

Switching power supply SP-R



Purpose of use

Switching chargers of the SP-R series are intended for charging station batteries and supplying DC circuits of nominal voltage 110V and 220V. Switching chargers of the SP-R series fully comply with the requirements of the station battery charging standard EUROBAT.

Compact construction of the charger brings all advantage of switching units in comparison with standard power supply units equipped with transformer – primarily lower weight and smaller dimensions.

Advanced software equipment leads to higher user comfort and to the merging different measure devices into one device.

Construction

The power unit is fit into 3U 19" rack and is designed for built-in mount into switchgears. All connection and signaling points are situated in front panel.

The power unit has force cooling which is controlled according to momentary temperature of the cooler. This solution increases lifetime of ventilator and contributes to low-noise run of the unit.

Regulation is controlled by processor card ProDrive III equipped DSP processor Texas Instruments.

Power supply unit offers function of temperature compensation of charging voltage or fast charging. There are different charging characteristics - I_{U_0} , I_{UU_0} etc.

Processor controlling in combination with measurement of cooler temperature permits short-term operation as well in worse thermal conditions – by restriction of output current.

Inputs and outputs are programmable which means adjustment of the power unit to concrete application.

Parameters

Basics types		
U_{in}	3x 400/230 V	
I_{in}	16A	
f_{in}	30-70 Hz	
U_n	110 V DC	220 V DC
I_{max}	50A	25A
Current ripple	<3%	
Efficiency	92 - 95%	
Power factor	0,98	
Parallel operation	YES	
Short circuit protection	YES	
LCD	YES	
Temperature compensation	YES	
Fast charging	YES	
Communication	RS232, RS485	
Logical inputs	2	
Analog inputs	1	
Logical outputs	9 (230 V AC/5 A)	
Operating temperature	-25 to +40 °C	
Dimension	360 x 484 x 133 mm	
Weight	25 kg	
Protection	IP 20	
Options		
PT100/PT1000		
3,5" HMI		
Load current measurement		

For detailed technical or commercial queries contact – PEG – s.r.o.