

INSTALLATION SHEET

⚠ Before operation, ensure you have read and understood all the information and instructions in this leaflet.

- Disconnect the system from the supply network before undertaking any installation, maintenance, modification or removal.
- The unit must be installed only by qualified personnel.
As a minimum, the following conditions must be met:
- Connection to the mains supply must be compliant with VDE0100 and EN50178.
- All wires must be properly secured in terminal blocks.
- Unit and power supply wires must be properly fused.
- All output wires must be correctly rated and connected with the correct polarity.
- Sufficient air cooling must be ensured. Do not cover ventilation holes – leave sufficient space for cooling around the unit.
- No modifications should be made while the unit is in operation.
- Only disconnect when the power is off.
- This unit contains unprotected conductors carrying a lethally high voltage. Improper usage or handling may result in electric shock or serious burns.
- Do not introduce any object into the unit.
- Keep away from fire and water.
- Refer to product datasheet for more technical parameters.

Installation

The PSU 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. It must only be installed and put into service by qualified personnel.

Mounting

See Step 1 & 2. Ventilation holes must be kept clear – recommended minimum clearance is 25mm on all sides. To mount, tilt the top of the unit backwards and clip to the top edge of the rail, tilt the bottom of the unit backwards and click into place.

Removal

Before removal switch off mains power and disconnect rack from the supply network. Push down the slider at the rear (see Step 1), tilt front of unit forwards and up.

Connection

Ensure that wires used are suitable for the load – see technical data below. Ensure that wires are correctly stripped and fitted – see Step 3 overleaf. Ensure correct polarity at output terminals.

Internal Fuse

The internal fuse protects the unit and is not user-replaceable. In the event of an internal failure, the unit should be returned to Farnell.

Voltage Adjustment

The output voltage can be adjusted by partially turning the potentiometer as indicated on the front of the power supply. The voltage range is indicated in the specification table below.

Input

Input Voltage	• 85~277VAC (120~390VDC)
Input Frequency	• 47~63 Hz
Input Current	• 5/2.5A
Inrush Current	• 15/35A
Leakage Current	• <1.5mA
Power Factor	• 0.99/0.97

Output

Output Voltage	• See table
Output Voltage Range	• See table
Minimum Capacitive Load	• See table
Hold Up Time	• 16ms min, 22ms max.
Line Regulation	• ± 0.55% typ.
Load Regulation	• ± 0.5% typ.
Ripple & Noise	• See table
Overvoltage Protection	• Hiccup, self-recovery
DC OK Signal	• 30VDC/1A Max.
Short Circuit Protection	• Constant current works, self-recovery

General

Efficiency	• See table
Isolation	• 4000 VAC Input to Output
Signal	• DC ON indicator LED Green
DIN Rail	• Compatible with TS35/7.5 or TS35/15

Environmental

Operating Temperature	• -40°C to +85°C;
Cooling	• Free air convection
Operating Humidity	• 95% RH max, non-condensing
Storage Temperature	• -40°C to +85°C
Shock & Vibration	• Tested to GB/T2423.10-2008 and GB-T2423.22-2002

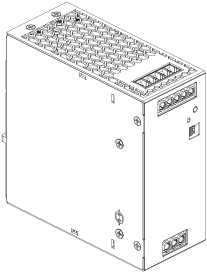
EMC & Safety

Emissions	• EN55032, Class B conducted & radiated
ESD Immunity	• EN61000-4-2, Criteria A
Radiated Immunity	• EN61000-4-3, Criteria A
EFT/Burst	• EN61000-4-4, Criteria A
Surge	• EN61000-4-5, Criteria A
Conducted Immunity	• EN61000-4-6, Criteria A
Dips & Interruptions	• EN61000-4-11
Safety Approvals	• UKCA/EN 62368-1 UL61010-1

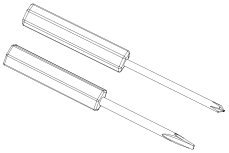


Output Voltage	Output Power	Output Voltage Range	Output Current	Ripple & Noise pk-pk	Typical Efficiency	Maximum Capacitive Load	Model Number
24V	480W	24-28V	20.0A	100mV	95.0%	100000µF	MPIMF480-23B24
48V	480W	48-56V	10.0A	150mV	95.5%	25000µF	MPIMF480-23B48

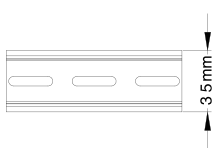
Materials required in the installation		
1	Product	1 PC
2	Phillips screwdriver Slotted screwdriver	1 PC
3	TS35/7.5 or TS35/15	1 PC
4	16–10AWG wire	/ PCS
The content is for reference only. Regarding the actual wire diameter and tightening torque, refer to the dimensional drawing.		



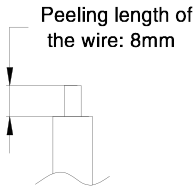
Product



Phillips screwdriver
Slotted screwdriver
Diameter of the cutting
Diameter: 3mm



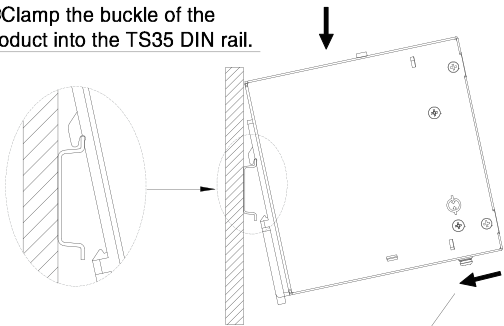
TS35/7.5 or TS35/15



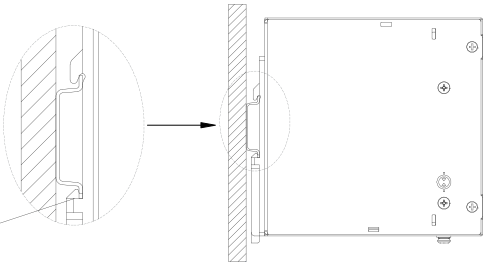
16–10AWG wire

Installation Steps ①–②

①Clamp the buckle of the product into the TS35 DIN rail.

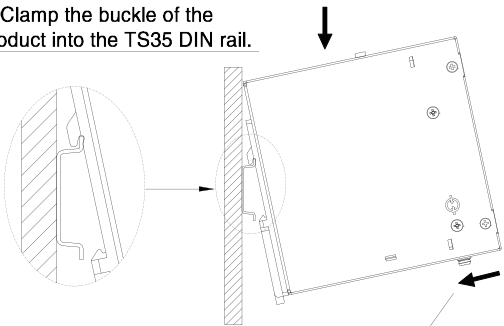


②Push the product vertically towards the TS35 DIN rail until hearing the sound of the buckle snapping into it.

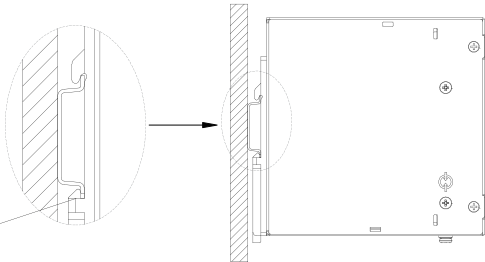


Disassembly Steps ③–④

①Clamp the buckle of the product into the TS35 DIN rail.

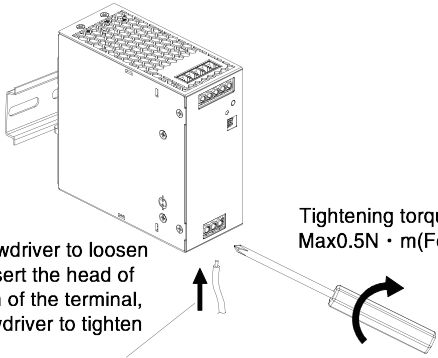


②Push the product vertically towards the TS35 DIN rail until hearing the sound of the buckle snapping into it.



Wiring / Unwiring Steps ⑤–⑥

⑤Use the Phillips screwdriver to loosen the terminal screws, insert the head of the wire into the bottom of the terminal, and then turn the screwdriver to tighten the terminal screws.



Tightening torque:
Max0.5N · m(For reference);

⑥Use the Phillips screwdriver to loosen the terminal screws and pull the wires out of the terminal holes.

