



## ■ 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



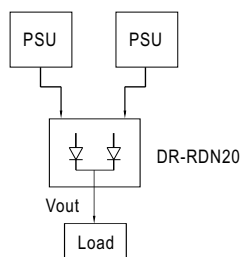
## SPECIFICATION

| 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°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                          | WORKING HUMIDITY            | 20 ~ 90% RH non condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                          | STORAGE TEMP., HUMIDITY     | -40 ~ +85°C, 10 ~ 95% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                          | VIBRATION                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mounting: Compliance to IEC60068-2-6                                                                                                                                                                                                                                                                                                                                                                                  |
| SAFETY & EMC<br>(Note 2) | WITHSTAND VOLTAGE           | Terminal-Chassis :0.5KVAC, Relay Contacts-Terminal :0.5KVAC                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                          | ISOLATION RESISTANCE        | Terminal-Chassis :>100M Ohms / 500VDC / 25°C / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                          | EMC EMISSION                | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                          | EMC IMMUNITY                | Compliance to EN61000-4-2,3,4,5,6,8,11, heavy industry level, criteria A                                                                                                                                                                                                                                                                                                                                                                                                                        |
| OTHERS                   | MTBF                        | 996.8Khrs min. MIL-HDBK-217F (25°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                          | 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°C of ambient temperature.<br>2. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> ) |

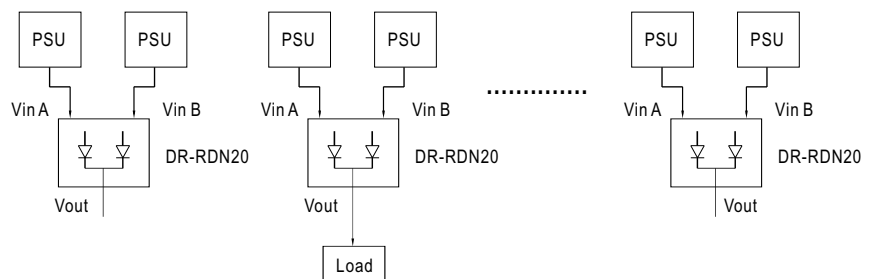
## ■ Typical Application Notes

### 1. 1+1 Redundancy

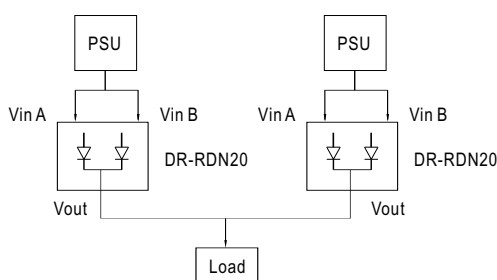
Using 1 more PSU as the redundant unit



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

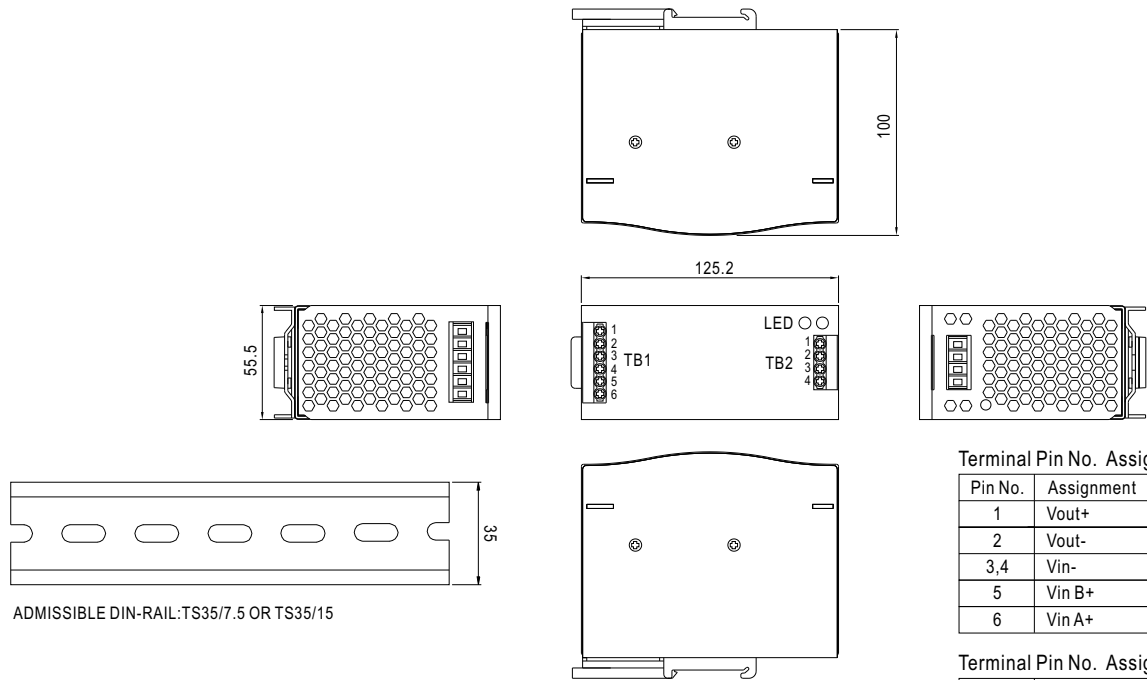


### 3. Single Use: Connecting only one PSU to one DR-RDN20 to reduce the stress of the diodes and hence increase the reliability

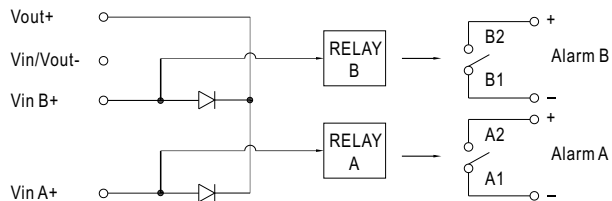


## Mechanical Specification

Case No.923C Unit:mm



## Block Diagram



## Derating Curve

