

## REDUNDANT MODULE 20 A DIMENSION SERIES, 24-28 VDC

24-28 V DC, 2x10 A

YR20.246  
 REDUNDANCY MODULE 24-28V 20A

- For 1+1 Redundancy
- MOSFET transistors
- Minimum power loss
- Automated Load Sharing



### PRODUCT DESCRIPTION

The YR20.246 is a redundancy module for building redundant power supply systems. It is equipped with two input channels and one output. The two inputs are decoupled by MOSFET technology.

The device is equipped with an automated load sharing feature, which can compensate a small voltage imbalance between the power supplies connected to the inputs in order to achieve an even current share. It

also monitors the function of the redundancy circuitry and provides a signal in case of a failure or a high output current, which could prevent redundancy if one power supply fails. If this feature is not required the YR20.242 is available.

The redundancy utilizes MOSFETs instead of diodes for the decoupling of the two input channels. This reduces the heat generation and the voltage drop between input and output. The redundancy module does not require an additional auxiliary voltage.

Due to the low power losses, the unit is very slender and only requires 32mm width on the DIN-rail. Large connection terminals allow for a safe and fast installation. The large international approval package makes this unit suitable for nearly every application.

### TECHNICAL DATA

#### INPUT DATA

Input voltage dc max	35 V DC
Input voltage dc	24-28 V
Input current at continuous overload or short circuit max	24 A
Input current per channel max	12 A
Input voltage dc min	18 V DC

#### OUTPUT DATA

Output current max	26 A
Output voltage	24 V DC
Output current	20 A

### EFFICIENCY / LIFETIME / MTBF

Life span	182000 h @ 2x 20 A, 24 V DC, 40 °C
MTBF (IEC 61709)	1954000 h @ 2x 20 A, 24 V DC, 40 °C

### DIMENSIONS

Weight	0,31 kg
Depth	127 mm
Width	32 mm
Height	124 mm

### OTHER

IP class	IP20
Voltage drop over semiconductor	500 mV
Temperature min without derating	-40 °C
Input / Output Separation	Mosfet
Series	Dimension Y
Approvals	ATEX, CB, CE, CSA, CSA US, UL
Temperature max without derating	70 °C
Material protection	Aluminium

Type Power Supply	Redundancy modules
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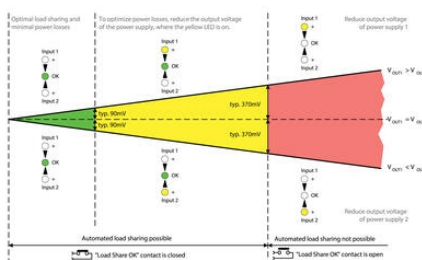
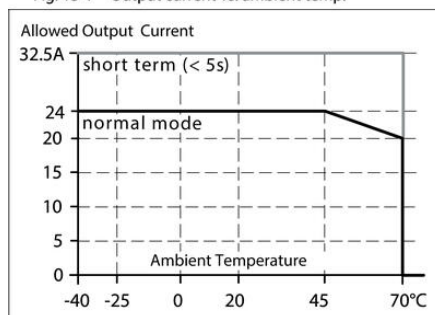


Fig. 13-1 Output current vs. ambient temp.



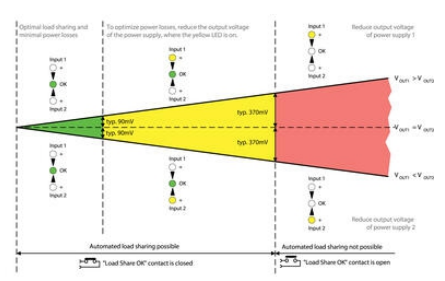
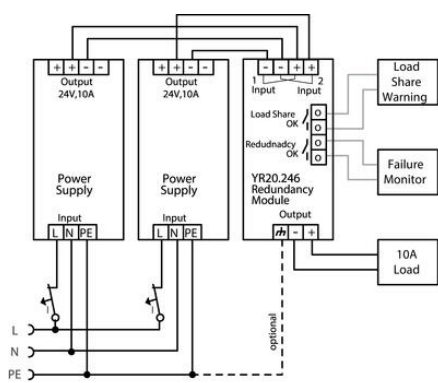
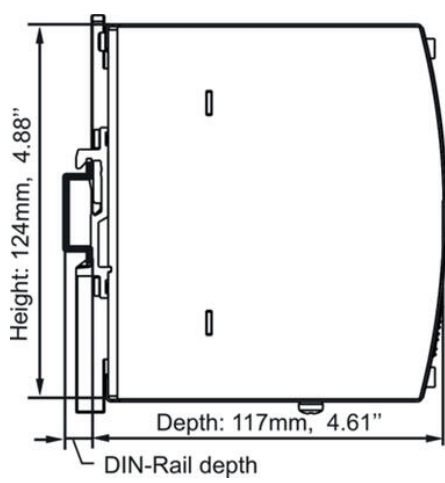
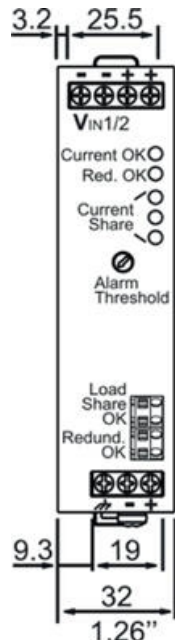


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