

REDUNDANCY MODULE with DIODE: MPAx
 250Vdc /127Vdc /125Vdc /115Vdc /110Vdc /48Vdc /24Vdc



- **For parallel connection of 2 or 3 DC power supplies**
 Increases system availability and safety
 Ensures uninterrupted redundancy
 Allowing the replace of one power supply without stop

- **Using range : 20Vdc ... 280Vdc**
MPA3 : 20A nominal, 30A maxi (natural convection)
MPA3-3 : version with 3 inputs 30A maxi
MPA4 : 40A nominal, 50A maxi (ventilated model)
MPA5 : 80A nominal, 100A maxi (ventilated model)
MPA6 : 200A nominal, 250A maxi (ventilated model)
 Monitoring relay in option

- **DIN rail or wall mounting**

- **Application** rescued system
 Installation requiring 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 immunity against power voltage dips

Inputs

2 or 3 inputs up to 280Vdc with common ground.

Output

equal to the higher input voltage - 1.2V

Monitoring relay (MPAx/R)

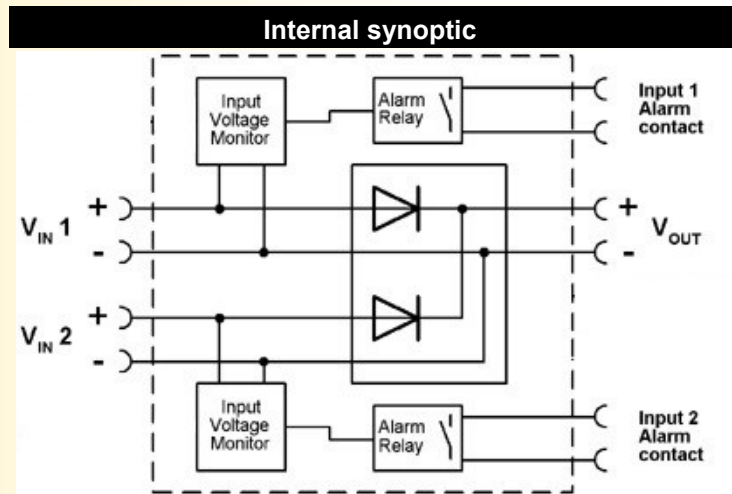
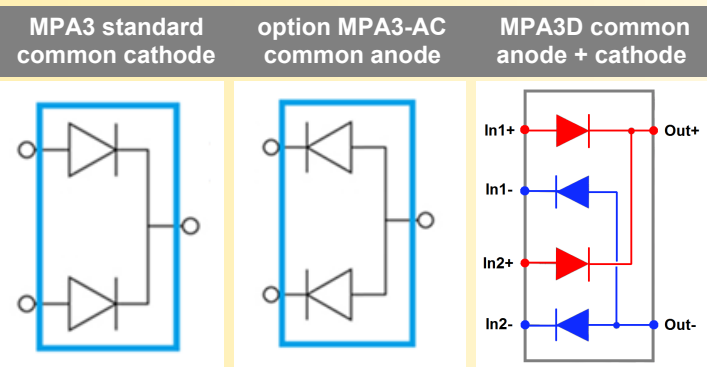
- Potential free contact (closed when power supply is ok)
- 1 relay per channel, signal a faulty power supply.

Extended protection for harsh environment (option - MOV)

- EMC protection, varistor surge protector.

Feature

- Wall or DIN rail mounting (symmetric according to EN50022)
- MPA3 : pluggable screw terminal blocks, 6mm² section
- MPA4 : screw terminal blocks, 25mm² section
- MPA5 : screw terminal blocks, 35mm² section
- MPA6 : wiring on 8mm threaded brass rod
- Protection rating: IP20



Version and order code:

[Request a quote](#)

- MPA3:** 2 inputs redundancy module up to 30A maxi
- MPA3D:** redundancy module common anode + cathode
- MPA3-3:** 3 inputs redundancy module up to 30A maxi (voltage operating range 20Vdc to 280Vdc)

MPA3/R-MOV-RTE: Redundancy module 127Vdc nominal / 30A with monitoring relay and varistor protection (model for RTE customers)

- MPA4:** Redundancy module up to 50A maxi
- MPA5:** Redundancy module up to 100A maxi
- MPA6:** Redundancy module up to 250A maxi (voltage operating range 20Vdc to 280Vdc)

- Option :
- /R** input voltage monitoring relay (**the rated voltage must be defined**)
 - AC** Diode mounted in common Anode
 - MOV** varistor surge protector

note : options can be cumulated (no option on MPA3-3)

INPUT / POWER SUPPLY

MPA3	Voltage	20...280Vdc
	Current	20Adc nominal, 30A @45°C maxi
MPA4	Voltage	20...280Vdc
	Current	40Adc nominal, 50A @45°C maxi
MPA5	Voltage	20...280Vdc
	Current	80Adc nominal, 100A @45°C maxi
MPA6	Voltage	20...280Vdc
	Current	200Adc nominal, 250A @45°C maxi

Reverse polarity protected

OUTPUT

typical voltage	= input voltage - 1.6V @ rating current
maxi overcurrent admissible	3 x I / 5 seconds
reverse leakage current	< 200uA
switching time	< 250nsec

MONITORING RELAY (MPAx/R)

Potential free contact (open on failure)	
switching capacity :	5A / 250V
response time :	5ms

ENVIRONMENT

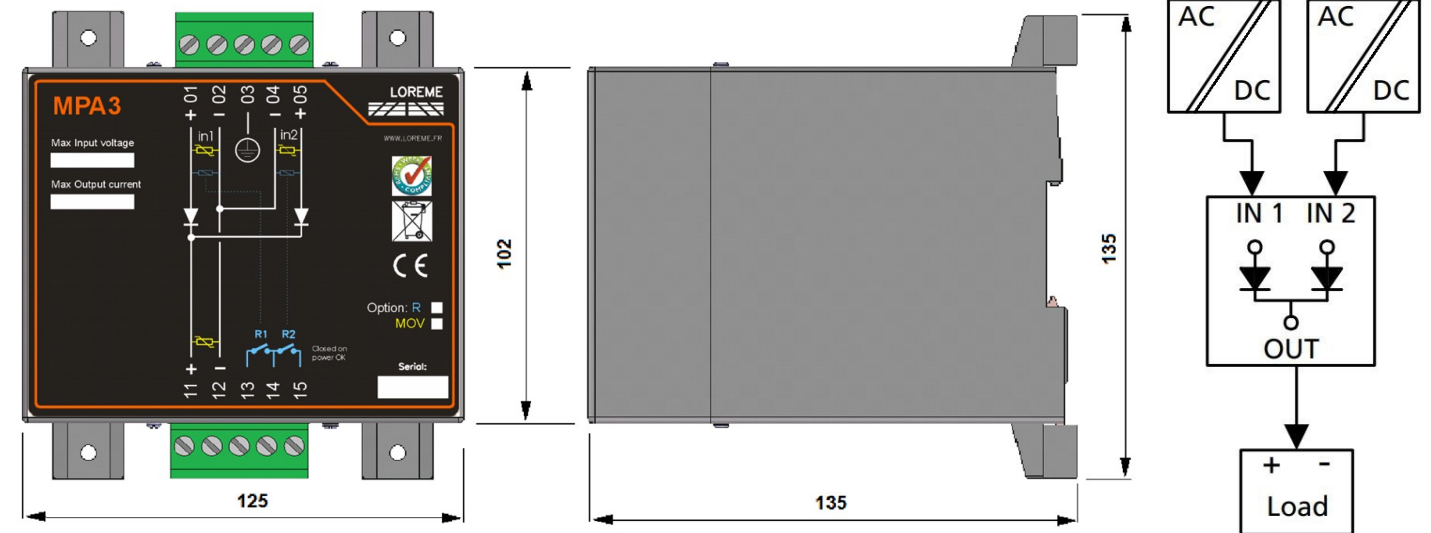
Operating temperature:	-25°C to 60°C
Storage temperature:	-40°C to 85°C
Humidity:	85 % non condensed
Protection rating (according to EN 60529):	IP20
Weight:	950 g
Dielectric strength (power supply / relay)	2500Vac continuously
MTBF (MIL HDBK 217F) life time	> 1 200 000 Hrs @ 25°C > 200 000 Hrs @ 30°C (natural convection) > 50 000 Hrs @ 30°C (ventilated)

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

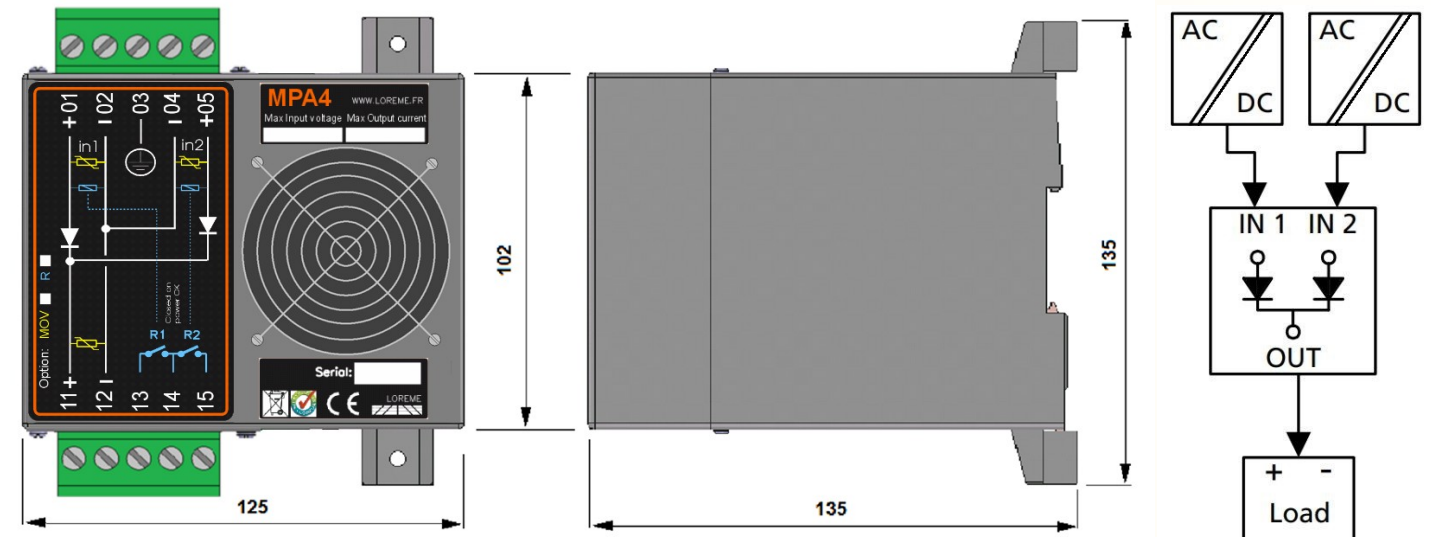
Immunity standard for industrial environments and power station EN 61000-6-2 / EN 61000-6-5		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5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



WIRING AND OUTLINE DIMENSIONS: MPA3



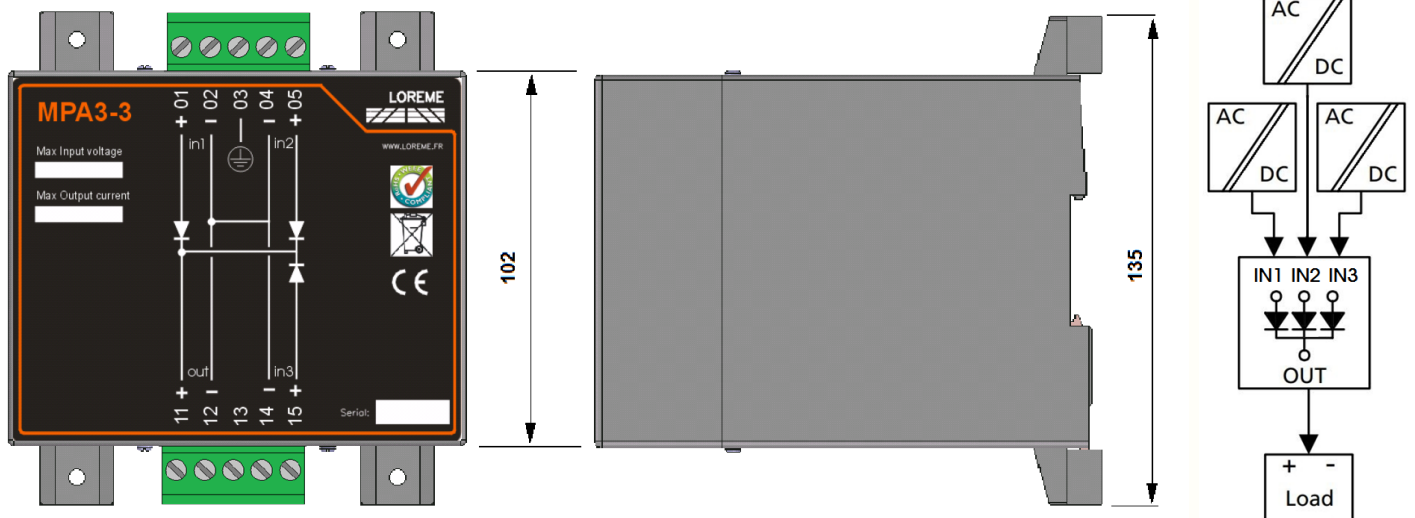
WIRING AND OUTLINE DIMENSIONS: MPA4



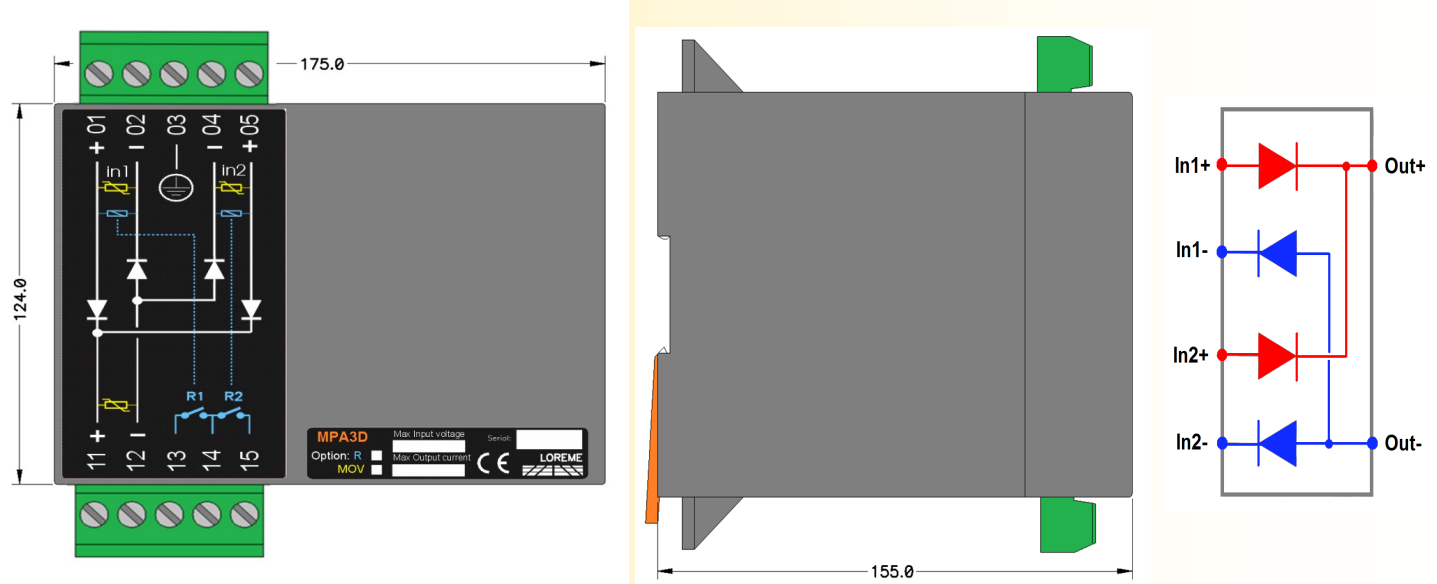
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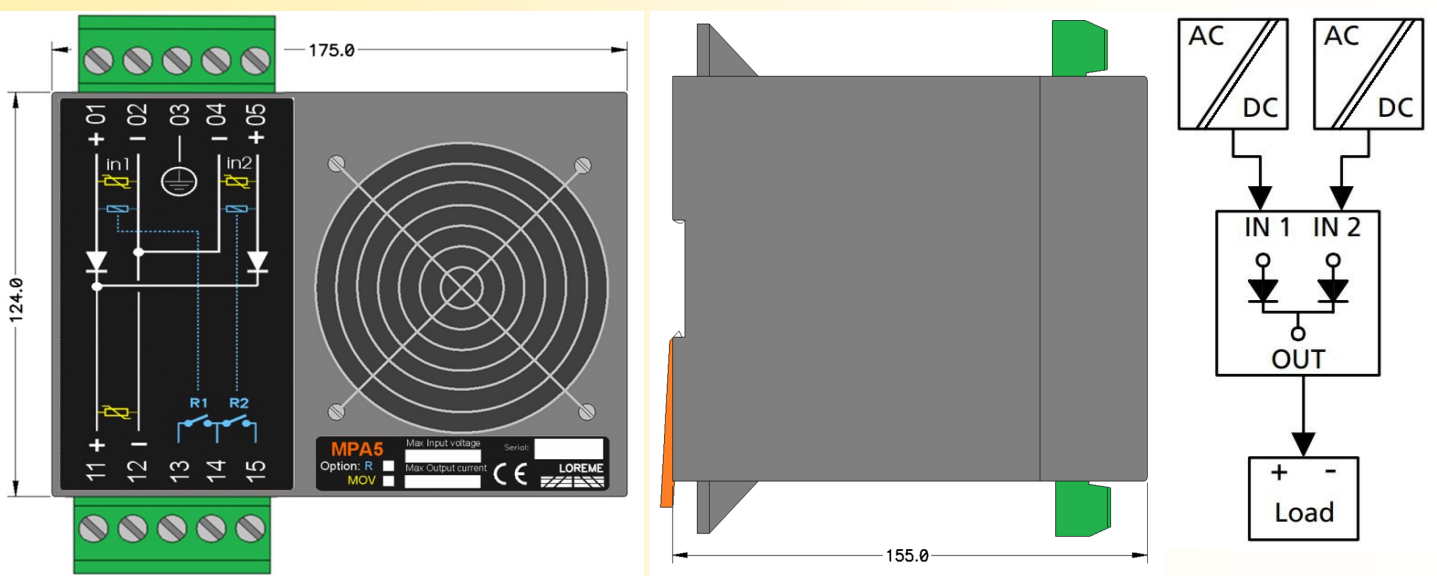
WIRING AND OUTLINE DIMENSIONS: MPA3-3 3 inputs version



WIRING AND OUTLINE DIMENSIONS: MPA3D



WIRING AND OUTLINE DIMENSIONS: MPA5



WIRING AND OUTLINE DIMENSIONS: MPA6

