

# REDMOD20

## Redundant Power Supply Module



### Key Features

- Suitable for redundant operation of 24V system
- Max. 20 Amps
- Relay ready contacts
- Decoupling diodes
- LED input alarm indicator
- 2 inputs
- IP20 Protection Rated



### Technical Specification

Model	REDMOD20
<b>Input Specifications</b>	
Rated Input Voltage	19-29VDC
Number of Inputs	2
Rated Input Current	20A continuous
<b>Output Specifications</b>	
Output Voltage Drop	0.25V
Output Current	20A
Max. Output Current	30A for 5 seconds
Reverse Voltage (max.)	30V
DC ON Indicator	Green LED input OK
<b>General Specifications</b>	
Isolation Voltage	100VDC
Isolation Resistance	100MΩ @ 500VDC
Ambient Temperature	-40 to +80°C
Storage Temperature	-40 to +85°C
Relative Humidity	5 to 95% RH
Cooling	Free air convection
MTBF	792,000 hrs
Dimensions	(H)125 x (W)32 x (D)100 mm
Weight	500g
Case Material	Metal
Pollution Degree	2
<b>Control &amp; Protection</b>	
Power Rdy (OK)	When input is >20V (±5%) or <30V (±5%)
Power Rdy (Fail)	When input is <20V (±5%) or >30V (±5%)
Contact Rating @ 30VDC	1.0A
<b>Approvals &amp; Standards</b>	
	CE, UL, cUL

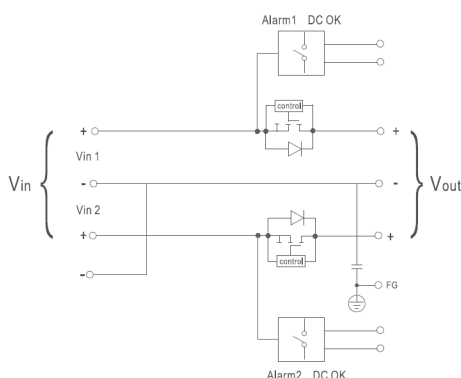
### Pin Assignment

Input		Output	
Pin No.	Description	Pin No.	Description
1	DC input +Vin1	1, 2	Alarm1 DC OK
2	DC input -Vin1	3, 4	Alarm2 DC OK
3	DC input +Vin2	5, 6	FG
4	DC input -Vin2	7	DC output +Vout
		8	DC output -Vout

### DC OK Relay Contact

Contact Close (DC OK)	PSU turns on
Contact Open (DC Fail)	PSU turns off
Contact Ratings (max.)	30V / 1A resistive load

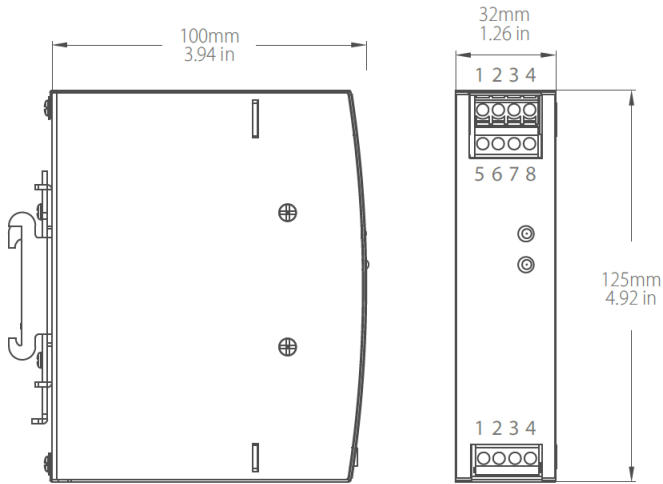
### Circuit Schematic



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### Dimensions (mm)



### Installation

#### Ventilation / Cooling

Normal convection  
All sides 25mm free space  
For cooling recommended

#### Connector Size Range

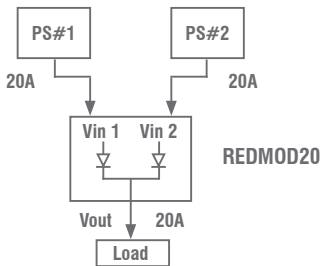
AWG24-10 (0.2 ~ 4mm<sup>2</sup>) flexible / solid cable,  
- Input connector can withstand torque at maximum 9 pound-inches  
- Output connector can withstand torque at maximum 5.5 pound-inches  
8 m/m striping cable end recommends  
Use copper conductors only, 60 / 75°C

### Construction

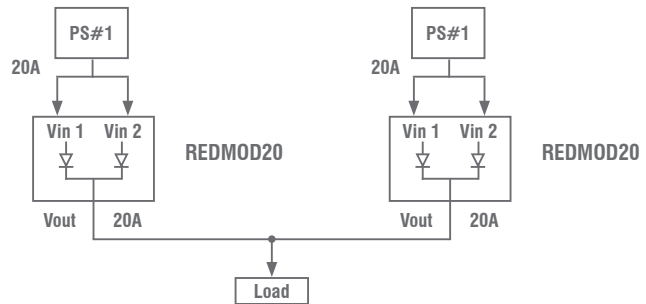
Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

### Typical Application Notes

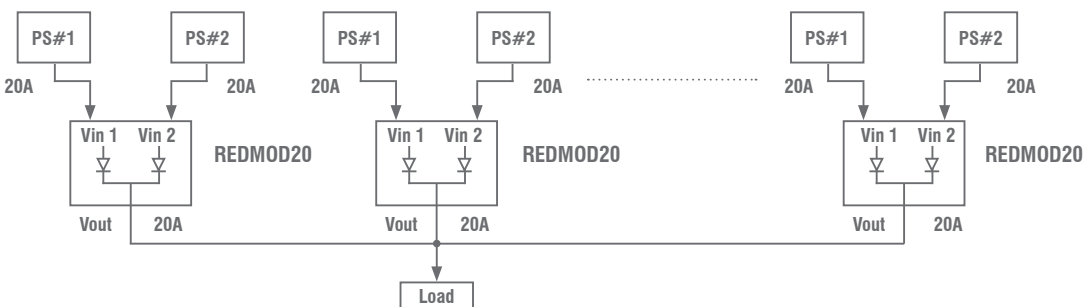
1) 1+1 Redundancy: Using 1 or more AC-DC power supply as the redundant unit



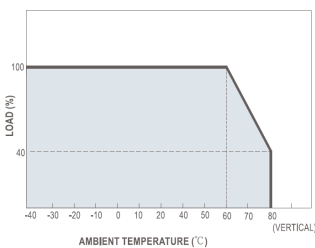
2) Single Use: Connecting only one AC-DC power supply to one REDMOD20 to reduce the stress of the diodes and hence increase the reliability



3) 1+N Redundancy: Using more AC-DC power supplies as the redundant units to increase the reliability



### Derating Curve



### Minus Output & Input Voltage Curves

