

REDUNDANT MODULES 20 A DIMENSION SERIES

YR2.DIODE
2x10A DECOUPLING 10-60VDC

- 32 mm wide
- Dual diodes
- Relay indication of power supply status
- Increases operational reliability



PRODUCT DESCRIPTION

Redundant module used with power supply unit to assure 24 V supply. The redundant module has two separate inputs with diodes that separate the power supply units. In the event of a fault on the secondary side of power supply 1, the diode will prevent power supply 2 from being short circuited. A system protected against internal power supply faults is attained that is especially well-suited in processes where downtime is costly. The redundant module can also be used in systems in which operation of sensitive loads is to be assured. Input 1 is connected to the main power supply that normally supplies loads and, for example, the PLC. Input 2 is connected to a smaller power supply that is only connected to the sensitive load, in this case the PLC. In the event of a fault to the main power supply or short circuit of the loads, the PLC will be supplied by the smaller power supply and incorrect process terminations are avoided. The redundant module is also well-suited when you want to separate the power supply units from the loads so as to avoid returned voltage, such as from motors and batteries. YRM2.diode has 2 relay outputs that indicate if voltage drops/is zero. The relay opens in the event of faults and the LED turns off. YRM2 is especially well-suited for Dimension C, which does not have relay outputs. If more than 10 A is required per channel, two redundant modules are connected, one for each power supply. Both inputs must be connected on each module.

SPECIFICATIONS

Type Power Supply	Redundancy modules
Input voltage dc max	60 V DC
Input voltage DC	12-48 V
Input current per channel max	10 A
Input voltage dc min	9 V DC
Output voltage min	12 V DC
Temperature Range Without Derating From	-40 °C
Output current max	25 A
Output voltage max	48 V DC
Output Current	20 A

Temperature Range Without Derating To	70 °C
Weight	0,29 kg
Depth	102 mm
Width	32 mm
Height	124 mm
IP Class	IP20
Voltage Drop Over The Semi-Conductor	850 mV
Series	Dimension Y
Approvals	ATEX, CB, CE, CSA, CSA US, GL, UL
Material Protection	Aluminium

Fig. 17.1 Wiring diagram, 1+1 Redundancy, 10A output current

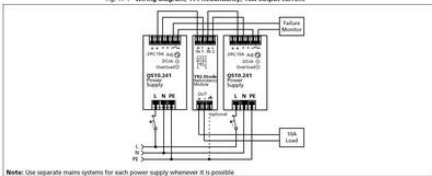


Fig. 17.2 Wiring diagram, n+1 Redundancy, 30A output current

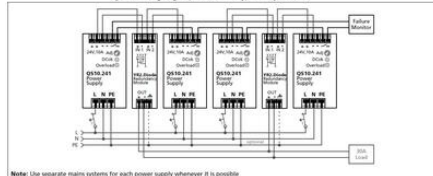


Fig. 17.4 Wiring diagram, redundancy for sensitive loads

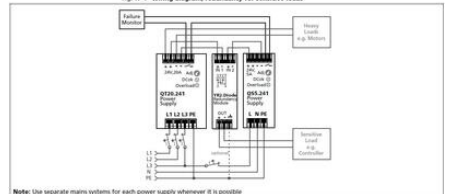


Fig. 17.5 Wiring diagram, decoupling of buffered branches

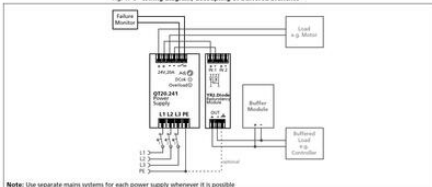


Fig. 17.3 Wiring diagram, 10A Battery back-up

