

Installation Manual

● **Type : DRDN20/40 DIN rail Type Redundancy Module**

DRDN20-12	INPUT : 1 : 9-14VDC	20A	OUTPUT : 20A (max)
	2 : 9-14 VDC	20A	
DRDN20-24	INPUT : 1 : 19-29VDC	20A	OUTPUT : 20A (max)
	2 : 19-29VDC	20A	
DRDN20-48	INPUT : 1 : 36-60VDC	20A	OUTPUT : 20A (max)
	2 : 36-60VDC	20A	
DRDN40-12	INPUT : 1 : 9-14VDC	40A	OUTPUT : 40A (max)
	2 : 9-14 VDC	40A	
DRDN40-24	INPUT : 1 : 19-29VDC	40A	OUTPUT : 40A (max)
	2 : 19-29VDC	40A	
DRDN40-48	INPUT : 1 : 36-60VDC	40A	OUTPUT : 40A (max)
	2 : 36-60VDC	40A	

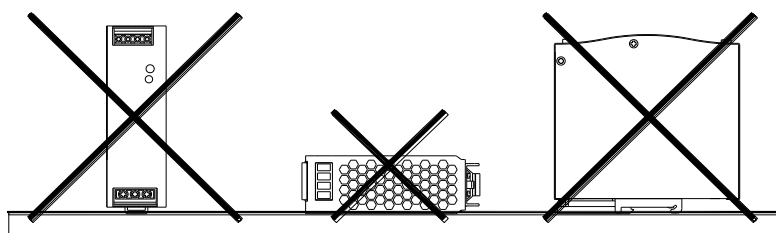
● **Introduction**

DRDN20/40 is a DIN rail type redundancy module.

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. 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	10	8	6
Rated Current of Equipment (Amp)	7A	10A	15A	20A	30A	40A	50A
Cross-section of Lead(mm ²)	0.8	1.3	2.1	3.3	5.3	8.4	13.3
Note: 1. 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. 2. The maximum allowable wire cross-sectional area for the terminal is 6AWG/13.3 mm ²							

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").

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- (6) Recommended screwdriver is 4mm, slotted type.
- (7) The recommended torque setting for terminals is shown as below.

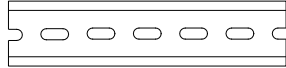
Model	I/P & O/P	DC OK
DRDN20	5.1kgf-cm (4.43Lb-in)	TB1: 4.1kgf-cm (3.54Lb-in)
DRDN40	20.21kgf-cm (17.54 Lb-in)	TB1: 4.1kgf-cm (3.54Lb-in) TB2: 5.1kgf-cm (4.43Lb-in)

- (8) Mounting Instruction :

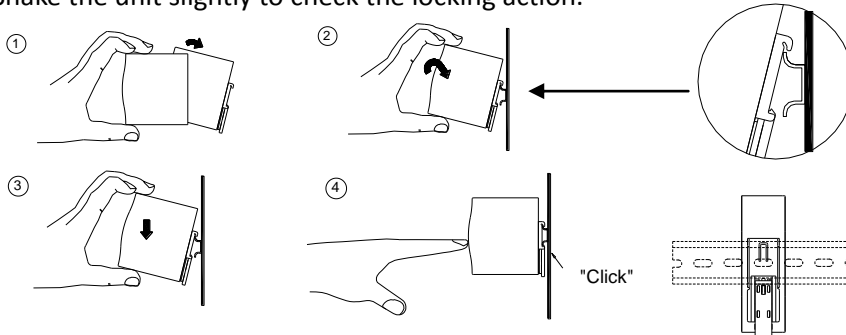
Mount as shown in figure only, with input terminals down, or else sufficient cooling will not be possible.

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.

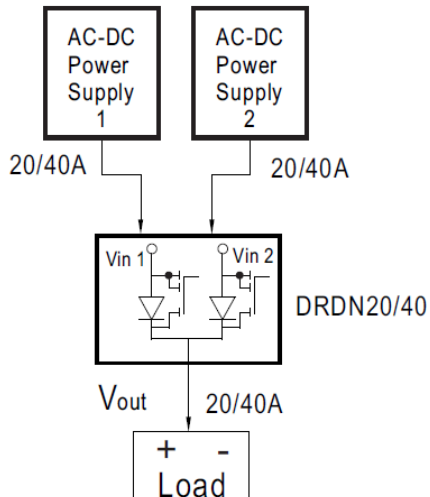


- (9) For other information about the products, please refer to www.meanwell.com for details.

Typical Application Notes

- (1) 1+1 Redundancy:

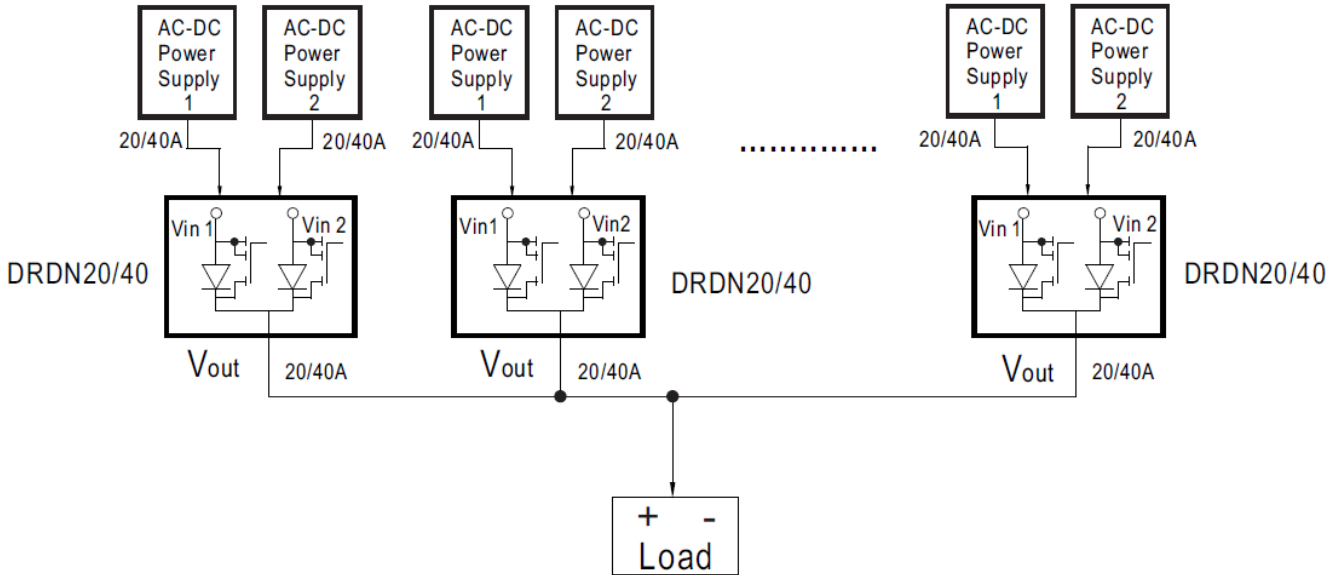
Using 1 more PSU as the redundant unit



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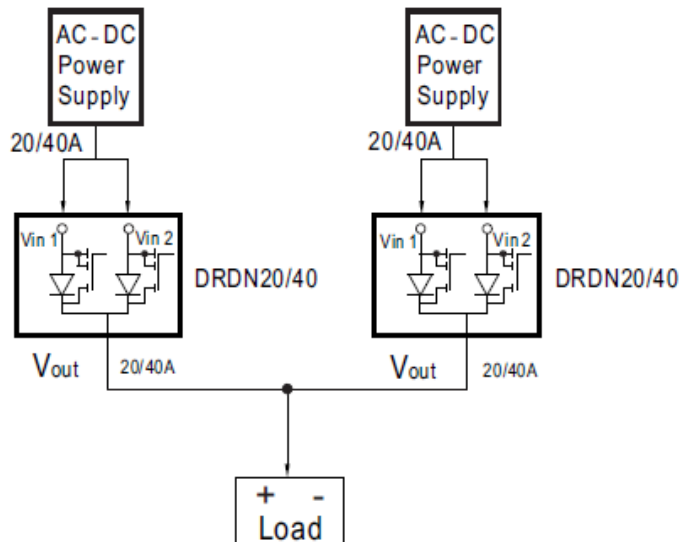
(2) 1+N Redundancy:

Using more PSUs as the redundant units to increase the reliability



(3) Single Use:

Connecting only one PSU to one DRDN20/40 to reduce the stress of the MOSFET and hence increase the reliability





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● **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.
- (7) The maximum operating temperature is 60°C, 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!
- (10) 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.

Manufacturer :

MEAN WELL ENTERPRISES Co., LTD.
No.28, Wuquan 3rd Rd., Wugu Dist.,
New Taipei City 24891, Taiwan
Tel: +886-2-2299-6100
Web: www.meanwell.com

Branch Office :

China

MEAN WELL (GUANGZHOU)
ENTERPRISES Co., LTD.
2F, A Building, Yuean Industry Park,
Huangcun, Dongpu Yown, Tianhe
District, Gungzhou, China
Post Code:510660
Tel: +86-20-2887-1200
Web: www.meanwell.com.cn

U.S.A.

MEAN WELL USA, INC.
44030 Fremont Blvd., Fremont,
CA 94538, U.S.A.
Tel: +1-510-683-8886
Web: www.meanwellusa.com

Europe

MEAN WELL EUROPE B.V.
Langs de Werf 8, 1185XT
Amstelveen, The Netherlands
Tel: +31-20-758-6000
Web: www.meanwell.eu