

# RED00202

# DIN Rail

Made in Germany

**Active N+1 Dual Redundancy Management Module 2x 50A  
Integrated low / overvoltage detection, Input/Output floating**

## Specification:

- Detects low voltage and overvoltage
- -20°C...+70°C ambient temperature
- DC-Input = DC-Output
- Screw terminal plugs for 22...6AWG
- For 2x 50A loads
- IP20 metal housing
- Monitoring relay, floating
- Schottky barrier decoupling diodes
- Efficiency  $\geq 97\%$
- DIN-Rail TS35 mounting
- Wall mount optional
- Reverse polarity protected

## Available DC-voltages:

12...28Vdc, 36...60Vdc, 90...125Vdc



In accordance with IEC60950-1

	Model A	Model B	Model C
Channel Inputs	V1in / V2in	V1in / V2in	V1in / V2in
DC-Input Voltage *)	12V...28Vdc	36V...60Vdc	90V...125Vdc
DC-Input Upper Margin Vo	fix +36V ± 5%	fix +75V ± 5%	fix +140V ± 5%
Hysteresis Vo	~1.5V	~1.5V	~1.5V
DC-Input Lower Margin Vu (ADJ)	adjust. +8Vdc...+28Vdc	adjust. +24V...+60Vdc	adjust. +60V ...+235Vdc
Low Rate Hysteresis Vu	~1.5V	~1.5V	~1.5V
Maximum Input Current	2x 50A	2x 28A	2x 8A
Maximum Output Current	1x 50A (1000W)	1x 28A	1x 8A
Voltage Drop, Input to Output	500mV typical	500mV typical	500mV typical

Order codes: RED00202.T + model (A,B or C), for example RED00202.TA (wall mount option available upon request)

\*) other voltages upon request

DC Input	Floating
DC Output	Floating
Power Good Relay	Change over contact
Relay contact load	48Vdc 500mA max.
Relay contact separation	protective electrical insulation ≤60Vdc
Cooling	Natural convection
Ambient temperature	-20°C...+70°C
Storage temperature	-40°C...+85°C
EMI	EN55022 class B / EN61000-3-2
EMS	EN61000-6-2,3
Safety	cUL60950/1950 (IEC)EN60950-1
Safety class 1(A)	VDE0805, VDE0100
Creepage paths	> 2mm
MTBF (IEC61709)	500000h
Dimensions (HxWxD)	130x62x115mm
Weight	1000g
Connectors	Screw terminals 20...6AWG (76A/40°C)

#### Application:

When breakdowns cost a lot of money and service is hindered, it is advisable to operate the power supply management redundant. The redundant module RED00202 is designed for applications from 12Vdc to 125Vdc. DC-outputs from n+1 power supply units (equal power supplies and output voltages are recommended) will be decoupled. If a breakdown occurs to one of the connected power supply modules, the other one will take over without a voltage drop to the system. While normal operation the load will be partitioned equal to each of the connected power supplies. The RED00202 power good relay (change over contact) features continuous control over the conditions of the connected power supplies. If one power supply fails the relay indicates that the remaining power supply takes over. The lower control margin Vu can be adjusted via front-sided control potentiometer ADJ. The upper margin Vo is a fixed value (see table).

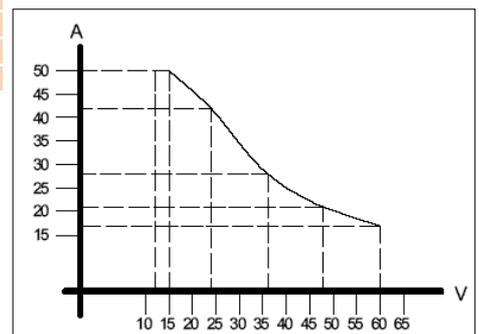
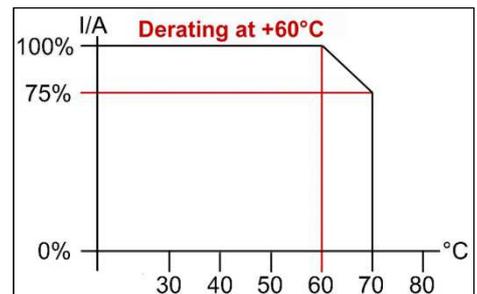
The DC-Input of the RED00202 corresponds to the output voltage of the power supplies installed. The GND-Input of the RED00202 is evident for the own supply only. The voltage drop down between DC-input and DC-output is 500mV.

#### Mechanics, Safety & Service Specifications:

For service or install conditions the system has been circuit switched to voltage free. The housing screws are recommended for the GND-connect – do not remove one of it.

For operation >60Vdc connecting the GND-connection of the housing to PE is recommended to prevent from any kind of interferences to the supply system.

The IP20 aluminium housing provides VDE approved ventilation slots. Safe fit on DIN-Rail: no tool is necessary to snap on or dismount it from the TS35mm-DIN-Rail. An optional wall mount kit is available upon request.

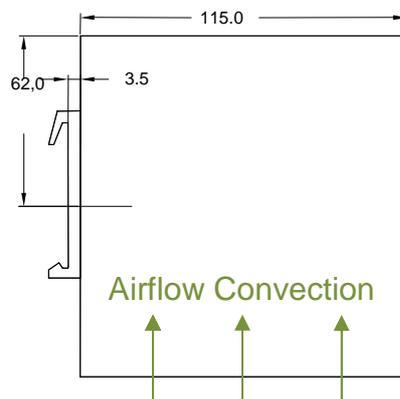
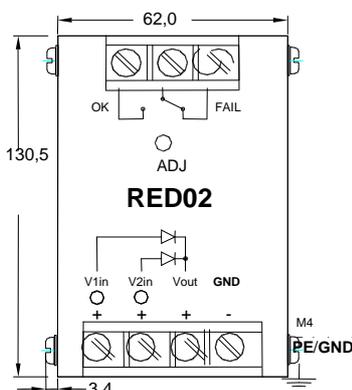


Current voltage ratio graph (C= 2x 50A)  
(90V=11.2A/125V=8A)

#### Voltage control specification:

Change over contact is tightened when Vin ranges between Vu and Vo (o.k. mode – LED lights green).

Relay drops when Vin < Vu or Vin > Vo (low voltage & over voltage control).



Ventilation space required @ full load:  
L/R = 10mm to active parts  
above/below = 30mm