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Made in Czech Republic
 02-16/2020 Rev.: 0



PS1M, PS2M PS3M, PS4M

Power supplies



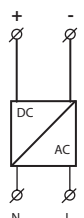
Characteristics

- Rated output voltage 12 or 24V DC with the possibility of regulation.
- High efficiency of up to 90%.
- Low ripple & noise.
- Protection: Over load, Over voltage and Short circuit.
- Continuously adjustable output voltage to adapt to the specific application, e.g. the need to compensate for the voltage drop caused by the length of the line.

Connection

PS1M-15/12V
 (PS1M-15/24V)

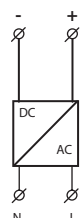
DC 12V / 1.25 A
 (DC 24V / 0.625 A)



AC 100 - 240 V
 50 Hz / 60 Hz

PS2M-24/12V
 (PS2M-30/24V)

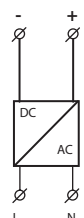
DC 12V / 2 A
 (DC 24V / 1.25 A)



AC 100 - 240 V
 50 Hz / 60 Hz

PS3M-54/12V
 (PS3M-60/24V)

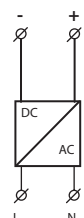
DC 12V / 4.5 A
 (DC 24V / 2.5 A)



AC 100 - 240 V
 50 Hz / 60 Hz

PS4M-85/12V
 (PS4M-92/24V)

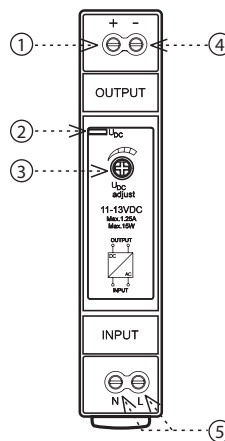
DC 12V / 7.1 A
 (DC 24V / 3.83 A)



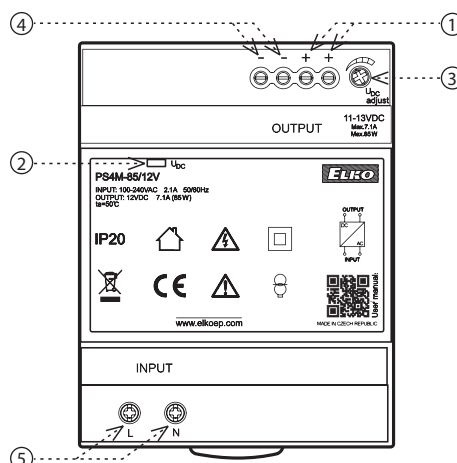
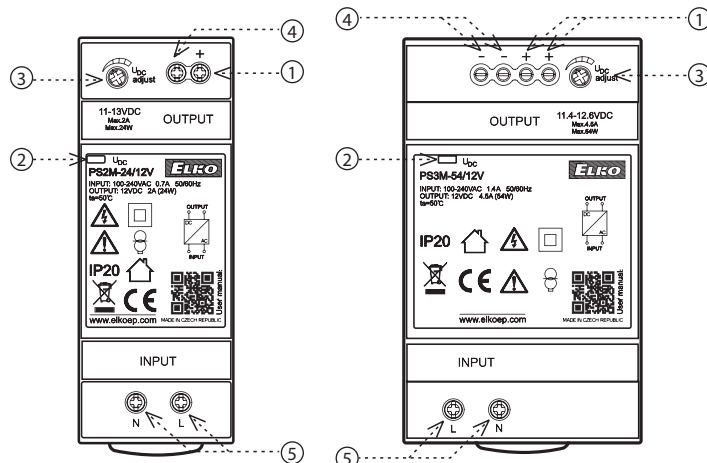
AC 100 - 240 V
 50 Hz / 60 Hz

Power supplies PSxM are overcurrent protection devices, because it turns power supplies off, if the output current exceeds more than 30 % of the rated output of the power supply. Therefore, these units are not intended to supply e.g. halogen lamps, because the starting / inrush current (in the cold state) is approximately ten times the amount of the steady-state operating current. So these power supplies cannot turn on such lamps.

Description



1. Output voltage terminals \oplus
2. Output voltage indication
3. Adjusting the output voltage
4. Output voltage terminals \ominus
5. Supply terminals



Technical parameters

PS1M-15/12V PS1M-15/24V PS2M-24/12V PS2M-30/24V PS3M-54/12V PS3M-60/24V PS4M-85/12V PS4M-92/24V

Input								
Voltage range:	AC 100 - 240 V (50-60 Hz)							
Tolerance:	± 10%							
Efficiency:	85%	86%	88%	89%	88%	90%	88%	90%
Burden without load (max.):	0.3W / 4VA	0.5W / 4VA	0.3W / 8VA	0.4W / 8VA	0.3W / 7VA	0.5W / 6.5VA	0.4W / 11VA	0.1W / 12VA
Burden with full load (max.):	16W / 30VA	17.5W / 32VA	30W / 50VA	33W / 60VA	60W / 95VA	70W / 111VA	95W / 150VA	105W / 160VA
Inrush current:*	max. 25A at 115V AC/60Hz max. 45A at 240V AC/50Hz				max. 30A at 115V AC/60Hz max. 60A at 240V AC/50Hz		max. 35A at 115V AC/60Hz max. 70A at 240V AC/50Hz	
Output								
Rated voltage:	12V DC	24V DC	12V DC	24V DC	12V DC	24V DC	12V DC	24V DC
Vol. setting range:	11 - 13V	23 - 25V	11 - 13V	23 - 25V	11.4 - 12.6V	22.8 - 25.2V	11 - 13V	23 - 25V
Rated current:	1.25A	0.625A	2A	1.25A	4.5A	2.5A	7.1A	3.83A
Rated power:	15W	15W	24W	30W	54W	60W	85.2W	92W
Ripple & Noise:	120mV	150mV	120mV	150mV	120mV	150mV	120mV	150mV
Output indication:	blue LED		blue LED		green LED		blue LED	
Tolerance of output voltage:	5 %							
Overload protection:	from 130 % - 200% rated output power							
Overvoltage protection:	from 110 % - 145% rated output power							
Overcurrent protection:	from 110 % - 180% rated output power							
Short circuit protection:	temporarily disconnecting the output							
Other information								
Operating temperature:	-20°C to +50°C							
Operating humidity:	20% ~ 90% RH non-condensing							
Storage temperature:	-40°C .. +80°C							
Dielectric strength:	3kV AC							
Isolation resistance:	100M Ω / 500V DC / 25°C (77°F) / 70% RH							
Overvoltage category:	III.							
Pollution degree:	2							
Max. cable size:	max. 1x 2.5 mm ² , max. 2x 1.5 mm ² solid wire / with sleeve max. 1x 2,5 mm ²							
Terminal torque:								
input terminals	0.5 Nm		0.3 Nm		0.3 Nm		0.3 Nm	
output terminals	0.5 Nm							
Protection degree:	IP20							
MTBF:	200 000 hours minimum, full load at 25°C ambient temperature							
Mounting:	DIN rail EN 60715							
Dimensions:	90 x 18 x 58 mm		90 x 35 x 58 mm		90 x 52.5 x 58 mm		90 x 70 x 58 mm	
Weight:	78 g		120 g		190 g		270 g	
Standards:	IEC60950-1, UL508, TUV EN61558-2-16							

* the stated values are valid for the full load from the source

Warning

Device is constructed for connection for 1-phase main alternating -current voltage and must be installed according to norms valid in existing state. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who learn this instruction and functions of device. For right device protection should be fronted-end certain element. Before starting installation must be main switch in position "SWITCH OFF" and device should be out of voltage. Don't install device to suppliers surcharge electro-magnetic interference. By right installation of device is provide good air circulate to don't pass maximal operating temperature, in case of higher ambient temperature and permanent working. For installation and setting use screw-driver cca 2 mm. The device is full-electronic - installation should be effected according to this. Function without problems is too dependent on previous type of transportation, storing and manipulation. In case of any vestige of destruction, deformation, non-function or missing part, don't install and made claim to seller. Product may be, after passing operating time, disassembled, recycled or puted on protected tip.