

# Installation Manual

- **Type : DDR DIN rail power supply ( Series : DDR-15, DDR-30, DDR-60 )**

|             |                      |   |
|-------------|----------------------|---|
| DDR-15G-3.3 | INPUT: 9~36VDC 2.2A  | OUTPUT: 3.3V 3.15A (9~12Vin) / 3.3V 3.5A (12~36Vin) |
| DDR-15G-5   | INPUT: 9~36VDC 2.2A  | OUTPUT: 5V 2.7A (9~12Vin) / 5V 3A (12~36Vin)        |
| DDR-15G-12  | INPUT: 9~36VDC 2.2A  | OUTPUT: 12V 1.13A (9~12Vin) / 12V 1.25A (12~36Vin)  |
| DDR-15G-15  | INPUT: 9~36VDC 2.2A  | OUTPUT: 15V 0.9A (9~12Vin) / 15V 1A (12~36Vin)      |
| DDR-15G-24  | INPUT: 9~36VDC 2.2A  | OUTPUT: 24V 0.57A (9~12Vin) / 24V 0.63A (12~36Vin)  |
| DDR-15L-3.3 | INPUT: 18~75VDC 1.1A | OUTPUT: 3.3V 4.1A (18~24Vin) / 3.3V 4.5A (24~75Vin) |
| DDR-15L-5   | INPUT: 18~75VDC 1.1A | OUTPUT: 5V 2.7A (18~24Vin) / 5V 3A (24~75Vin)       |
| DDR-15L-12  | INPUT: 18~75VDC 1.1A | OUTPUT: 12V 1.13A (18~24Vin) / 12V 1.25A (24~75Vin) |
| DDR-15L-15  | INPUT: 18~75VDC 1.1A | OUTPUT: 15V 0.9A (18~24Vin) / 15V 1A (24~75Vin)     |
| DDR-15L-24  | INPUT: 18~75VDC 1.1A | OUTPUT: 24V 0.57A (18~24Vin) / 24V 0.63A (24~75Vin) |
| DDR-30G-5   | INPUT: 9~36VDC 4.4A  | OUTPUT: 5V 5.1A (9~12Vin) / 5V 6A (12~36Vin)        |
| DDR-30G-12  | INPUT: 9~36VDC 4.4A  | OUTPUT: 12V 2.13A (9~12Vin) / 12V 2.5A (12~36Vin)   |
| DDR-30G-15  | INPUT: 9~36VDC 4.4A  | OUTPUT: 15V 1.7A (9~12Vin) / 15V 2A (12~36Vin)      |
| DDR-30G-24  | INPUT: 9~36VDC 4.4A  | OUTPUT: 24V 1.06A (9~12Vin) / 24V 1.25A (12~36Vin)  |
| DDR-30L-5   | INPUT: 18~75VDC 2.1A | OUTPUT: 5V 5.4A (18~24Vin) / 5V 6A (24~75Vin)       |
| DDR-30L-12  | INPUT: 18~75VDC 2.1A | OUTPUT: 12V 2.25A (18~24Vin) / 12V 2.5A (24~75Vin)  |
| DDR-30L-15  | INPUT: 18~75VDC 2.1A | OUTPUT: 15V 1.8A (18~24Vin) / 15V 2A (24~75Vin)     |
| DDR-30L-24  | INPUT: 18~75VDC 2.1A | OUTPUT: 24V 1.13A (18~24Vin) / 24V 1.25 (24~75Vin)  |
| DDR-60G-5   | INPUT: 9~36VDC 8A    | OUTPUT: 5V 8.1A (9~18Vin) / 5V 10.8A (18~36Vin)     |
| DDR-60G-12  | INPUT: 9~36VDC 8A    | OUTPUT: 12V 4.5A (9~18Vin) / 12V 5A (18~36Vin)      |
| DDR-60G-15  | INPUT: 9~36VDC 8A    | OUTPUT: 15V 3.6A (9~18Vin) / 15V 4A (18~36Vin)      |
| DDR-60G-24  | INPUT: 9~36VDC 8A    | OUTPUT: 24V 2.25A (9~18Vin) / 24V 2.5A (18~36Vin)   |
| DDR-60L-5   | INPUT: 18~75VDC 4.5A | OUTPUT: 5V 10.8A (18~36Vin) / 5V 12A (36~75Vin)     |
| DDR-60L-12  | INPUT: 18~75VDC 4.5A | OUTPUT: 12V 5A                                      |
| DDR-60L-15  | INPUT: 18~75VDC 4.5A | OUTPUT: 15V 4A                                      |
| DDR-60L-24  | INPUT: 18~75VDC 4.5A | OUTPUT: 24V 2.5A                                    |

- **Introduction**

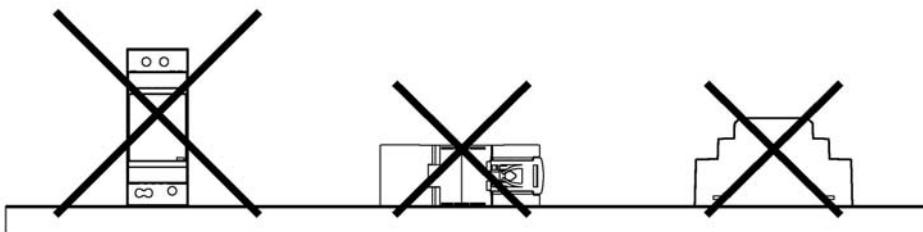
DDR series is a DIN Rail type DC-DC converter with main features including DIN rail-type easy installation, ultra slim width, 4: 1 wide input voltage, -40~+85°C wide operating temperature, adjustable output voltage ( $\pm 10\%$ ) and full protective functions...etc.

This series has two input options: 9~36V / 18~75V and various output options: 3.3V / 5V / 12V / 15V / 24V and can be used for industrial control, security control, communication system and other fields. Suitable applications are DC buck/boost regulator, increasing system insulation level and voltage drop compensation along cable...etc.

# Installation Manual

## ● 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.
- (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  |
|--|-----|-----|-----|
| Rated Current of Equipment (Amp)       | 7A  | 10A | 15A |
| Cross-section of Lead( $\text{mm}^2$ ) | 0.8 | 1.3 | 2.1 |

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.

- (4) Use wires that can withstand temperatures of at least 80°C, such as UL1007.
- (5) Recommended wire strapping length is 6mm (0.236").
- (6) Recommended screwdriver is 3mm, slotted type.
- (7) The recommended torque setting for terminals is shown as below.

| Model      | I/P                  | O/P                  |
|------------|----------------------|----------------------|
| DDR-15G/L  | 5 kgf-cm (4.4 Lb-in) | 5 kgf-cm (4.4 Lb-in) |
| DDR-30 G/L | 5 kgf-cm (4.4 Lb-in) | 5 kgf-cm (4.4 Lb-in) |
| DDR-60 G/L | 5 kgf-cm (4.4 Lb-in) | 5 kgf-cm (4.4 Lb-in) |

- (8) Suggested fuse is shown as below.

| Model   | Fuse         | Model   | Fuse         |
|---------|--------------|---------|--------------|
| DDR-15G | T3.15A/L250V | DDR-15L | T3.15A/L250V |
| DDR-30G | T6.3A/L250V  | DDR-30L | T3.15A/L250V |
| DDR-60G | T10A/L250V   | DDR-60L | T5A/L250V    |

## Installation Manual

### (9) Mounting Instruction :

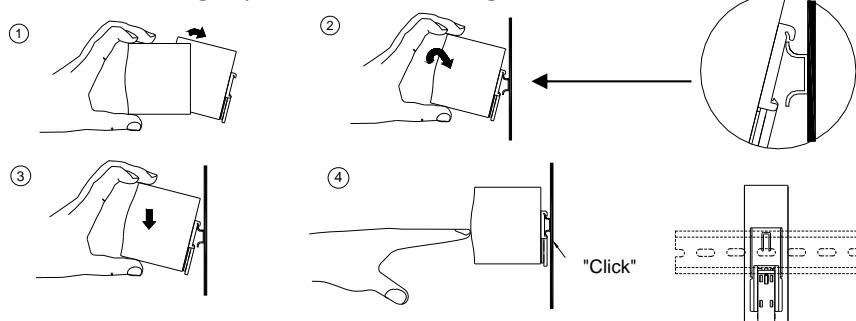
Mount as shown in figure only, with input terminals down, or else sufficient cooling will not be possible.

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.



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

### ● Warning / Caution !!

"CAUTION : FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO MANUAL FOR ENVIRONMENTAL CONDITION"  
 ATTENTION: A UTILISER DANS UN ENVIRONNEMENT CONTROLE. REFEREZ VOUS AU MANUEL POUR  
 LES CONDITIONS D'ENVIRONNEMENT.

- (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.
- (7) The maximum operating temperature is 60°C for the DDR-15/30; 50°C for the DDR-60, please do not install the unit in places with high ambient temperature or near fire source.
- (8) Output current and output wattage must not exceed the rated value on its specification.
- (9) 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.



## Installation Manual

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## Declaration of China RoHS Conformity

In order to reduce the impacts on the environment and take the more responsibility for protecting the earth, MEAN WELL is confirming and announcing the conformity to China RoHS, an Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products.

### Environment Friendly Use Period Label

|   |  |
|---|--|
|  | Observing SJT 11364-2024, Marking for the Restricted Use of Hazardous Substances in Electronic and Electrical Products   |
|   | Observing SJ/Z 11388-2009, General Guidelines of Environment-friendly Use Period of Electronic Information Products Appendix B, adopting table look-up to verify the Environment Friendly Use Period |

### Names and Contents of Hazardous Substances Lists

| Part Name               | Hazardous Substances |                 |                 |   |                                      |  |  |                               |                               |                                   |
|-------------------------|----------------------|-----------------|-----------------|---|--------------------------------------|--|--|-------------------------------|-------------------------------|-----------------------------------|
|                         | Lead<br>(Pb)         | Mercury<br>(Hg) | Cadmium<br>(Cd) | Hexavalent<br>chromium<br>(Cr <sup>6+</sup> ) | Polybrominated<br>biphenyls<br>(PBB) | Polybrominated<br>diphenyl ethers<br>(PBDEs) | Bis(2-ethylhexyl)<br>phthalate<br>(DEHP) | Dibutyl<br>phthalate<br>(DBP) | Dibutyl<br>phthalate<br>(DBP) | Diisobutyl<br>phthalate<br>(DIBP) |
| PCB and its components  | X                    | O               | O               | O   | O                                    | O  | O  | O                             | O                             | O                                 |
| Metal structure parts   | X                    | O               | O               | O   | O                                    | O  | O  | O                             | O                             | O                                 |
| Plastic structure parts | O                    | O               | O               | O   | O                                    | O  | O  | O                             | O                             | O                                 |
| Accessories             | O                    | O               | O               | O   | O                                    | O  | O  | O                             | O                             | O                                 |
| Cables                  | X                    | O               | O               | O   | O                                    | O  | O  | O                             | O                             | O                                 |

O: The concentration of the hazardous substances within the homogeneous material of that product is less than the concentration limits set by GB/T 26572-2011.

X: The concentration of the hazardous substances within the homogeneous material of that product is over the concentration limits set by GB/T 26572-2011; however, it follows the standard advised by 2011/65/EU.



## Declaration of China VOC Conformity

In order to reduce the impacts on the environment and take the more responsibility for protecting the earth, MEAN WELL is confirming and announcing the conformity to China's Standardization Administration Releases VOC Standards

| Standard No.  | Name of the Standard   |
|---------------|--|
| GB 30981-2020 | Limit of harmful substances of industrial protective coatings    |
| GB 33372-2020 | Limits for volatile organic compounds content in adhesive        |
| GB 38507-2020 | Limits for volatile organic compounds (VOCs) In printing ink     |
| GB 38508-2020 | Limits for volatile organic compounds content in cleaning agents |



## Declaration of Five PBT TSCA Conformity

In order to reduce the impacts on the environment and take the more responsibility for protecting the earth, MEAN WELL hereby confirms that MEAN WELL product series comply with Use and Risk Management for Five PBT Chemicals under TSCA section 6(h)

| CAS No.    | Substance Name                                      |
|------------|---|
| 1163-19-5  | Decabromodiphenyl ether (DecaBDE)                   |
| 68937-41-7 | Phenol, isopropylated, phosphate (3:1)<br>PIP (3:1) |
| 732-26-3   | 2,4,6-Tris (tert-butyl) phenol (2,4,6-TTBP)         |
| 133-49-3   | Pentachlorothiophenol (PCTP)                        |
| 87-68-3    | Hexachlorobutadiene (HCBD)                          |