

# Installation Manual

● **Type : NDR DIN rail power supply ( Series : NDR-75, 120, 240, 480 )**

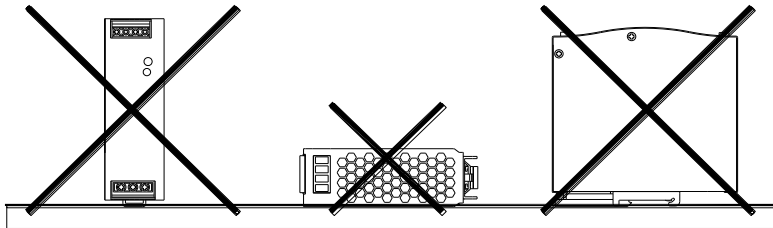
NDR-75-12	INPUT: 100-240VAC 1.6A 50/60Hz	OUTPUT: 12V 6.3A
NDR-75-24	INPUT: 100-240VAC 1.6A 50/60Hz	OUTPUT: 24V 3.2A
NDR-75-48	INPUT: 100-240VAC 1.6A 50/60Hz	OUTPUT: 24V 1.6A
NDR-120-12	INPUT: 100-240VAC 2.6A 50/60Hz	OUTPUT: 12V 10A
NDR-120-24	INPUT: 100-240VAC 2.6A 50/60Hz	OUTPUT: 24V 5A
NDR-120-48	INPUT: 100-240VAC 2.6A 50/60Hz	OUTPUT: 48V 2.5A
NDR-240-24	INPUT: 100-240VAC 2.8A 50/60Hz	OUTPUT: 24V 10A
NDR-240-48	INPUT: 100-240VAC 2.8A 50/60Hz	OUTPUT: 48V 5A
NDR-480-24	INPUT: 100-240VAC 5.3A 50/60Hz	OUTPUT: 24V 20A
NDR-480-48	INPUT: 100-240VAC 5.3A 50/60Hz	OUTPUT: 48V 10A

● **Introduction**

NDR is a DIN rail power supply series with an economical price and slim design. Like other Mean Well's DIN series, they can be mounted on a TS35 Standard DIN rail.

● **Installation**

- ( 1 ) Always allow good ventilation clearances, 5mm left and right, 40mm above and 20mm below, around the unit in use to prevent it from overheating. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.
- ( 2 ) The appropriate mounting orientation for the unit is vertical, the input terminals at the bottom and output on the top. Mounting orientations other than that, such as upside down, horizontal, or table-top mounting, is not allowed.



- ( 3 ) Use copper wire only, and recommended wires are shown as below.

AWG	18	16	14	12
Rated Current of Equipment (Amp)	7A	10A	15A	20A
Cross-section of Lead(mm <sup>2</sup> )	0.8	1.3	2.1	3.3
Note: Current each wire carries should be de-rated to 80% of the current suggested above when using 5 or more wires connected to the unit.				

Make sure that all strands of each stranded wire enter the terminal connection and the screw terminals are securely fixed to prevent poor contact. If the power supply possesses multi-output terminals, please make sure each contact is connected to wires to prevent too much current stress on a single contact.

- ( 4 ) Use wires that can withstand temperatures of at least 80°C, such as UL1007.
- ( 5 ) Recommended wire strapping length is 5mm (0.197").
- ( 6 ) Recommended screwdriver is 3mm, slotted type.

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(7) The recommended torque setting for terminals is shown as below.

Model	I/P	O/P
NDR-75	6.9 kgf-cm (6 Lb-in)	6.9 kgf-cm (6 Lb-in)
NDR-120	10.35 kgf-cm (9 Lb-in)	10.35 kgf-cm (9 Lb-in)
NDR-240	10.35 kgf-cm (9 Lb-in)	10.35 kgf-cm (9 Lb-in)
NDR-480	10.35 kgf-cm (9 Lb-in)	10.35 kgf-cm (9 Lb-in)

(8) Suggested fuse and maximum number of the SDR PSUs that can be connected to a circuit breaker at 230V are shown as below.

Model	Fuse	Circuit breaker	
		C16	D16
NDR-75	T3.15A/L250V	6	13
NDR-120	T4A/L250V	5	10
NDR-240	T5A/L250V	4	10
NDR-480	T8A/L250V	3	5

(9) Mounting Instruction :

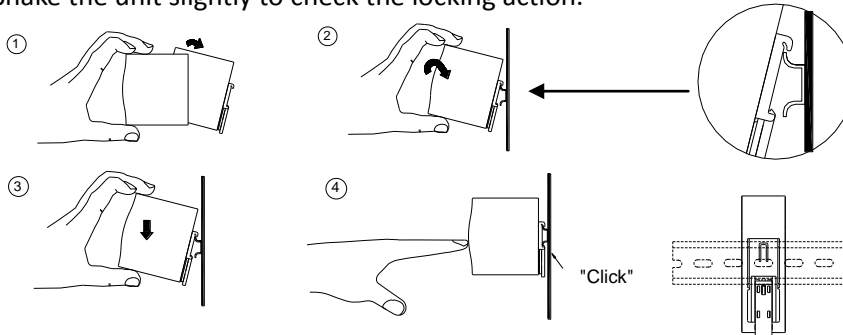
Mount as shown in figure only, with input terminals down, or else sufficient cooling will not be possible.

Admissible DIN rail : TS35/7.5 or TS35/15

For rail fastening :



- (a) Tilt the unit slightly rearwards.
- (b) Fit the unit over top hat rail.
- (c) Slide it downward until it hits the stop.
- (d) Press against the bottom for locking.
- (e) Shake the unit slightly to check the locking action.



(11) For other information about the products, please refer to [www.meanwell.com](http://www.meanwell.com) for details.

## ● Warning / Caution !!

- (1) Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself!
- (2) Risk of electric arcs and electric shock (danger to life). Connecting both the primary and the secondary sides together is not allowed.
- (3) Risk of burn hazard. Do not touch the unit in operation and shortly after disconnection!
- (4) Risk of fire and short circuit. The openings should be protected from foreign objects or dripping liquids.
- (5) Only install the unit in a pollution degree 2 environment (Note.1).
- (6) Please do not install the unit in places with high moisture or near the water.



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- (7) The maximum operating temperature is 45°C for NDR/EDR-75-12; 50°C for NDR/EDR-75-24/48, NDR/EDR-120-12/24/48, NDR-240-24/48, NDR-480-24/48, please do not install the unit in places with high ambient temperature or near fire source.
- (8) The FG (⊕) must be connected to PE (Protective Earth).
- (9) Output current and output wattage must not exceed the rated value on its specification.
- (10) Disconnect system from supply voltage:  
Before commencing any installation, maintenance or modification work: Disconnect your system from supply voltage. Make sure that inadvertent connection in circuit will be impossible!
- (11) For continued protection against risk of fire, replace only with same type and rating of fuse.  
Pour ne pas compromettre la protection contre les risqué d'incendie, remplacer par un fusible de même type et de memes caractéristiques nominales.

Note.1: Pollution Degree 2 applies where there is only non-conductive pollution that might temporarily become conductive due to occasional condensation. Generally refer to dry, well-ventilated locations, such as control cabinets.

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