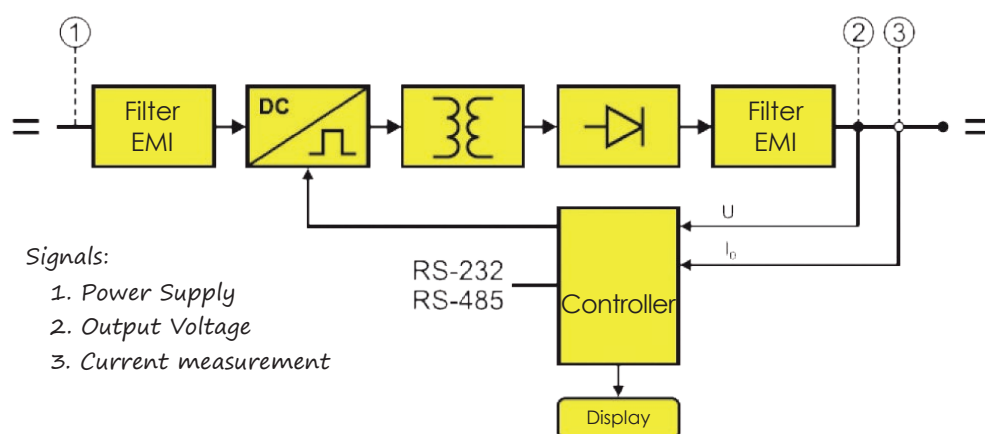
- Communication with the control system SCADA and TCP/IP network;
- Choice of communication protocol Profibus, Modbus RTU, IEC, TCP IP;
- Constant measurement of the electrical parameters at the input and the output, as well as measurement of the battery and environment temperatures;
- Compatibility with EUROBAT UI battery charging method(DIN 41773);

SYSTEM PARAMETERS:	UNITS:	VALUES:
Power supply voltage	V	110 or 220
Tolerance of power supply voltage	%	-15 / +40%
Rated output DC voltage	V	see the table below
Output voltage stabilization	%	+/- 1%
Output voltage ripple	%	+/- 0,2%
Rated output current (I _n)	A	see the table below
Overload	A	1.5I _n up to 3s
Output current stabilization	%	+/- 1 %
Output current ripple	%	+/- 0,2 %
Efficiency	%	> 92%
EMC		EMI filters

ENVIRONMENT		
Ambient temperature (EN 50178 class 3k3)	°C	0 to +40
Storage temperature	°C	-40 to +55
Humidity (EN50178 class 3k3)	%	Max. 80 (without condensation)
Access		Maintenance and service from the front
Maximum altitude	m n.p.m.	1000*

* Above 1000 m, make sure to lower the rated current by 5% for every additional 1000 m

Block diagram (example)



STANDARDS:

- EN 61204: 1995/A1:2001
- EN 61204-3:2000
- EN 61204-6:2001
- EN 61204-7:2006/A11:2009
- EN 50178: 1997
- EN 60950: 2000
- EN 61000-6-4:2007/A11:2011
- EN 61000-2-4:2002
- EN 61000-2-2:2002

TYPE SERIES OF CONVERTERS IN COMPACT VERSION

	110 V DC		220 V DC	
Housing type	4U	6U	4U	6U
Output voltage	Output current		Output current	
220 V DC	10 A	25 A	10 A, 25 A	50 A
110 V DC	10 A	25 A, 50 A	10 A, 25 A, 50 A	75, 100 A
60 V DC		50 A, 75 A, 100 A	50 A	75, 100 A
48 V DC	50 A	75 A, 100 A	20 A, 50 A, 75 A, 100 A	
24 V DC	50 A		50 A, 75 A, 100 A	

The manufacturer reserves the right to change parameters of the devices. Other types and solutions can be delivered on request.



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