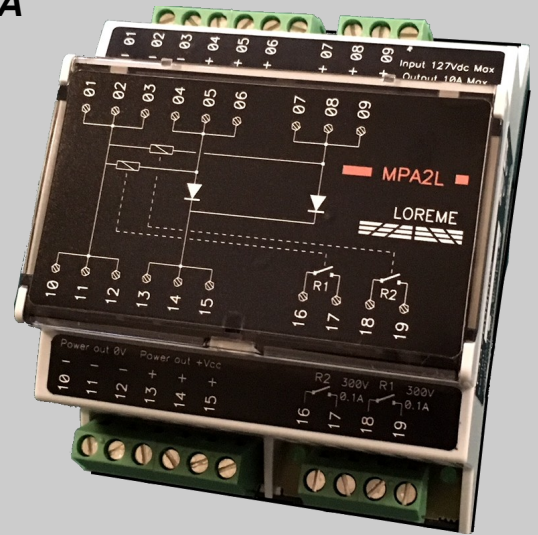


REDUNDANCY MODULE with DIODE: MPA2 MPA2L
250Vdc / 125Vdc / 115Vdc / 110Vdc / 48Vdc / 24Vdc / 12Vdc



- **For parallel connection of 2 DC power supplies**
Increases system availability and safety
Ensures uninterrupted redundancy if one of power supplies fail.
- **MPA2L(HV) : 12Vdc ... 125Vdc (280Vdc) maxi 10A**
Low dissipation, dropout voltage < 1V
Option : monitoring relay
- **MPA2 : 24Vdc version**
+ monitoring relay
for power supplies diagnosis
+ resettable thermal protection
for each power supplies
Option: inrush current limiter
until the output voltage is set.
- **Application**
Uninterruptible power supply,
installation needing a high level of availability.



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 micro cuts immunity

Inputs

- MPA2 : 2 voltage inputs 24V +/- 15% with common ground.
- MPA2L : 2 voltage inputs up to 127Vdc.
- MPA2LHV : 2 voltage inputs up to 280Vdc.

Monitoring relay (MPA2 only)

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

Special functions (option MPA2-LCA)

- Inrush current limiter on supply primary circuits.
- EMC protection, varistor surge protector.

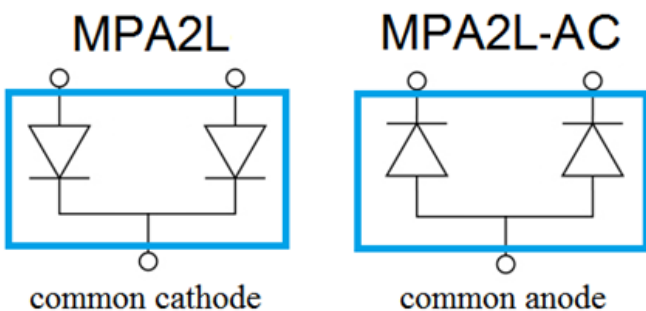
Output

- Protected with resettable fuse on MPA2 model
- Multi-output terminals (No need of external bridge connection)

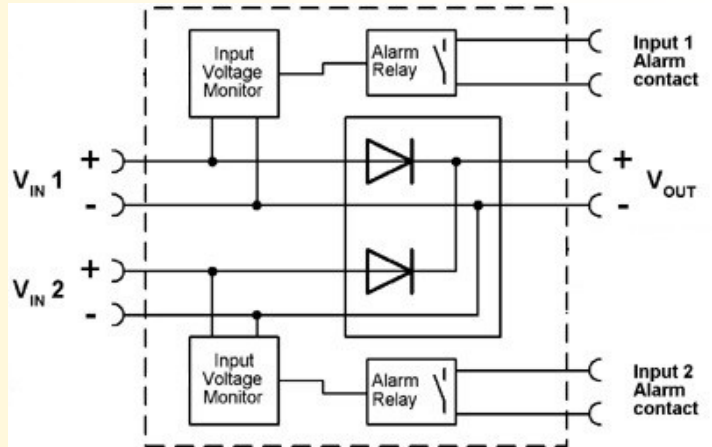
Feature

- DIN rail mounting (symmetric according to EN50022)
- Screw terminal blocks (up to 2.5 mm²)
- Protection rating: IP20, conformal coating

MPA2L Normal and reverse model (-AC)



Synoptic for MPA2 and MPA2L/R models



Version and order code:

[Request a quote](#)

MPA2: Redundancy module 24V / 5A with control relay (48Vdc version on request)

Option : **-LCA** Inrush current limiter and EMC protection for input power supplies

MPA2L: Redundancy module up to 127Vdc 10A maxi (voltage range: 12Vdc to 127Vdc)

MPA2LHV: Redundancy module up to 280Vdc 10A maxi (voltage range: 12Vdc to 280Vdc)

Option : **/R** input voltage monitoring relay
-AC Diode mounted in common Anode

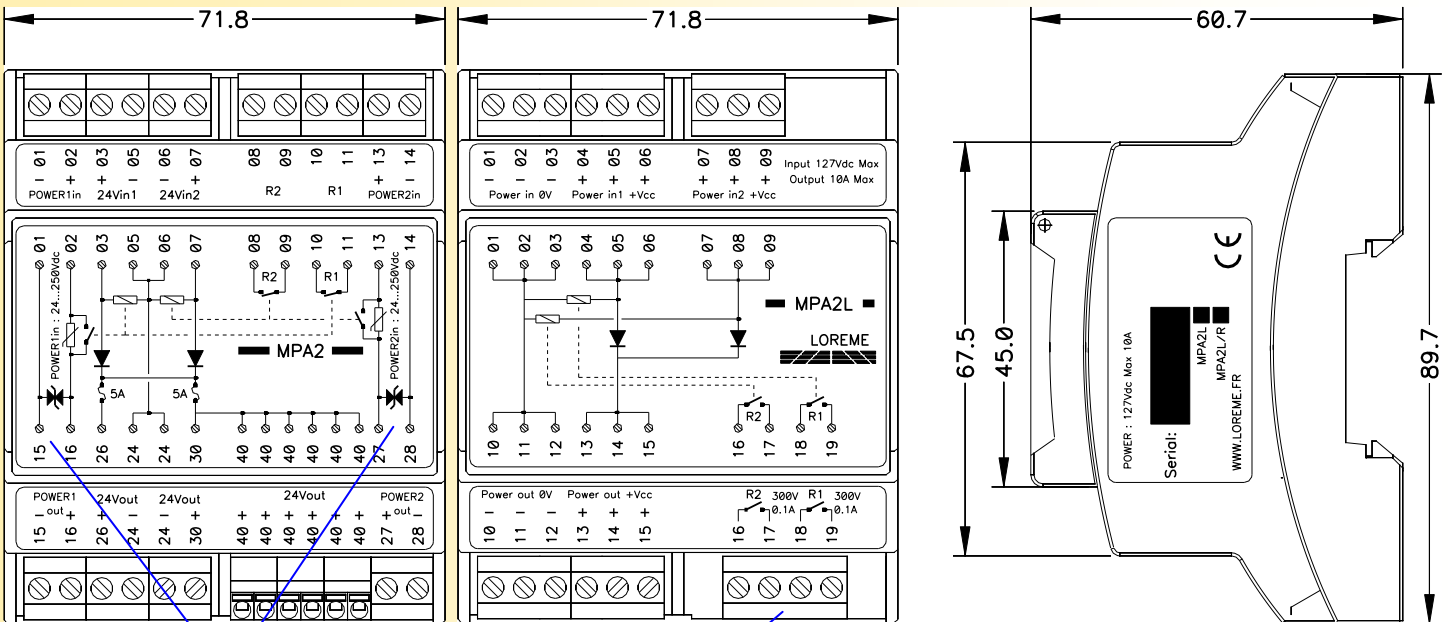
INPUT / POWER SUPPLY	
MPA2	Voltage 24dc +/- 15% Current 5Adc
MPA2L (HV)	Voltage 12 ... 127Vdc (280Vdc) Current 10Adc
Reverse polarity protected	
OUTPUT	
typical voltage	= input voltage - 0.42V @ 5A
maximal admissible overcurrent	3 x I / 5 seconds
MPA2 protection	tripping current 10A, tripping delay: 10s maxi
MONITORING RELAY	
Potential free contact (open on failure)	
MPA2 : electromechanical relay, 5 A / 250 V response time : 5ms	
MPA2L : MOS FET relay 0.1A / 300 V response time : 2ms	
OPTION MPA2-LCA	
Primary inrush current limiter 5A @ 230Vca	
Clipper: 230Vac varistor, withstand surge current 20us: 4500A	

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:	150 g
Dielectric strength (power supply / relay)	2500Vac continuously
MTBF (MIL HDBK 217F)	> 1 200 000 Hrs @ 25°C
life time	> 200 000 Hrs @ 30°C
Shock IEC 60068-2-27 (operating)	5 G / 11 ms
Bump IEC 60068-2-29 (transportation)	30 G / 6 ms
Vibration IEC 60068-2-6 (operating)	1 G / 10 - 150 Hz
Vibration IEC 60068-2-6 (transportation)	2 G / 10 - 150 Hz

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE		
Immunity standard for industrial environments		Emission standard for industrial environments
EN 61000-6-2		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	



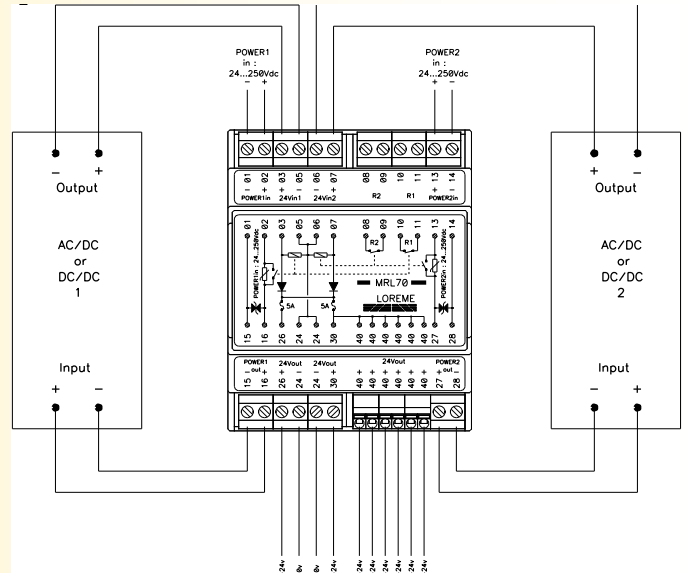
WIRING AND OUTLINE DIMENSIONS:



Option: Inrush current limiter and shock waves EMC protection

Option: Monitoring relay

Wiring of MPA2 with inrush current limiter



MPA2 application

