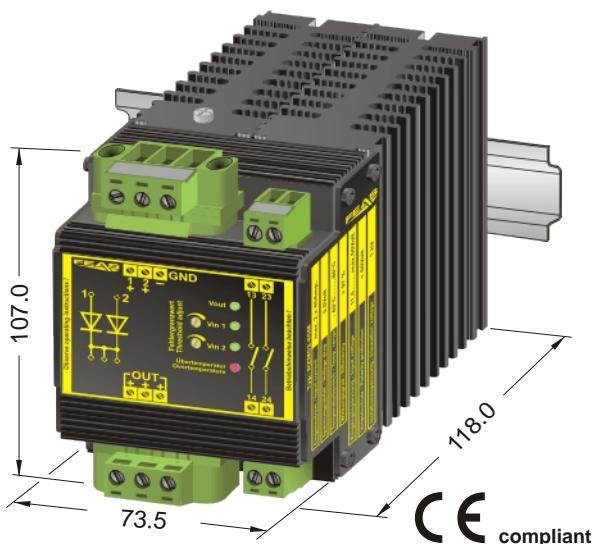
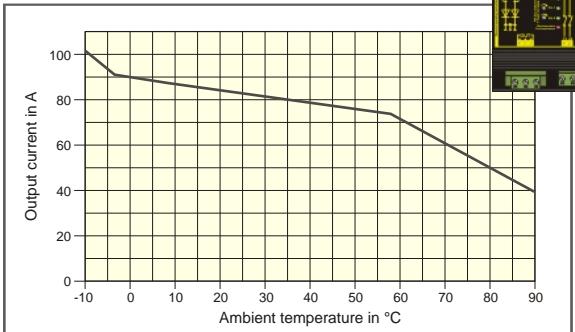


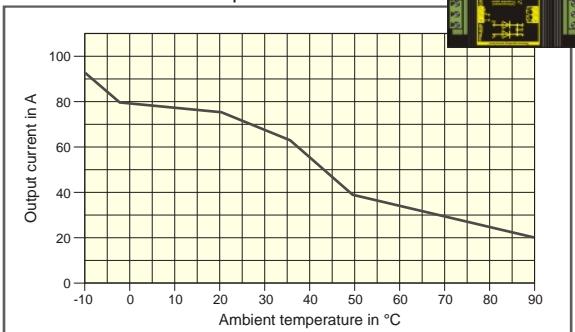
# Redundancy module type RZM02-80M



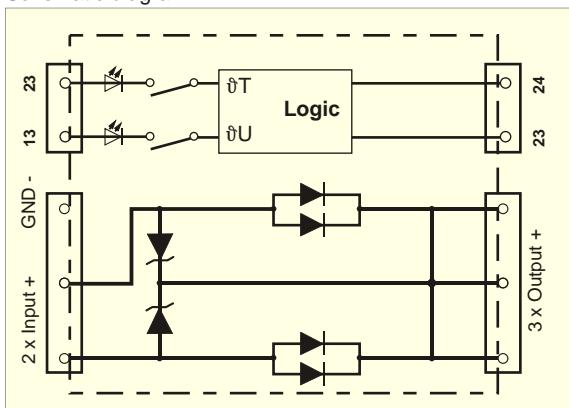
Thermal characteristic  
at vertical installation position



Thermal characteristic  
at horizontal installation position



Schematic diagram



## Technical data

### General data

Product denomination	Redundancy module
Type	RZM02-80M
FEAS order number	52004
Product function	Decoupling of two power supplies
Main current circuit	Input 3-pole, output 3-pole
Installation altitude (over sea level)	unlimited
Operation temperature range	-40°C .... +80°C
Storage temperature range	-55°C .... +125°C
State indicator	LED green/red
Overtemperature indicator	LED red
Relay output	2 x NOC (1.0A, 250V <sub>AC</sub> - 1.0A, 24V <sub>DC</sub> )

### Operating data

Duty cycle	100% (continuous operation)
MTBF at 25°C	> 380.000h
Cooling	Selfcooling (natural convection), 15mm clearance recommended

### Main current circuit

Voltage-range of load circuit	11.5V <sub>DC</sub> .... 50V <sub>DC</sub>
Permanent load current (Input)	2 x 40A at T <sub>U</sub> = 25°C
Permanent load current (Output)	1 x 80A at T <sub>U</sub> = 25°C
Max. load current (Input)	2 x 50A at T <sub>U</sub> = 25°C, max. 5 minutes
Max. load current (Output)	1 x 100A at T <sub>U</sub> = 25°C, max. 5 minutes
Insulation voltage	1kV
Derating from 40°C	0.5A / °C
Real power loss	max. 46W
Potential difference (Input/Output)	approx. 0.5V
Efficiency	>97%

### Protective devices

Reverse voltage protection with diode	Yes
Transient voltage suppressor	Suppressor diode, integrated into device
Thermal overload protection	Integrated into device
Fuse assignments load circuit	-----
Insulating-grouting	PUR-resin, non-halogen and self-extinguishing

### Safety data

Rated surge voltage	Control / Load circuit 4kV (IEC 60664-1)
EMI suppression	Class A IEC/EN 60 947-4-3
Pollution degree	2
Ambient humidity	95% relative humidity, yearly average dewelling allowed for use in tropical atmosphere
Degree of protection housing	IP 68
Degree of protection terminals	IP 20 (BGV A3)
Resistance against shock	> 80g with 33Hz in x, y and z, acc. to IEC 60068-2-27
Vibration proof	3 - 15Hz, amplitude 3,0mm acc. to IEC 68-2-6

### Applied design specifications

EMC	IEC/EN 61000-6-4, IEC/EN 61000-6-1
Electrostatic Discharge (ESD)	8kV - air / 6kV terminal IEC/EN 61000-4-2
HF - Irradiation	20V/ m IEC/EN 61000-3-4
Surge transients	4kV IEC/EN 61 000-4-5
Pollution degree	IEC 60 664-1, EN 50178
Resistance against shock	IEC 60068-2-27
Degree of protection terminals	IEC/EN 60 529
Resistance to climatic conditions	IEC/EN 60 068
CSA / UL	CSA-C 22.2 / UL60950, UL508, UL1950

### Mechanical data

Terminal cross-section (control-circuit)	0.2mm <sup>2</sup> .... 4.0mm <sup>2</sup> / AWG 24-12 (unfilar + flexible)
Terminal cross-section (load-circuit)	0.2mm <sup>2</sup> .... 4.0mm <sup>2</sup> / AWG 24-12 (unfilar + flexible)
Tightening torque	0.5Nm .... 0.6Nm
Mounting	On 35mm DIN-rail acc. to IEC/EN 60 715
Dimensions (W x H x D)	73.5mm x 107mm x 118mm
Weight	1.28kg

### Notes

The output voltage of the redundancy module equals the output voltage of the connected power supplies. A parallel operation for increasing output power is only permissible if the total output current not exceed the maximum rated value of the module.

The maximum allowable current is dependent from the cross sections of the connected conductor cables and the environmental temperature. The surface temperature of the housing should not exceed the value of 95°C. In dependence of the ambient temperature and the mounting orientation, the current-carrying capacity will be reduced. (see adjacent diagram)