REDUNDANT MODULE 20 A DIMENSION SERIES, 12-28VDC

12-28 V DC, 2x10 A

YR20.242 Redundancy Module 2 x 12-28V dc 10A I/P 12-28V dc 20A O/P

- For N+1 and 1+1 Redundant Systems
- MOSFET transistors
- Minimum power loss





PRODUCT DESCRIPTION

The YR20.242 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.

In addition to the YR20.242, the YR20.246 is available which is featured with an automated load sharing between the connected power supplies and functions which monitor defects in the redundancy circuit or too high output currents, which could prevent redundancy, if one power supply fails.

The YR20.242 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 | 12-28 V |
|---|-----------|
| Input voltage dc min | 8,4 V DC |
| Input voltage dc max | 36,4 V DC |
| Input current per channel max | 20 A |
| Input current at continuous overload or short circuit max | 2x24 A |

OUTPUT DATA

| Output voltage | 24 V DC |
|----------------|---------|
| | |

| Output current | 20 A |
|--------------------|------|
| Output current max | 26 A |

EFFICIENCY / LIFETIME / MTBF

| Life span | 355000 h @ 2x 20 A, 24 V DC, 40 °C |
|------------------|-------------------------------------|
| MTBF (IEC 61709) | 7895000 h @ 2x 20 A, 24 V DC, 40 °C |

DIMENSIONS

| Width | 32 mm |
|--------|---------|
| Height | 124 mm |
| Depth | 127 mm |
| Weight | 0,25 kg |

OTHER

| Input / Output Separation | Mosfet |
|----------------------------------|-------------------------------|
| Approvals | ATEX, CB, CE, CSA, CSA US, UL |
| IP class | IP20 |
| Material protection | Aluminium |
| Series | Dimension Y |
| Voltage drop over semiconductor | 110 mV |
| Temperature min without derating | -40 °C |
| Temperature max without derating | 70 °C |
| | |

Redundancy modules

| 2.5A | short term (< 5s) |
|------|---------------------|
| 24 | normal mode |
| 20 - | |
| 15 - | |
| 10 - | +-+ |
| 5 - | |
| 0 | Ambient Temperature |

Type Power Supply





