



PSACH01246EKO

v.1.0

PSACH 24VAC/6A/1x6A

AC power supply for 1 rotating camera, ABS enclosure

EN

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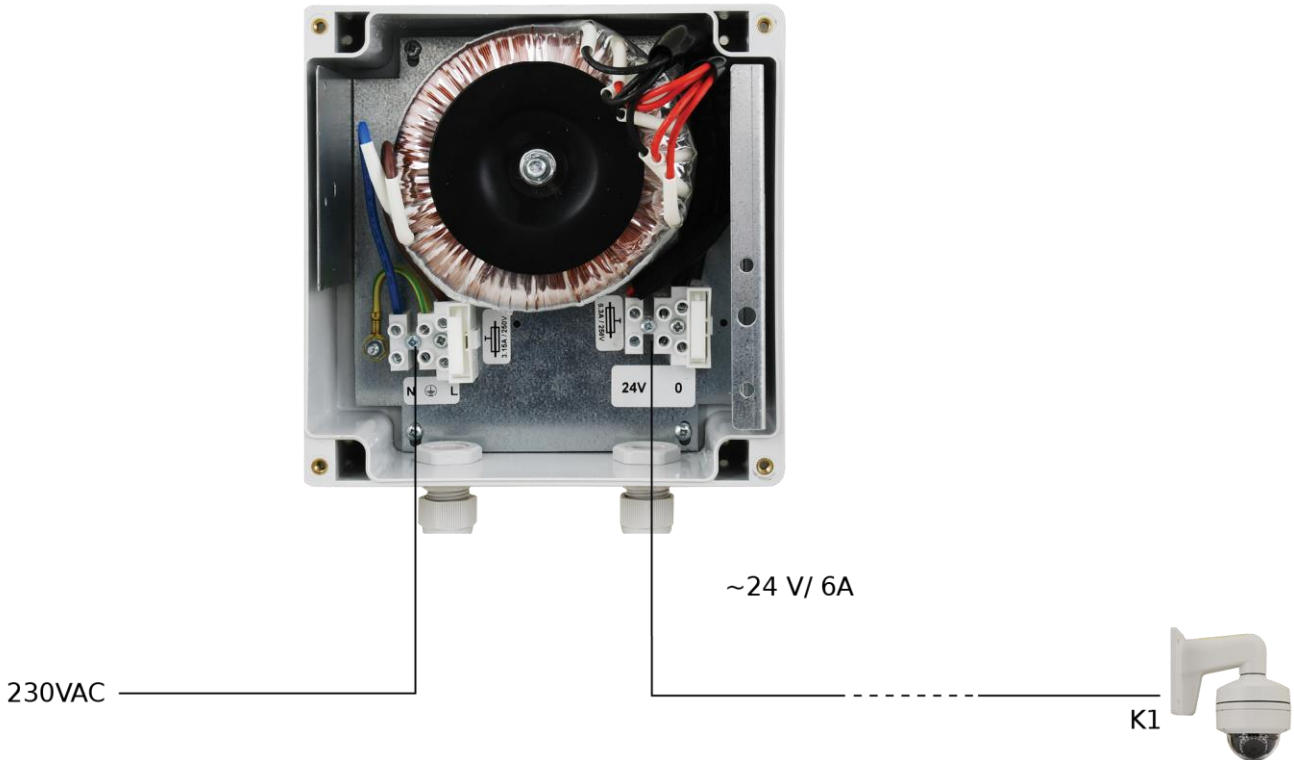
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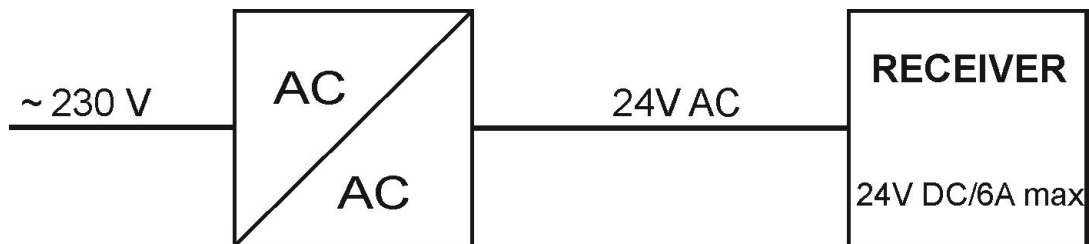
Features:

- ~24 V /6 A power output for powering camera
- power voltage ~230 V
- protections:
 - SCP short-circuit protection
 - OLP overload protection
 - OHP overheat protection
- IP 65 ABS, hermetic enclosure
- warranty – 2 year from the production date

Sample power supply unit for rotating camera supplied with AC voltage.



Schematic diagram of a power supply.



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1. Technical description.

1.1. General description.

The AC/AC PSU intended for supplying devices requiring voltage AC of **24 V** and total capacity of **6 A**. It features protections: short-circuit (SCP), overload (OLP), transformer overheating (OHP). The PSU is housed in an ABS enclosure.

1.2. Block diagram.

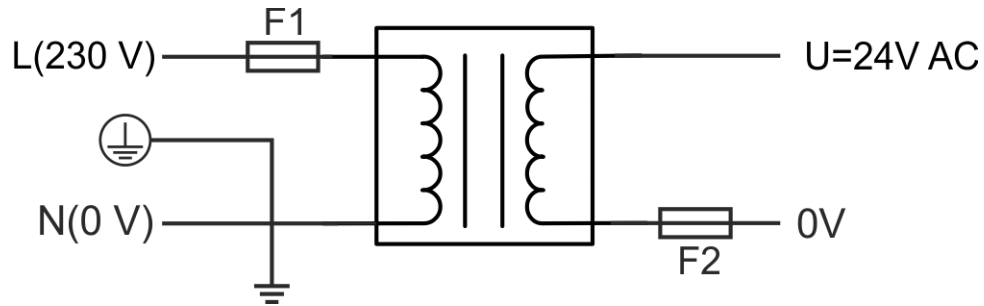


Fig.1. Block diagram of the PSU.

1.3. Description of PSU components.

Tab.1. Elements of the power supply unit.

Element no. [Fig. 2]	Description
[1]	Isolation transformer
[2]	AUX: 24 V-0 V secondary voltage connector, devices power supply (SEC)
[3]	F2 fuse in the secondary voltage circuit
[4]	F1 fuse in the power supply circuit (230 V, PRI)
[5]	L-N connector 230 V, protection connector

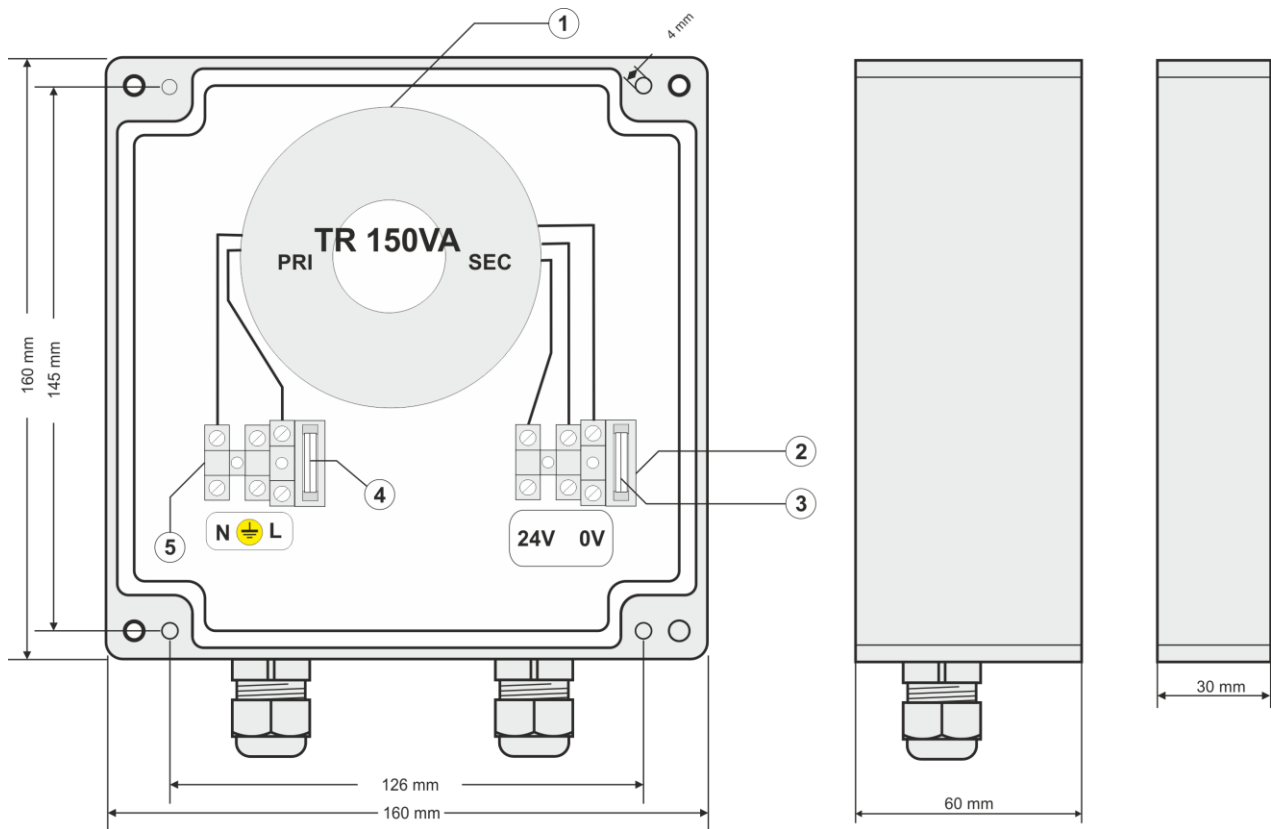
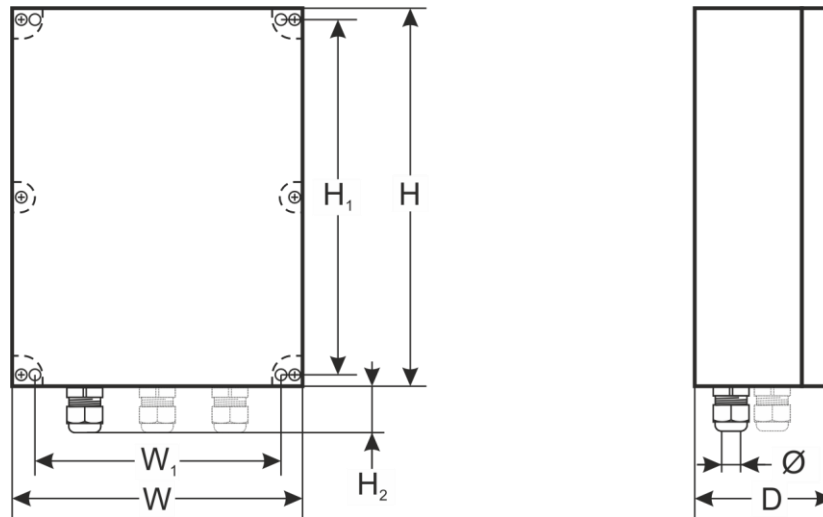


Fig.2. The view of the PSU.



1.4 Specifications:

- electrical specifications (tab.2)
- mechanical specifications (tab.3)
- operation safety (tab.4)
- operating specifications (tab.5)

Electrical specifications (tab. 2).

Mains supply	~230 V
Current consumption	0,75 A
Power frequency	50 Hz
Power of the S PSU	150 VA max.
Output voltage	U1: ~23-28 V (100% load ÷ 0% load)
Output current	6 A
Short-circuit protection SCP	1x T 6,3 A glass fuse - glass fuse damage requires fuse-element replacement
Overload protection OLP	circuit 24 V: 1x T 6,3 A circuit 230 V: 1x T 3,15 A
Overheat protection OHP	inside transformer
F1 fuse	T 3,15 A/250 V
F2 fuse	T 6,3 A/250 V

Mechanical specifications (tab. 3).

External dimensions of the PSU	W=160, H=160, D=90 [+/- 2 mm]
Mounting dimensions PSU	W ₁ =126, H ₁ =145 [+/- 2 mm]
Height glands	H ₂ =25 [mm]
The number of cable glands/ Ø cables	2 pcs / 4÷8mm
Net/gross weight	2,4/2,5 kg
Enclosure	ABS, IP65, light grey
Closing	Cheese screw x 4 (at the front)
Connectors	Power supply: Ø0,63÷2,50 (AWG 22-10) Outputs: Ø0,63÷2,50 (AWG 22-10)
Notes	The enclosure has a removable mounting board with the PSU systems.

Operation safety (tab.4).

Protection class EN 60950-1:2007	I (first)
Protection grade EN 60529: 2002 (U)	IP65
Electrical strength of insulation: - between input (network) circuit and output circuits of the PSU - between input circuit and protection circuit - between output circuit and protection circuit	3000 V AC min. 1500 V AC min. 500 V AC min.
Insulation resistance: - between input circuit and output or protection circuit	100 MΩ, 500 V DC

Operating specifications (tab.5).

Operating temperature	-25°C...+40°C
Storage temperature	-25°C...+60°C
Relative humidity	10%...90% without condensation
Vibrations during operation	unacceptable
Impulse waves during operation	unacceptable
Direct insolation	unacceptable
Vibrations and impulse waves during transport	PN-83/T-42106

2. Installation.**2.1 Requirements**

The AC/AC power supply is to be mounted by a qualified installer, holding relevant permits and licenses (applicable and required for a given country) for 230 V interference and low-voltage installations. The unit should be mounted in confined spaces, in accordance with the 2nd environmental class, with normal relative humidity (RH=90% maximum, without condensation) and temperature from -25°C to +40°C (table 5). The PSU shall work in a vertical or horizontal position.

Before mounting the PSU module, perform a load balance. During normal operation, total current drawn by the receivers cannot exceed **I=6 A**.

As the PSU is designed for a continuous operation and is not equipped with a power-switch, therefore an appropriate overload protection shall be guaranteed in the power supply circuit. Moreover, the user shall be informed about the method of unplugging (usually through assigning an appropriate fuse in the fuse-box). The electrical system shall follow valid standards and regulations.

2.2 Installation procedure.

Before installation, make sure that the voltage in the 230 V power-supply circuit is cut off. To switch power off, use an external switch, in which the distance between the contacts of all poles in the disconnection state is not less than 3 mm.

1. Mount the PSU in a selected location and connect the wires.
2. Connect the power cables to the L-N terminals.



The shock protection circuit shall be performed with a particular care, i.e. the yellow and green wire coat of the power cable shall stick to one side of the terminal marked with the '⊥' earth symbol in the PSU enclosure. Operation of the power supply without a properly made and fully operational shock protection circuit is UNACCEPTABLE! It can result in device damage or an electric shock.

3. Connect the ground wire to the terminal marked by the earth symbol "⊥". Use a three-core cable (with a yellow and green protection wire ⊥) to make the connection. Lead the cables to the appropriate terminals of the connection board through the bushing.
4. Connect the conductors of consumers to the terminals 24 V – 0 V and/or the terminal box on the power-supply unit (the balance of the power-supply load shall be performed).
5. Restore the mains power ~230 V.
6. Once the tests and control operation have been completed, close the PSU.

3. Operation and use.**3.1 Overload or short circuit at the PSU output**

The 24 V – 0 V PSU outputs are protected against a short circuit with glass fuse. If the PSU is loaded with current exceeding 6 A (110% for ÷ 150% of S power), there occurs the F2 and/or F1 fuse damage in the 230 V circuit. In case of a failure, replace the fuse of the same parameters.

3.2 Maintenance.

Any and all maintenance operations may be performed following the disconnection of the PSU from the power supply network. The PSU does not require performing any specific maintenance measures. However, in case of a significant dust level, clean the interior with compressed air. In case of a fuse replacement, use one of the same parameters.



WEEE MARK

According to the EU WEE Directive – It is required not to dispose of electric or electronic waste as unsorted municipal waste and to collect such WEEE separately.



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