

REDUNDANT MODULE 20 A DIMENSION SERIES

24-28 V DC, 2x10 A

YR20.246

Redundancy Module 2 x 24-28V dc 10A I/P 24-28V dc 20A O/P

- 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.

SPECIFICATIONS

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| Input voltage DC | 24-28 V |
| Input voltage dc min | 18 V DC |
| Input voltage dc max | 35 V DC |
| Input current per channel max | 12 A |
| Input current at continuous overload or short circuit max | 24 A |
| Type Power Supply | Redundancy modules |
| Output voltage | 24 V DC |

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|--|--------|
| Output Current | 20 A |
| Output current max | 26 A |
| Temperature Range Without Derating From | -40 °C |
| Temperature Range Without Derating To | 70 °C |

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|-------------------------|-------------------------------------|
| 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 |

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|---------------|---------|
| Width | 32 mm |
| Height | 124 mm |
| Depth | 127 mm |
| Weight | 0.31 kg |

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|---|-------------------------------|
| Series | Dimension Y |
| Approvals | ATEX, CB, CE, CSA, CSA US, UL |
| Material Protection | Aluminium |
| IP Class | IP20 |
| Voltage Drop Over The Semi-Conductor | 500 mV |

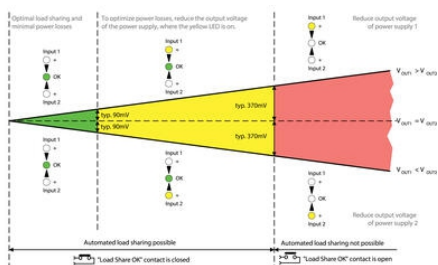
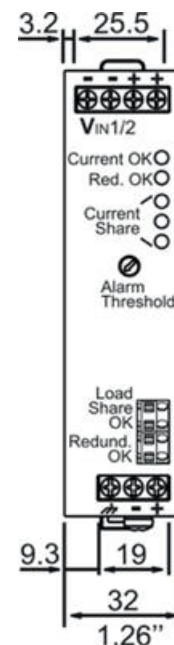
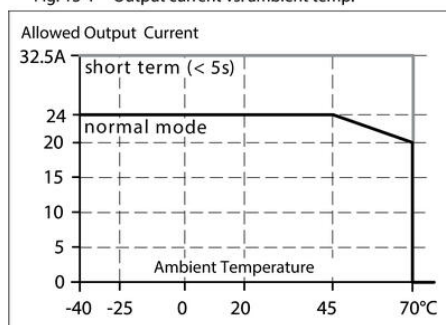


Fig. 13-1 Output current vs. ambient temp.



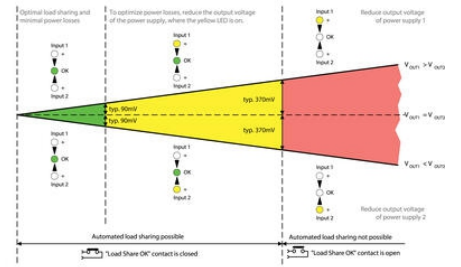
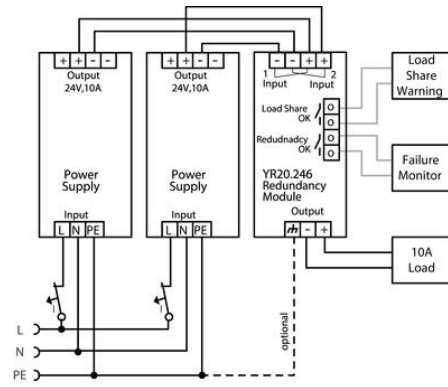
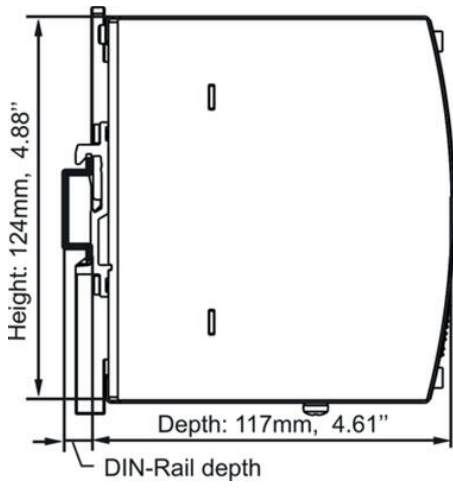


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