MR220 Decoupling 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 89/336/EEC and 93/68/EEC and the Low voltage directive 2014/35/UE.

Electrical Safety

In compliance to UL508.

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

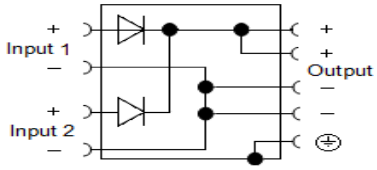
EMC Emission:

EN61000-6-4, EN61000-3-2

Standards Conformity

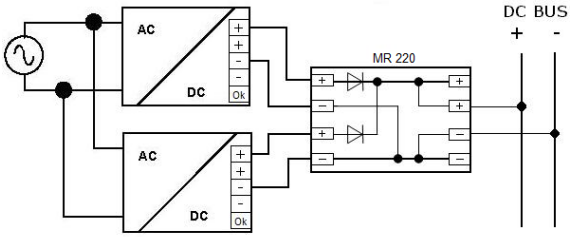
EN 60204-1 Safety of Electrical Equipment Machines

Block Diagram



Wiring Scheme

Dual Input Mode (1+1 Redundancy)



Single Input Mode