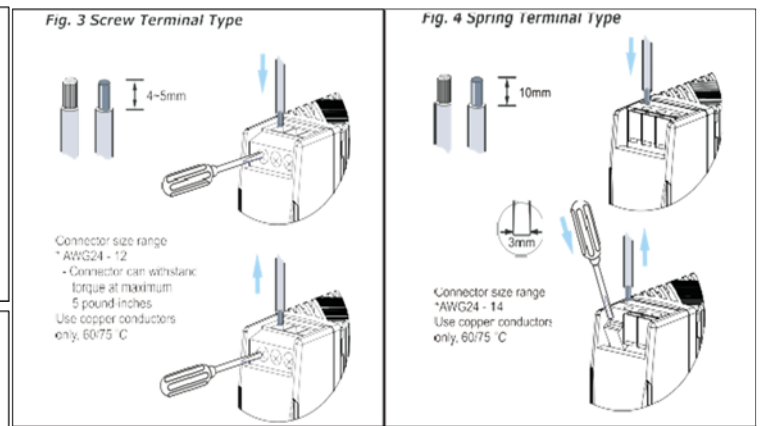
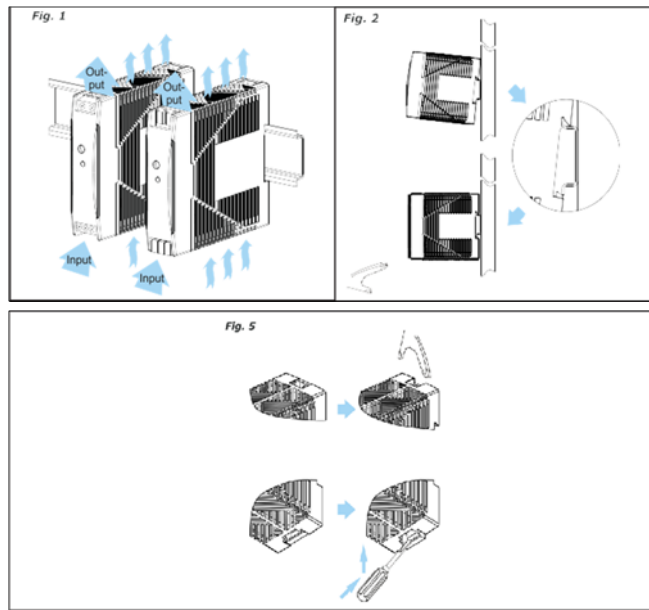


# PSS 30W Medium Switching Power Supply DIN Rail Mountain

## Technical data installation and operation



### Safety and Warning Notes

#### Read instructions!

Before working with this unit, read these instructions carefully and completely. Make sure that you have understood all the information!

#### Disconnect the system from the supply network

Before any installation, maintenance or modification work: Disconnect your system from the supply network. Ensure that cannot be re-connected inadvertently!

#### Before start of operation

##### Ensure appropriate installation

Warning! Improper installation / operation impair safety and result in operational difficulties or complete failure of the unit. The unit must be installed and put into service appropriately by qualified personnel. Compliance with the relevant regulations must be ensured. Before operation is begun the following conditions must be ensured, in particular:

- Connection to main power supply in compliance with VDE0100 and EN50178.
- With stranded wires: all strands must be secured in the terminal blocks (potential danger of short circuit).
- Unit and power supply cables must be properly fused; if necessary a manually controlled disconnecting element must be used to disengage from supply mains.
- The non-fused earth conductor must be connected to the ground terminal (protection class 1).
- All output lines must be rated for the power supply output current and must be connected with the correct polarity.
- Sufficient air-cooling must be ensured.
- Use in a pollution degree 2 environment

#### In operation: No modifications!

As long as the unit is in operation: do not modify the installation! The same applies also to the secondary side. Risk of electric arcs and electric shock (fatal)!

**Only (dis) connect plug connectors when the power is off!**

#### Convection cooling

Do not cover any ventilation holes! Leave sufficient space around the unit for cooling! See supplementary sheet "Technical Data" and Fig. 1

#### Warning: High voltage! Store energy!

The unit contains unprotected conductors carrying a lethal high voltage, and components storing substantial amounts of energy. Improper handling may result in an electric shock or serious burn!

- The unit must not be opened except appropriately trained personnel!
- Do not introduce any object into the unit!
- Keep away from fire and water!

### Installation

#### Application

This unit is a primary switched-mode power supply designed for use in panel-board installations or building-in applications where access to the supply is restricted (shock-hazard protection). It must only be installed and put into service appropriately by qualified personnel.

#### Mounting

Permissible mounting position: see Fig. 1 keep free ventilation hole, leave space for cooling! Recommended to have 25mm free space at all sides for ventilation / cooling: see supplementary sheet "Technical Data".

#### Snap on support rail (See Fig. 2)

- Tilt the unit slightly rearwards.
- Fit the unit over top hat rail.
- Slide it downward until it hits the stop.
- Press against the bottom front side for locking.
- Shake the unit slightly to check the locking action.

#### Front elements

##### Operation indicator

The green LED lights up while the PSU working properly.

##### DC output low indicator

The red LED lights up while the output voltage is too low.

##### Potentiometer

Setting the output voltage.

#### Connection

- Data for permitted loads, cable cross-sections and stripping: see enclosed leaflet "Technical Data" (See Fig. 3). Use only commercial cables designed for the indicated voltage and current values!
- With flexible cables: make sure that all stranded cable are secured in the terminal. Ensure proper polarity at output terminals!

#### Grounding

- **Do not operate without PE connection!** To comply with EMC and safety standards (CE mark, approvals), the unit must only be operated if the PE terminal is connected to the non-fused earth conductor.
- Secondary side is not earthed; if necessary the or terminal can be earthed optionally.

#### Internal fuse

The internal input fuse serves to protect the unit and must not be replaced by the user. In case of an internal defect, the unit must be returned to the manufacturer for safety reasons.

#### Removal

Removal from DIN Rail. Insert a flat screwdriver into the slot in the clamp. Pull down.

### Technical Data

Input	
Voltage range	Ta min ... Ta max: AC in 85 ~ 264Vac
Frequency range	47 - 63Hz
Efficiency (typical)	86% for 24Vout
Rated input current	750mA
Inrush current (typ.)	<20A 115Vac <40A 230Vac
Output	
DC output	24Vdc
Rated current	1.25A for 24Vdc
Ripple & noise	100mV
Voltage Adj	22.5V ~ 28.5V for 24Vout
Turn on time	<1000ms
Hold up time	>20ms
Temperature coefficient	± 0.03%/°C
General	
Derating	+51 ~ +71°C
Storage Temperature	-40 ~ +85°C
Relative Humidity	20 ~ 95% RH
Dimension	L90 x W22.5 x D100 [mm]
Weight	140g
Ambient temperature	-25°C to +71°C
Cooling	Free air convection
Parallel function	No
Control & protection	
Input Internal Fuse	T2A / 250 Vac
Output Short Circuit	Hiccup mode
Output Over Load	Min 140%

### Pin Assignment and Front Controls

PIN NO.	Designation	Description
1	V+	Positive output terminal
2	V-	Negative output terminal
3	⏚	Ground this terminal to minimize high frequency emissions
4	N	Input terminals (neutral conductor, no polarity with DC input)
5	L	Input terminals (phase conductor, no polarity with DC input)
	DC ON	Operation indicator LED
	Vout Adj.	Trimmer-potentiometer for out adjustment

