MEAN WELL

20A Power Supply Redundancy Module

# DR-RDN20

■ Features :

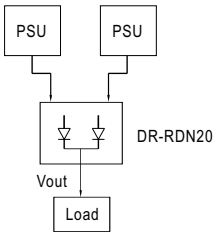
- Suitable for redundant operation of 24V system
- Installed on DIN Rail TS35 / 7.5 or 15
- Relay contact signal output and LED indicator for input failure alarm
- Cooling by free air convection
- 3 years warranty

## SPECIFICATION

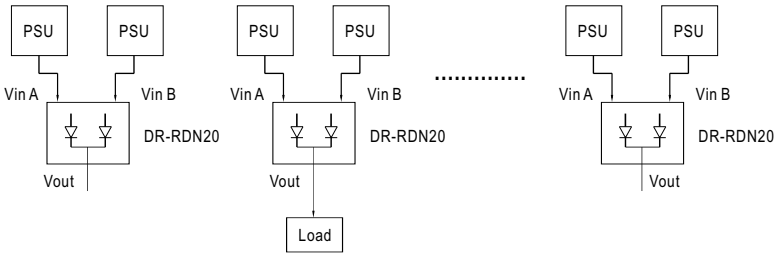
| MODEL | | DR-RDN20 |
|---|---|---|
| OUTPUT | REVERSE VOLTAGE (max.) | 30V |
| | OUTPUT CURRENT (max.) | 20A |
| | VOLTAGE DROP | 0.5V |
| | LED INDICATORS | Two green LEDs indicating each input is "OK or fail" |
| INPUT | INPUT VOLTAGE RANGE | 21 ~ 28V |
| | NUMBER OF INPUTS | Two |
| | INPUT CURRENT (max.) | 20A per input |
| FUNCTION | INPUT VOLTAGE ALARM | When input is > 20V(±5%) or < 30V(±5%) relay contacts |
| | RELAY CONTACT RATING (max.) | 30VDC, 1A |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +70℃ |
| | WORKING HUMIDITY | 20 ~ 90% RH non condensing |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85℃, 10 ~ 95% RH |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mouning: Compliance to IEC60068-2-6 |
| SAFETY & EMC | WITHSTAND VOLTAGE | Terminal-Chassis :0.5KVAC, Relay Contacts-Terminal :0.5KVAC |
| | ISOLATION RESISTANCE | Terminal-Chassis :>100M Ohms/500VDC 25℃ 70%RH |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8, ENV50204, Heavy industry level, criteria A |
| OTHERS | MTBF | 996.8Khrs min. MIL-HDBK-217F (25℃) |
| | DIMENSION | 55.5*125.2*100mm (W*H*D) |
| | PACKING | 0.5Kg; 20pcs/11Kg/1.29CUFT |
| NOTE | 1. All parameters NOT specially mentioned are measured at 24VDC input, rated load and 25℃ of ambient temperature. | |

## ■ Typical Application Notes

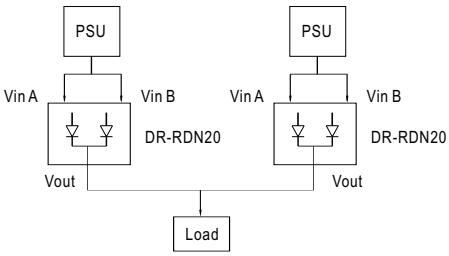
**1. 1+1 Redundancy**
**Using 1 more PSU as the redundant unit**




**2. 1+N Redundancy: Using more PSUs as the redundant units to increase the reliability**




**3. Single Use: Connecting only one PSU to one DR-RDN20 to reduce the stress of the diodes and hence increase the reliability**

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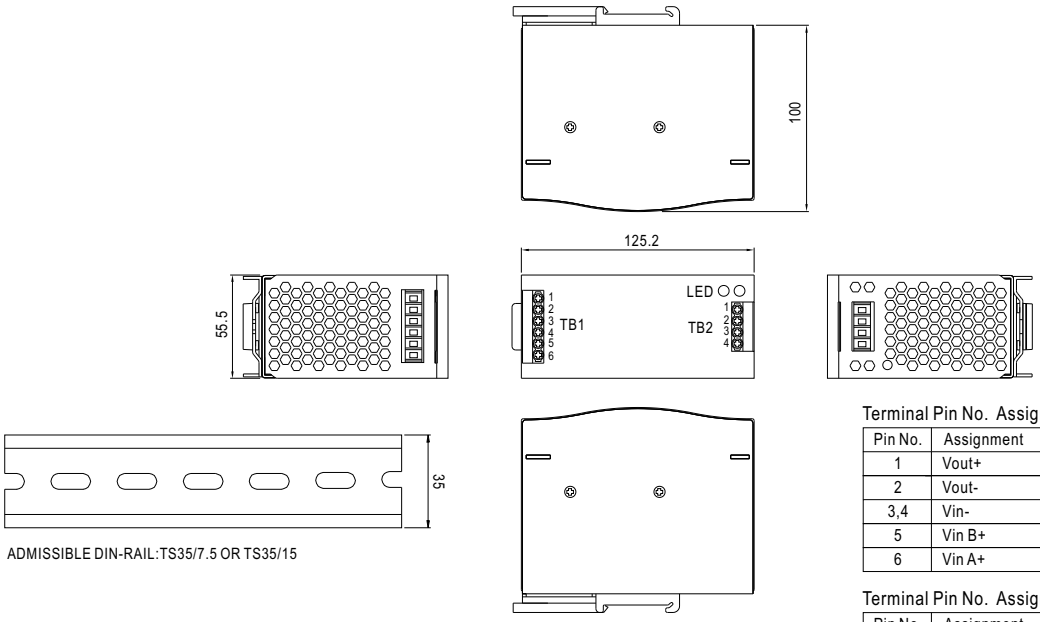
# DR-RDN20

## ■ Mechanical Specification

Case No.923C Unit:mm




ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

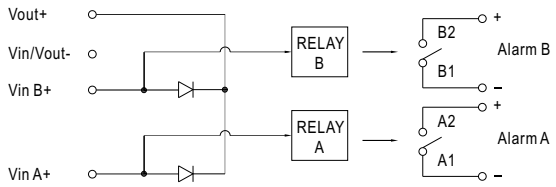
Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---|---|
| 1 | Vout+ |
| 2 | Vout- |
| 3,4 | Vin- |
| 5 | Vin B+ |
| 6 | Vin A+ |

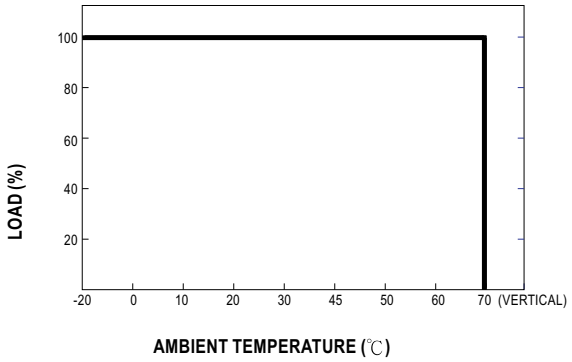
Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment |
|---|---|
| 1 | Alarm B1 |
| 2 | Alarm B2 |
| 3 | Alarm A1 |
| 4 | Alarm A2 |

## ■ Block Diagram




## ■ Derating Curve

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