

REDUNDANCY MODULE with DIODE: 24Vdc - 20Adc

MPA24-20



- **For parallel connection of 2 DC power supplies**
Increases system availability and safety
Ensures uninterrupted redundancy
Allowing the replace of one power supply without stop
- **24Vdc output, up to 20A**
Control relays and signalisation Led
allowing the diagnosis of power supplies
- **Application**
Uninterruptible power supply,
installation requiring a high level of availability.
- **Natural convection cooling**
- **DIN rail mounting**



The redundant module provide an effective protection against the power supplies failure. Through decoupling of two power supplies, the failure of one of them has no effect on the output, the other taking automatically its function without interruption. The redundant module monitor continuously the two power supplies, and provide an alarm via a contact relay if a failure is detected (loss of redundancy).

Benefit

- Improve the operational safety,
- Increases the availability of installations,
- Increase immunity against micro power cuts

Inputs

- 2 voltage inputs 24V +/- 15%, common ground.

Monitoring relay for each power supply

- Potential free contact (close when power supply is ok)
- 1 relay per channel, signal a faulty power supply.

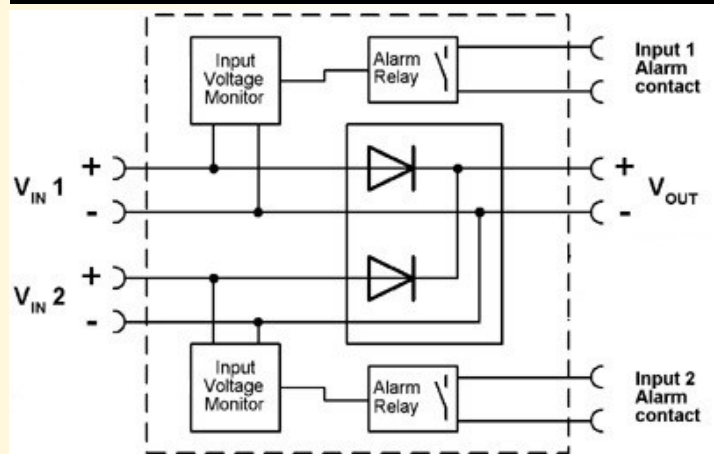
Output

- The output is a copy of the greater of the two input voltage.
(output = input - 0.6V)

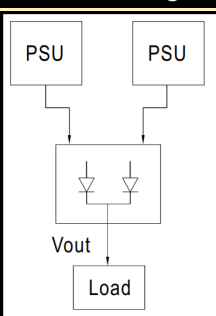
Feature

- DIN rail mounting (symmetric according to EN50022)
- Screw terminal blocks (up to 4 mm²)
- Protection rating: IP20, conformal coating

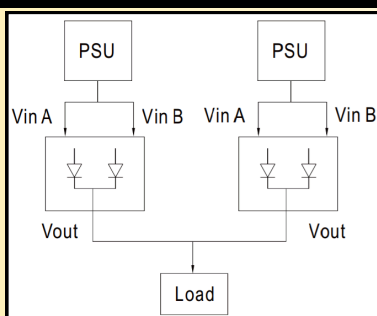
Internal synoptic



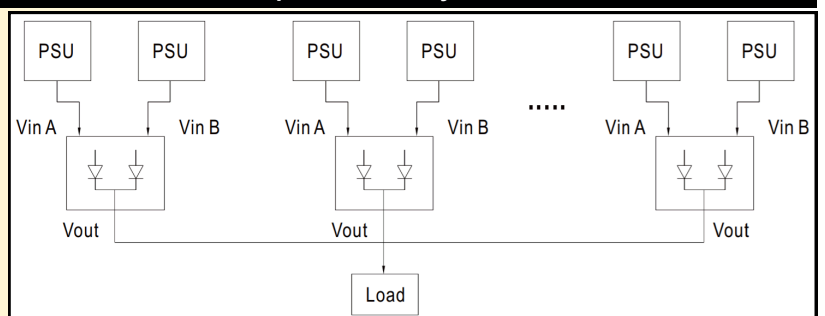
standard using



increase current to 25A



multiple redundancy



Version and order code:

[Request a quote](#)

MPA24-20: redundancy module 24V 5A with control relay

INPUT / POWER SUPPLY

Voltage 24 Vdc (21V to 28V)
 Current 20 Adc maxi

Reverse polarity protected. 30V maxi

OUTPUT

typical voltage = input voltage - 0.6V @ 10A
 maxi overcurrent 2 x 1 / 5 seconds

MONITORING RELAYS

Potential free contact (open on failure)
 switching capacity 30Vdc / 1A
 response time 5ms

ENVIRONMENT

Operating temperature: -40°C to 70°C
 Storage temperature: -40°C to 85°C
 Humidity: 85 % non condensing
 Protection rating (according to EN 60529): IP20.
 Weight: 500 g

Dielectric strength (power supply / relay) 2500Vac continuously
 Isolation resistance >100Mohms @500Vdc

Vibration (IEC60068-2-6) 10 ~ 500Hz, 2G 3 axes

MTBF (MIL HDBK 217F) > 1 000 000 Hrs @ 25°C
 life time > 200 000 Hrs @ 30°C

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

| Immunity standard for industrial environments EN 61000-6-2 | | Emission standard for industrial environments EN 61000-6-4 |
|---|-------------------------|---|
| EN 61000-4-2 ESD | EN 61000-4-8 AC MF | EN 55011 group 1 class A |
| EN 61000-4-3 RF | EN 61000-4-9 pulse MF | |
| EN 61000-4-4 EFT | EN 61000-4-11 AC dips | |
| EN 61000-4-5 CWG | EN 61000-4-12 ring wave | |
| EN 61000-4-6 RF | EN 61000-4-29 DC dips | |



WIRING AND OUTLINE DIMENSIONS:

