

INSTRUCTIONS

1) Description: DIN rail mountable primary switched-mode power supply with 90...264Vac - 110...345Vdc input, suitable for single phase main line and DC line.

2) Installation: use DIN-rails according to EN 60715. Installation should be made vertically (see Fig. 7). For better device stability fix the rail to the wall close to the point where the device is to be mounted. In order to guarantee sufficient convection, we recommend observing a minimum distance to other modules (see Fig.6).

3) Connections: the device is equipped with screw terminals header. To avoid sparks, do not connect or disconnect the connectors before having previously turned-off input power and waited for internal capacitors discharge (minimum 1 minute).
Use appropriate copper cables of indicated cross section, designed for an operating temperature of:
60°C for ambient up to 45°C
75°C for ambient up to 60°C
90°C for ambient up to 70°C.
Strip the connecting ends of the wires according to the indication as shown below and ensure that all strands of a stranded wire enter the terminal connection (Fig.2)

4) Input protection: the device input is provided with varistors against overvoltage. Input is provided with internal fuse 2AT/250Vac, thus an external short circuit/overcurrent protection is recommended by the end user (see Fig.3).

Surge protection: it is strongly recommended to provide external surge arresters according to local regulations.

5) AC input connection: the device can be connected to single-phase AC lines with U_{lin} 120...240 Vac (see Fig.4).

6) DC input connection: connect L terminal to + pole, N terminal to - pole. Rated voltage 110...345Vdc.
The device is also suitable for photovoltaic or wind turbine applications.

7) Output connection: The device is suitable for SELV and PELV circuitry.
Output voltage can be adjusted with a potentiometer (see Fig.1).
Check output voltage before connecting the power supply to the load. With output voltage set to the maximum value, the continuous current must not exceed the nominal power.

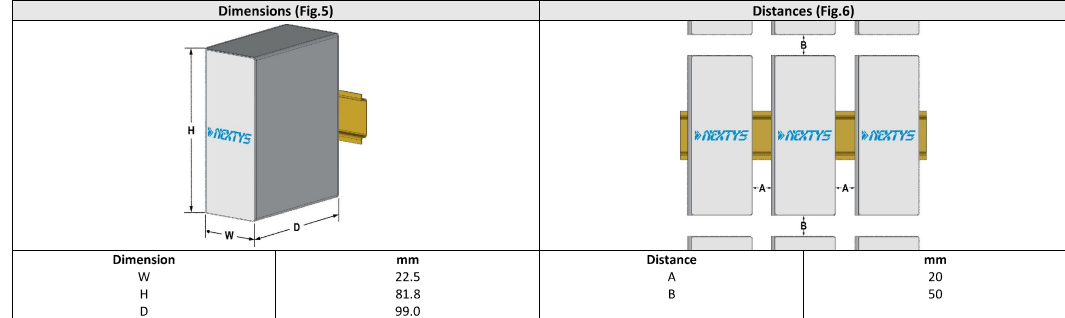
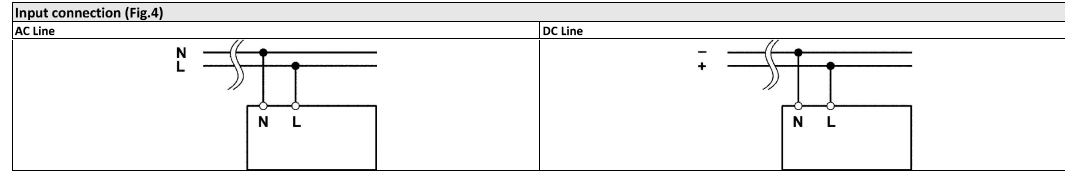
8) Parallel connection for redundancy:
For redundant connection, an external isolating diode must be used.

9) Output protection: the device is protected against overload (OL) / short circuit (SC) / overvoltage (OV) /
OL and SC: are controlled by a hiccup auto-reset protection with the following behaviour:
OL behaviour: Max. OL = In x 1.3 with constant output voltage. If the current is ≥ In x 1.3 the unit enters the OL protection and starts an ON/OFF cycle (hiccup).
SC behaviour: the device supplies the indicated short circuit peak current for 60 ms if the output current exceeds In x 1.3 the device enters into a controlled ON/OFF cycles (hiccup mode). The output voltage drops to a voltage value depending on the impedance of the failed load circuit.
Output OV circuit protection: the output is protected against potential OV due to internal malfunction or coming from the load for U_{out} ≥ U_{nom} x 1.2 - 1.3, depending on the model.

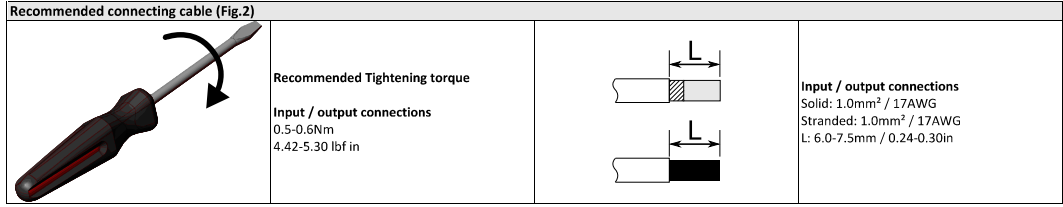
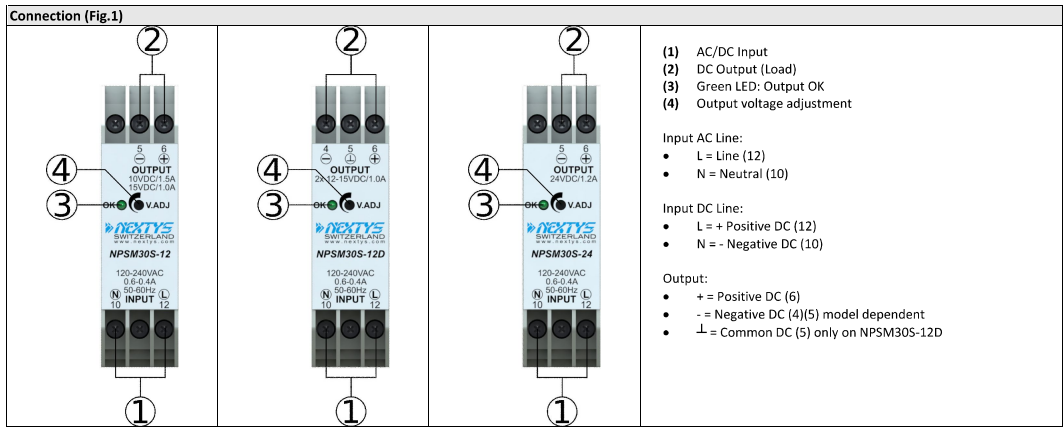
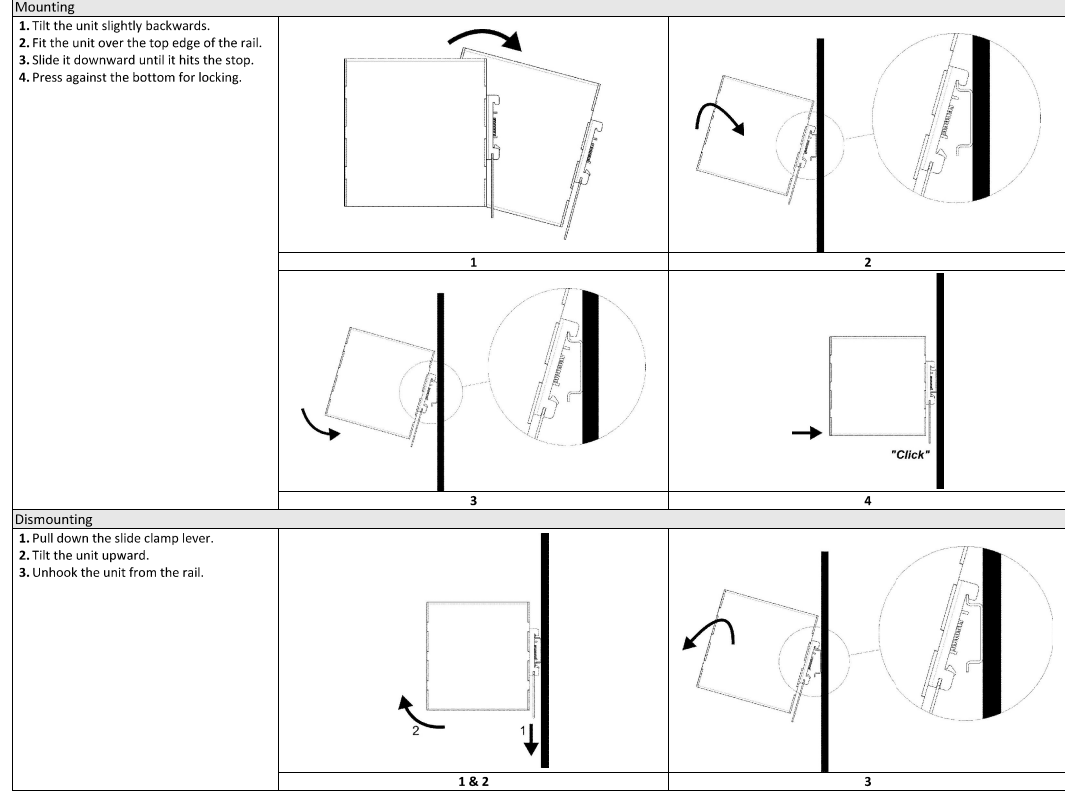
10) Feeding DC motors: it is possible to feed DC motors considering that when a motor starts-up under effort its consumption is much higher than the nominal current and it can trigger the overcurrent protection.
NOTE: motors can generate high conducted noise on the DC line. Therefore it is not recommended to feed on the same line motors and equipment sensitive to noise.

11) Warranty: power supplies are guaranteed free from factory defects for the time specified in the "Sales Conditions".
Failures caused by misuse, external and/or abnormal events (i.e. overvoltage, over temperatures) or non-respect of above parameters and standards, are not covered by warranty. Opening the housing of the product makes warranty to be no longer valid.

In order to improve the products Nextys SA reserves the right to change product specifications, ratings and data without previous advice.



Mounting / Dismounting Instructions (Fig.7)
For DIN rail mounting according to IEC 60715 TH35-7.5(-15). Mounting as shown in figure, with input terminals on lower side, with suitable cooling and maintaining a proper distance between adjacent devices as specified in the User manual.



Input protection (Fig.3)
Fuse 6AT or MCB6A C curve
For USA and Canada, use the fuse type closest to the European equivalent type.

Surge Protection: it is strongly recommended to provide external surge arresters (SPD) according to local regulations.