

RED00202

DIN Rail

Made in Germany

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

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

For use with DC-voltages:

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



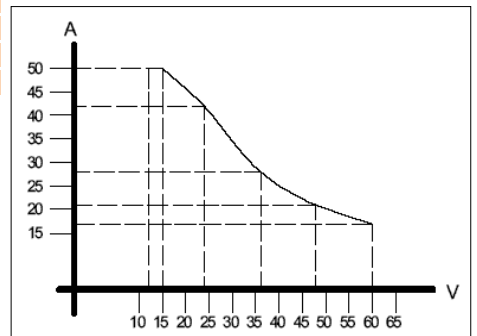
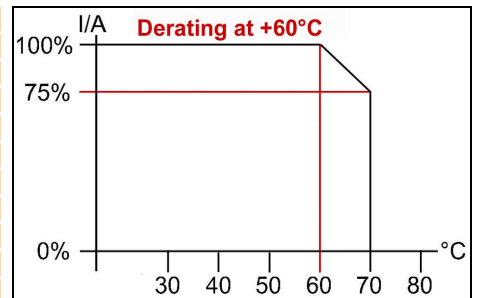
In accordance with IEC60950-1

	Module A	Module B	Module C
Channel Inputs	V1in / V2in	V1in / V2in	V1in / V2in
DC-Input Voltage	12V...28Vdc	36V...60Vdc	90V...125Vdc
DC-Input Upper Limit	+36V ± 5%	+75V ± 5%	+140V ± 5%
Hysteresis	~1.5V	~1.5V	~1.5V
DC-Input Lower Limit	+8V	+24V	+60V
Low Rate Hysteresis	~1.5V	~1.5V	~1.5V
Maximum Continuous Current	2x 50A	2x 50A	2x 50A
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+module (A,B or C), example RED00202.TA (wallmount option upon request)

***) other voltages upon request**

Power Good Relay	Change over contact
Relay contact load	48Vdc 500mA max.
Relay contact separation	protective electrical separation ≤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)



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

Voltage control specification:

Change over contact is tightened when V_{in} ranges between V_u and V_o (o.k. mode – LED lights green).

Relay drops when $V_{in} < V_u$ or $V_{in} > V_o$ (low voltage & over voltage control).

Application:

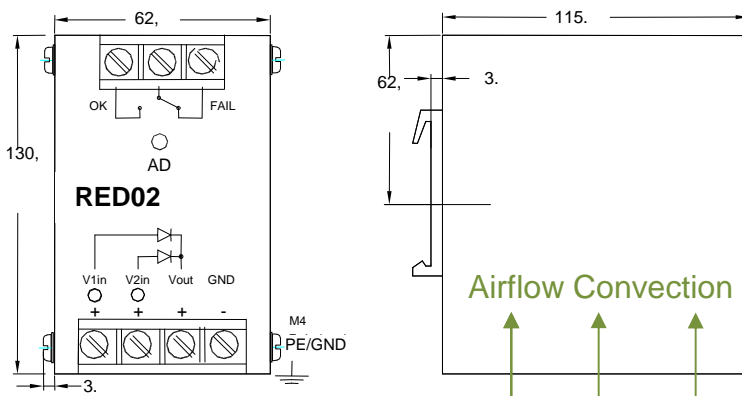
When breakdowns cost a lot of money and service is hindered, it is advisable to rate the power supply management application redundant. The redundant module RED00202 is designed for applications from 12Vdc to 125Vdc. For example, if you use the Camtec HSE-Series or other high class power supplies, the two DC-outputs (equal power supplies and output voltages are recommended) will be decoupled from each other with the RED. In case of a breakdown to one of the power supply modules, the other one will take over the load with any voltage breakdown to the system. In non-fault operation mode the load will be partitioned absolute equal to each power supply by the RED, too. This increases lifetime and availability dramatically in comparison with standard parallel operation modes. From the RED00202 a power good relay (change over contact) features continuous control over the operating condition of the redundant system. If one power supply faults the relay drops out a message that the remaining power supply has taken over. You can detect the faulty PSU to your automation system, this way. 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 as low as 500mV what is in accordance to the drop down voltage of the internal Schottky Barrier Diodes.

Mechanics, Safety & Service Specifications:

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

For operation >60Vdc it is necessary to connect the GND-Screw to the system ground to prevent any kind of interferences to the system.

We use a stable IP20 aluminium metal housing with VDE approved ventilation slots. Safe fit on DIN-Rail: although no tool is necessary to snap on or demount it from the TS35-Rail. A wall mount kit is optional available.



Ventilation space required @ full load:

L/R = 10mm to active parts
above/below = 15mm