



# PS-RDN20

## Specifications



### 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 year warranty

### DC INPUT/ DC BUS

#### Cat. No.

#### PS-RDN20

REVERSE VOLTAGE (max.)	30V
OUTPUT CURRENT (max.)	20A
VOLTAGE DROP	0.5V
LED INDICATORS	Two green LED's indicating each input is OK or fail

### BATTERY IN / OUTPUT

INPUT VOLTAGE RANGE	21 ~ 28V
NUMBER OF INPUTS	Two
INPUT CURRENT (max.)	20A per input

### FUNCTION

INPUT VOLTAGE ALARM	When input is $\geq 20V (\pm 5\%)$ or $\leq 30V (\pm 5\%)$ 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, 60 min. each long X,Y, Z axes
MOUNTING	Compliance to IEC60068-2-6

### SAFETY & EMC

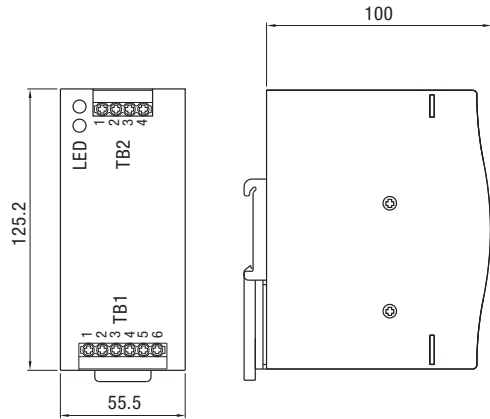
WITHSTAND VOLTAGE	Terminal- Chassis: 0.5KVAC, Relay Contacts- Terminal: 0.5KVAC
ISOLATION RESISTANCE	Terminal- Chassis: $\geq 100M \text{ Ohms} / 500VDC (25^\circ C; 70\% RH)$
EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8; ENV50204; heavy industry level; criteria A,

### OTHERS

MTBF	996.8Khrs min. MIL-HDBK-217K (25°C)
DIMENSION	55.5x125.2x100mm (WxHxD)
PACKING	0.5Kg; 20pcs / 11Kg / 1.29CUFT

All parameters NOT specially mentioned are measured at 24V DC input, rated load and 25°C of ambient temperature.

## Mechanical Specification



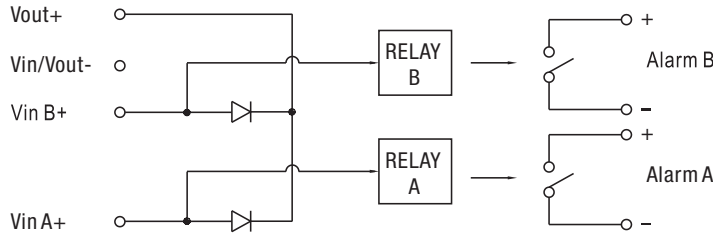
Terminal Pin. No Assignment (TB1)

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

Terminal Pin. No Assignment (TB2)

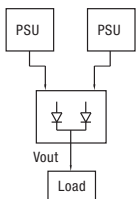
Pin No.	Assignment
1	Alarm B1
2	Alarm B2
3	Alarm A1
4	Alarm A2

## Block Diagram

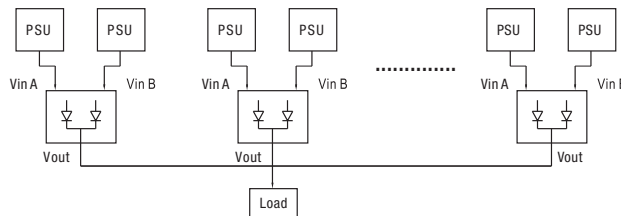


## Applications

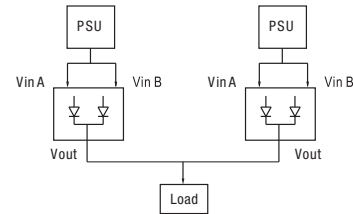
1. 1+1 Redundancy  
Using 1 more PSU  
as the redundant unit



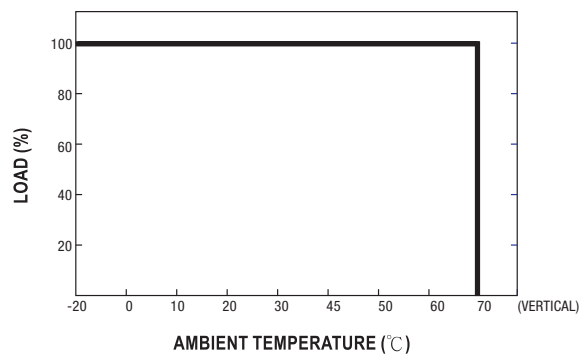
2. 1+N Redundancy: Using more PSUs as the redundant units to increase the reliability



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



## Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.