

MB REDUNDANCY BALANCE

PERFECT BALANCE WITH 100 % REDUNDANCY

Having the highest machine availability is an important subject. That's why power supply systems are often redundantly designed, with two power supply units. Murrelektronik's active redundancy module, MB Redundancy Balance, decouples two independent power supply units and generates a redundant 24 V DC control voltage.

MB Redundancy Balance ensures an automatic 50:50 balancing of power between the two units. For example: if the required load current is 10 A, this cabinet component ensures that both units supply 5 A. If one of the two power supply units fails, the other can continue to work because it is decoupled. The only condition is that each unit is in the position to supply the nominal current of the load.

MB Redundancy Balance operates with an innovative technology based on MOSFET. Depending on the output current and the input voltage difference, the internal consumption of the modules is up to 87 % less than with conventional diode modules.



HIGHLIGHTS

- 50:50 Auto Balancing
- Signal contact for each input
- LEDs for channel-specific status indication
- Very low power loss
- Bridging system combines several modules or connects to MICO, the electrical load circuit monitoring module
- Spring clamp connections
- Wide temperature range
-25...+60 °C

MB REDUNDANCY BALANCE ENSURES EQUAL LOADS ON BOTH POWER SUPPLY UNITS

Power Supply 24 V/10 A



$I_{IN1} = 5 \text{ A}$



$I_{IN2} = 5 \text{ A}$



$I_{OUT} = 10 \text{ A}$

Power Supply 24 V/10 A



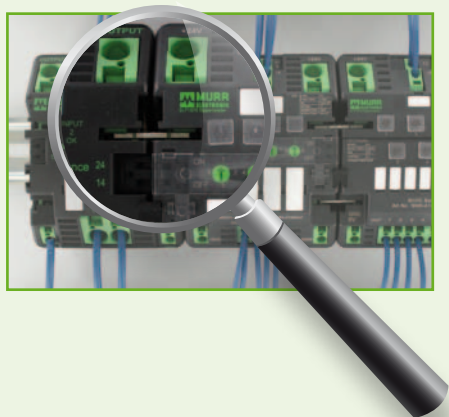
HIGHLY EFFICIENT

Due to the innovative technology based on MOSFET, the energy consumption is up to 87 % less than those of conventional diode modules.



50:50 AUTO BALANCING

MB Redundancy Balance automatically ensures that each unit supplies half the current load. Because the power supply units aren't under as much stress, their lifetime increases.



EASY TO CONNECT

With the integrated bridging system, MB Redundancy Balance can be directly combined with the electronic load circuit control module MICO, without requiring wiring work.

Ordering data		Art. No.
24 V DC/2x20 A	(SELV/PELV)	85496
Input		
Input voltage	24 V DC	
Voltage range	21...30 V DC	
Nominal current	2 x 20 A	
Total current	max. 40 A	
Polarity	internal reverse polarity protection up to 60 V DC	
Output		
Output voltage	24 V DC	
Voltage range	21...30 V DC	
Nominal output current	40 A (-25...+60 °C)	
Overload	at 20 A + 50 % for 4 sec.	
Status indicator	1 LED per channel	
Alarm output relay contact	1 potential-free alarm output per channel	
General data		
Mounting method	spring clamp terminals	
Standards	EN 61000-6-2, EN 61000-6-3	
Bridging	on both sides, with spring clamp terminals or bridge set (max. 40 A)	
Relative humidity	5...95 %	
Efficiency	> 98 %	