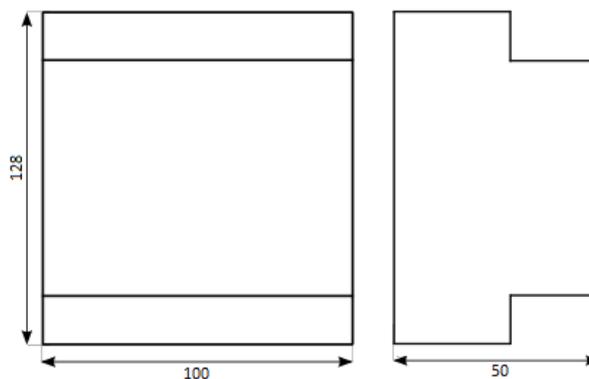


## JS-51-138-240/DIN\_2A-0,5A



### DESCRIPTION

Power supply consisting of a main 230 V AC / 13.8 V DC converter and an auxiliary DC/DC 13.8 V / 24 V converter and a control part that provides monitoring, indication and battery management. The 13.8 V DC output is divided into 2 sections for connecting appliance 1 (terminals TB5) and appliance 2 (terminals TB6). A backup Pb accumulator (terminals TB4) is connected to the source, which directly backs up both outputs 13.8 V DC (appliance 1 and 2) and supplies the inverter with 24VDC. The battery is used for backup, consumption during normal operation is covered by the main inverter. The backup battery voltage is monitored. If the battery voltage during backup is in the range of 13.8 V to 10.8 V (level "1"), the LED and the relay contact indicate the battery status OK (LED is lit, the relay contacts are closed). If the battery voltage drops below 10.2 V DC (level "2"), it will be disconnected. The battery is reconnected after the mains voltage is restored - the main inverter has 13.8V at its output. The input for connecting the battery is treated with a fuse (T5 A). If the battery is discharged and disconnected, it is possible to replace the battery with a charged one and connect it to the output by pressing the START microbutton located on the PCB. The system is resistant to the connection of a completely discharged or damaged battery. In the event of a short circuit in some battery cells, the output voltage will not be correct, but the system will not be destroyed. The 24 V DC output is protected against overvoltage by a transil. This output is equipped with a power limiter and is resistant to short circuits on the output so as not to affect the voltage at the outputs of 13.8 V DC. The 13.8 V DC and 24 V DC output circuits are of the PELV type, after the interruption of the short-circuit bridge between the fuse and the TB3 of the SELV type.

### TECHNICAL PARAMETERS

#### Input Data

Input voltage, DC	230 V AC (180-260 V AC)
Frequency of input	47-63 Hz
Input current, DC max.	500 mA
Input fuse	Yes (internal T 1 AH / 250 V AC)

#### Output Data

Output voltage I.	13,8 V DC (+/-3 %)
Output current I	2 A max.
Output voltage II.	24 V DC (+/-3%)
Output current II.	0,5 A max.
Output power	40 W
Power derating	-2 %/°C from 40 °C to 50 °C ambient temperature.
Short-circuit protection	Yes (auto resume)
Max. residual ripple	<150 mV

**General Data**

Efficiency, max.	approx. 86 %
Max. power loss (nominal load)	approx. 6 W
Impulse withstand	0,5 kV line to line, 0,5 kV line to case
Isolation	3 kV between primary and secondary (double insulation)
Cooling	natural (free air)
IP code	IP00

Weight	600 g
Material of enclosure	plastic holder, Al cover
Dimensions	128 x 100 x 50 mm
Class of protection	I.
Pollution degree	2
RoHS comply	Yes

**Connection data**

	<b>Input TB1</b>	<b>Output TB2, TB4, TB5, TB6</b>	<b>TB3, TB7</b>
Number of terminals	3 (L,N,PE)	2 (+,-)	3(NO, COM, NC)
Wire cross-section			
Solid min/max	0,5/2,5 mm <sup>2</sup>	0,5/2,5 mm <sup>2</sup>	0,5/2,5 mm <sup>2</sup>
Flexible min/max	0,5/2,5 mm <sup>2</sup>	0,5/2,5 mm <sup>2</sup>	0,5/2,5 mm <sup>2</sup>
Tightening torque, min/max	0,5/0,6 Nm	0,5/0,6 Nm	0,5/0,6 Nm

**Signal indication**

Device working	TB2, TB5 and TB6 has LED green
Output voltage	TB3 – connected NO, COM
Battery discharged	TB7 – connected NC, COM, LED blue shines

**Environmental conditions**

Operating temperature	-5°C to 50 °C
Relative humidity (non-condensing)	10% to 90 %RH
Installation altitude	<3000 m above sea level

The power supply is designed for continuous operation, overvoltage category in installation 3 according to EN 61010-1 and is resistant to short-circuit at the output.

**TECHNICAL STANDARDS**

Safety	EN 61204-1 ed.2
EMC	EN 61000-6-1 ed.2 EN 61000-6-3 ed.2

**Limited warranty****5 years****PACKING AND STORAGE**

The product is supplied bulk packaged, user's guide for each piece is included.  
Storage temperature -25 to 70 °C, relative humidity < 80 % (not condensing). It is prohibited to expose the product to mechanical shocks and injurious gases.