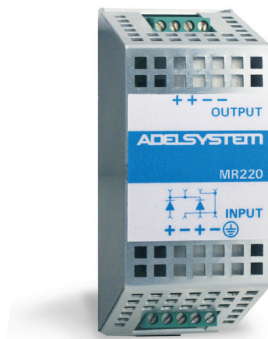


# MR220 Redundancy Module



Decoupling Diode to produce redundant applications or to decouple power sources from each other as well as from the load

Input - Output: 10 - 60 Vdc

Output Current: 0 - 25 A max

DIN Rail Mountable

Extremely small size

3 Year warranty

## Features

The decoupling module is a dual input diode with 2 inputs and one output, suitable for various applications such as to produce redundant applications to decouple power sources from each other as well as from the loads e.g. separation of sensitive loads from the power bus, design buffered branches, block reverse power etc.

### Input

In Current (Dual Input Mode;1+1Redundancy)	2 x 12.5 A max
Input Current (Single)	1 x 25 A max
Input 1	10 – 60 Vdc, 0 – 25 A
Input 2	10 – 60 Vdc, 0 – 25 A
Peak Current	200 A for max. 10 ms
Reverse Current	25 mA max. per diode

When both inputs are used “Dual Input Mode” the output current results as the sum of the two inputs, max 25A. If used with only one input “Single Input Mode”, both positive input terminals can be linked.

### Output Data

Output Voltage “Drop Out” Vin - Vout	0,9 (,max.) 0-25 A
Rated Current at 24 V 40°C (In)	25 A (permanent )
Rated Current at 24 V 50°C (In)	22 A (permanent )
Rated Current at 24 V 60°C (In)	20 A (permanent )
Current Short Circuit Icc	60 A
Dissipation power load max (W)	12

### Climatic Data

Ambient Temperature operation	-25 up to +70 °C (>60°derating 2.5% °C)
Ambient Temperature Storage	-40 up to +85 °C
Humidity at 25 °C, no condensation	95 % to 25 °C

### General Data

Fuse: Input or output (recommended)	35 A (MCB curve B)
Protection Class (EN/IEC 60529)	IP 20
Reliability: MTBF IEC 61709	> 500.000 h
Pollution Degree Environment	2
Connection Terminal Blocks Screw Type	2,5 mm (24 – 14 AWG)
Protection class	I with PE connected
Dimension (w-h-d)	50x120x50 mm
Weight	0.4 kg approx.

### Cooling

Convention cooling no fan required
Free space for cooling 10 mm around the device

### Norms and certifications

The CE mark in According to EMC 2014/30/UE and Low voltage directive 2014/35/UE.

### Electrical Safety

In compliance to UL508. EN IEC 61010-2-201:2018

According to IEC/EN 60950 (VDE 0805) e EN 50178 (VDE 0160) for assembling device. The unit must be installed according to IEC/EN 60950. Input / Output separation: SELV EN60950-1 and PELV EN 60204-1. Double or reinforced insulation.

### EMC Immunity

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN61000-6-2

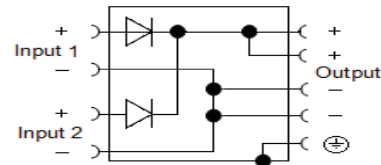
### EMC Emission:

EN61000-6-4, EN61000-3-2

### Standards Conformity

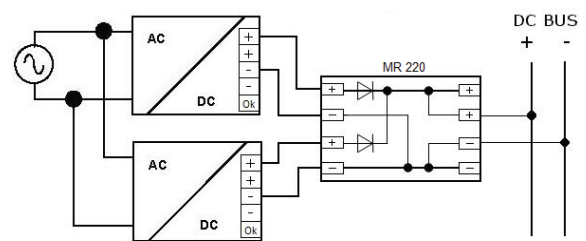
EN 60204-1 Safety of Electrical Equipment Machines

### Block Diagram

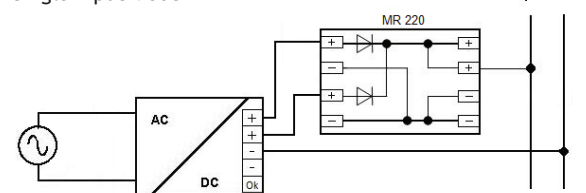


### Wiring Scheme

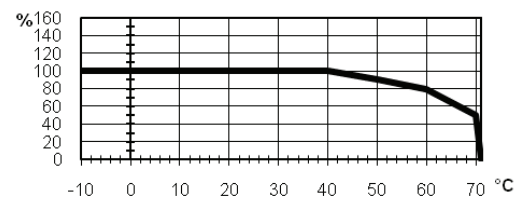
Dual Input Mode (1+1 Redundancy)



Single Input Mode



Output derating Curve  
Continuous Load



All specifications are subject to change without notice