

Light barrier amplifier

PSU-1200S

Features

- Operation voltage 95 ... 265 V AC / 47 ... 63Hz
- Output voltage 15 / 24 V DC
- Output power 10 W, high efficiency >74%
- Overload protection, short circuit proof
- Overtemperature protection
- External fuse is not necessary
- Switching on current limiter
- Relay output, change over 230 V AC / 5 A, controllable with NPN- or PNP-input
- Relay switching mode light / dark
- Adjustable switching-on and switching-off delay
- Mounting for DIN rail EN 60715

Safety Instructions



Warning!

The power supply unit PSU-... are not safety systems and should not be used as such systems.
The devices are not to be used for applications, where personal safety is dependent on their function.

Short Description

The power supply, PSU-1200S supplies direct current devices with maximum power consumption up to 10 W. Modern and extreme energy-saving switching power supply technology enable a high efficiency of more than 74%.

The device has a wide range alternating voltage input from 95 V AC up to 265 V AC. No fuse is necessary on the input side and the switching-on current limiter prevents overloading during switching-on. Using a safety transformer guarantees a galvanic separation from the operation voltage (EN 61558).

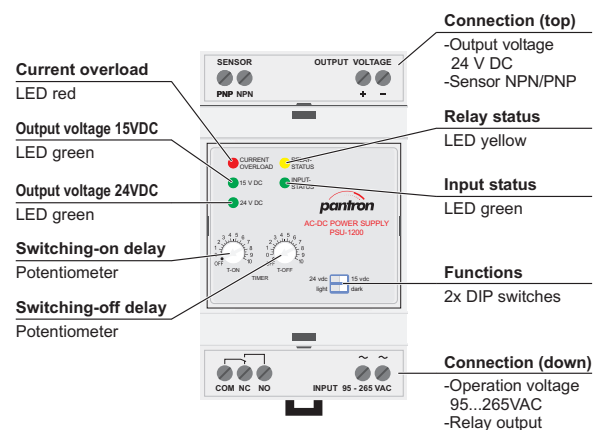
The short circuit proof, overload, and overtemperature protected voltage output supply a selected, constant and stabilized direct current voltage of 15 V DC / 650 mA or 24 V DC / 450 mA.

A relay output can be switched with a control input which works with a NPN or PNP-behaviour. The relay function (light / dark) can be select with a Dip-switch on the front side. If required, the relay switching-on and switching-off delay can be adjusted up to 10 seconds. All important information, like adjusted output voltage, input and output status as well the overloading of the voltage output, can be read on the front panel.

The case has the standard dimensions according to DIN 43880. Easy and quick mounting on the standard DIN rail is possible (EN 60715).



Device Overview



Ordering Table

Type	Order code
Power supply unit 95...265 V AC	PSU-1200S/95-265VAC
Accessories	
Protective enclosure	PanBox 1x1

Light barrier amplifier

PSU-1200S

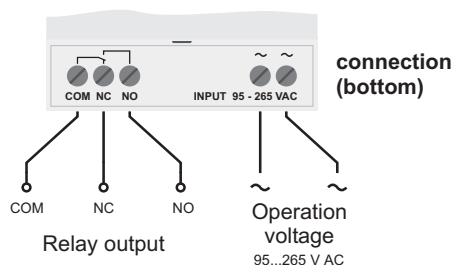
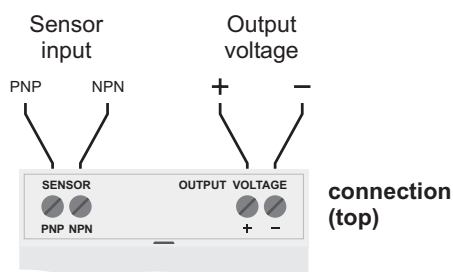
Technical Data (at 20 °C / 68 °F)

Operating voltage	95 ... 265 V AC
Power consumption	max. 15 VA
Current consumption:	230 V AC < 150 mA 115 V AC < 300 mA
Power loss (max.) ¹ (EN 61439)	230 V AC: 3,7 W 115 V AC: 2,6 W
External fuse	not necessary
Overvoltage protection (IN)	< 2,0 kV
Displays:	
Power on	2 x LED green
Current limit	LED red
Output status	LED yellow
Input status	LED green
Operation mode	light / dark
Time delay	0 ... 10 s
Parallel connection	yes
Series connection	yes
Housing material	NORYL (self-extinguishing) UL 94 V-0
Housing colour	grey RAL 7035
Protection class	IP20
Operation temperature	-25 °C ... 50 °C (-13 °F ... 122 °F)
Storage temperature	-40 °C ... 80 °C (-40 °F ... 176 °F)

Output voltage	24 V DC / 15 V DC, selectable
Voltage tolerance	± 5%
Output current:	24 V DC 450 mA 15 V DC 650 mA
Remaining ripple	< 60 mV _{SS} (20 MHz bandwidth)
Buffer time:	230 V AC with I _{max} > 50 ms 115 V AC with I _{max} > 16 ms
Input	nnp / npn
switching level	nnp: 20% of the output voltage pnp: 80% of the output voltage
Relay output	1 changeover
max. load	5 A / 230 V AC (24 V DC)
Reaction time	8 ms
Overvoltage protection (OUT)	< 1,3 x output voltage
Emission	EN 50081-1: EN 55011-1A
Immunity	EN 50082-1
Isolation test voltage according to EN 60950	IN - OUT 2,5 kV AC
MTBF (IEC 61709)	2,6·10 ⁶ h (T _a = 40 °C / 104 °F)
Mounting	DIN rail EN 60715
Electrical connection	screw terminal 0,14 - 2,5 mm ²

¹ Without load at the output

Connection Diagram



Dimensions (in mm)

