

MDR-40/MDR-60 Installation Manual

Type : MDR DIN rail power supply (Series : MDR-40, MDR-60)

MDR-40-5	INPUT: 100 -240VAC 1.1A 50/60Hz	OUTPUT: 5V 6A
MDR-40-12	INPUT: 100 -240VAC 1.1A 50/60Hz	OUTPUT: 12V 3.33A
MDR-40-24	INPUT: 100 -240VAC 1.1A 50/60Hz	OUTPUT: 24V 1.7A
MDR-40-48	INPUT: 100 -240VAC 1.1A 50/60Hz	OUTPUT: 48V 0.83A
MDR-60-5	INPUT: 100 -240VAC 1.8A 50/60Hz	OUTPUT: 5V 10A
MDR-60-12	INPUT: 100 -240VAC 1.8A 50/60Hz	OUTPUT: 12V 5A
MDR-60-24	INPUT: 100 -240VAC 1.8A 50/60Hz	OUTPUT: 24V 2.5A
MDR-60-48	INPUT: 100 -240VAC 1.8A 50/60Hz	OUTPUT: 48V 1.25A

Introduction

MDR is a DIN rail power supply series with < 0.75W no load power consumption. And like other Mean Well's DIN series, they can be mounted on a TS35 Standard DIN rail.

Installation

- 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.
- 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.



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

AWG	18	16	14	12
Rated Current of Equipment (Amp)	7	10	15	20
Cross-section of Lead(mm ²)	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 4-6 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.

- Use wires that can withstand temperatures of at least 80°C such as UL1007.
- Recommended wire strapping length is 6.5mm (0.255").
- Recommended screwdriver is 3mm, slotted type.
- The recommended torque setting for terminals is 4.4lb-in.
- Suggested fuse and maximum number of the MDR PSUs that can be connected to a circuit breaker at 230V are shown as below.

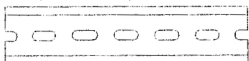
Model	Fuse	Circuit breaker	
		C16	D16
MDR-40	T2.5A/L250V	6	13
MDR-60	T2.5A/L250V	4	9

- Mounting Instruction :

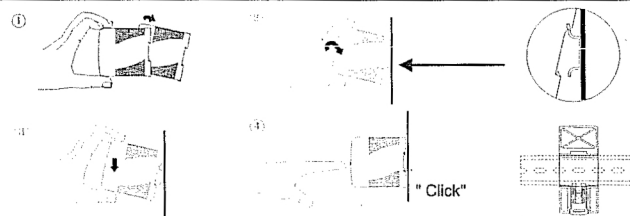
Mount as shown in figure only, with input terminals down, or else sufficient cooling will not be possible.

Admissible DIN rail : TS35 / 7.5 or TS35 / 15

For rail fastening :



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



- For other information about the products, please refer to www.meanwell.com for details.

Notes On Safety

- 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!
- Risk of electric arcs and electric shock (danger to life). Connecting both the primary and the secondary sides together is not allowed.
- Risk of burn hazard. Do not touch the unit in operation and shortly after disconnection!
- Risk of fire and short circuit. The openings should be protected from foreign objects or dripping liquids.
- Only install the unit in a pollution degree 2 environment (Note.1).
- Please do not install the unit in places with high moisture or near the water.
- The maximum operating temperature is 50°C for MDR-40/60 series, please do not install the unit in places with high ambient temperature or near fire source.
- The FG (⊕) must be connected to PE (Protective Earth).
- Output current and output wattage must not exceed the rated values on its specification.
- 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!

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.

Warning / Caution II

- RISK OF ELECTRICAL SHOCK AND ENERGY HAZARD. DO NOT OPEN.
RISQUE DE CHOC ÉLECTRIQUE. NE PAS OUVRIR.
- INSTALLATION IN A POLLUTION DEGREE 2 ENVIRONMENT.
POUR UTILISATION EN ATMOSPHÈRE CONTRÔLÉE SEULEMENT.
- THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D OR NON-HAZARDOUS LOCATIONS ONLY. DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN REMOVED OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.
RISQUE D'EXPLOSION.
NE PAS DÉBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, À MOINS QU'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX.
AVANT DE DÉCONNECTER L'EQUIPEMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DÉSIGNÉ NON DANGEREUX.

SUBSTITUTION OF ANY COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

RISQUE D'EXPLOSION – LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EM-PLACEMENTS DE CLASSE I, DIVISION 2.

DEVICES SHALL BE INSTALLED INTO AN ENCLOSURE THAT UTILIZES A TOOL ACCESSIBLE DOOR/COVER.

LES PRODUITS DOIVENT ÊTRE INSTALLÉS DANS UN BOÎTIER NÉCESSITANT L'UTILISATION D'UN OUTIL POUR SON OUVERTURE.

EXPOSURE TO SOME CHEMICALS MAY DEGRADE THE SEALING PROPERTIES OF MATERIALS USED IN THE FOLLOWING DEVICES:

SEALED RELAY DEVICE.

L'EXPOSITION À CERTAINS PRODUITS CHIMIQUES PEUT DÉGRADER LES PROPRIÉTÉS D'ÉTANCHÉITÉ DES MATÉRIEAUX UTILISÉS DANS LES COMPOSANTS SUIVANTS: RELAIS ÉTANCHE.

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