

PULS

PULS
PISA-M-4ADJ



IN DC
24V
+1.1
-1.2
-1.3

Ctrl
+3.1
-3.2
+3.3
-3.4
Status

1
2
3
4
ON / OFF
● ON ● OFF ☀ Tripped

OUT
+2.1
+2.2
+2.3
+2.4

PISA-M

The safety your system needs, comes in a revolutionary compact design.

4-channel
Electronic Circuit Breakers

**DISTRIBUTE.
PROTECT.
MONITOR.**

PISA-M

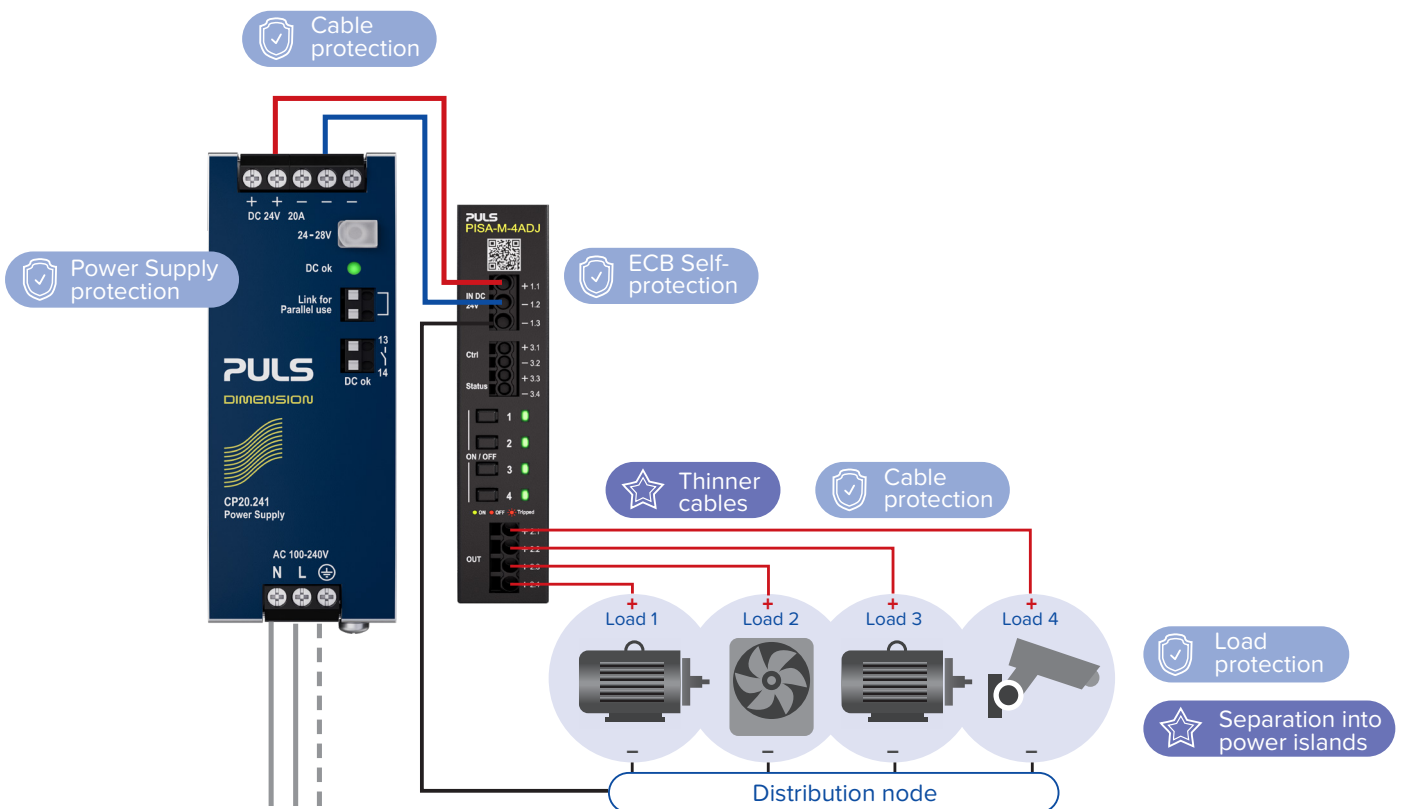
Distribute. Protect. Monitor.
Next level ECBs

PISA-M 4-channel electronic circuit breakers (ECBs) are the perfect safety and power distribution tools for your applications with 90 W to 480 W power requirements.

PISA-M manages the current distribution on the secondary-side of your system and allows to separate it into smaller „power islands“, which are easier to maintain.

The modules protect your system components and wiring against over-current or short-circuits and prevent costly system failures and downtimes. In addition the devices ensure the safety and functionality of your power supply units.

The digital coded interface is an easy way to remotely control the PISA-M modules and to monitor the operational system status.

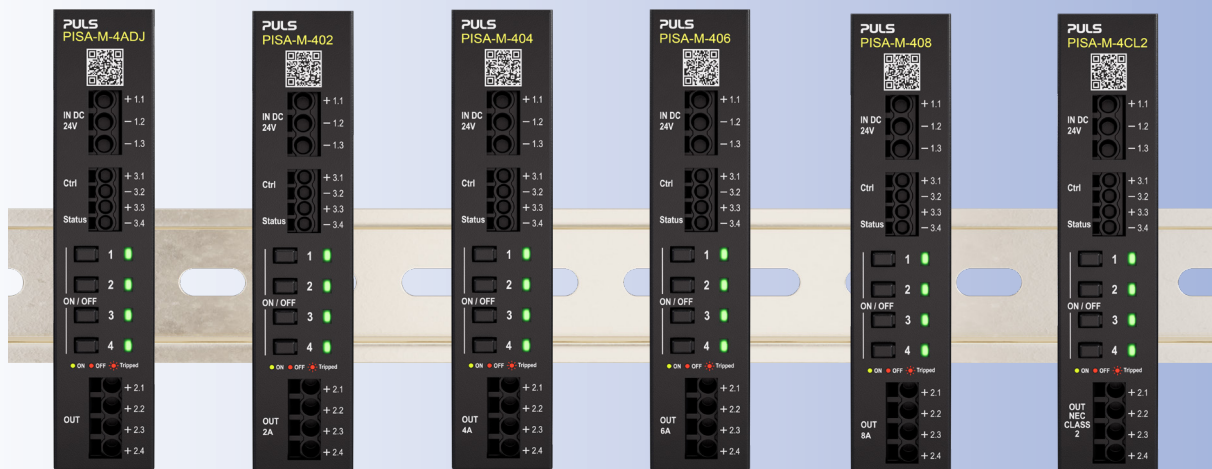


PISA-M provides benefits for the protection of loads, cables, power supply and the ECB itself as well as for an efficient power distribution.

Overview

PISA-M portfolio

	Adjustable output current	Fixed output current
Input		
Voltage	DC 24 V - 20 % / + 25 %	DC 24 V - 20 % / + 25 %
Auto-Select	DC 12 V - 20 % / + 25 %	DC 12 V - 20 % / + 25 %
Output		
Number of channels	4	4
Voltage	DC 24 V - 20 % / + 25 % DC 12 V - 20 % / + 25 %	DC 24 V - 20 % / + 25 % DC 12 V - 20 % / + 25 %
Current	1 / 2 / 3 / 4 / 6 / 8 A adjustable max. 20 A total	2 / 3.75 / 4 / 5 / 6 / 8 A fixed for 6 and 8 A: max. 20 A total for 3.75 A (24 V) and 5 A (12 V): choose NEC Class 2 version
Tripping		
Characteristics	Slow or fast selectable	Slow or fast selectable
Delay	< 10 ms (at short circuit) 0.22 s for fast tripping at 1.5 x nominal current 1.1 s for slow tripping at 1.5 x nominal current	< 10 ms (at short circuit) 0.22 s for fast tripping at 1.5 x nominal current 1.1 s for slow tripping at 1.5 x nominal current
Further information		
Temperature range	-25 °C to +70 °C	-25 °C to +70 °C
Dimensions WxHxD	22.5 x 104 x 100 mm	22.5 x 104 x 100 mm
Weight	100 g	100 g
Terminals	Push-in	Push-in
Commercial information		
Order numbers	PISA-M-4ADJ	PISA-M-402 2 A p. ch. PISA-M-404 4 A p. ch. PISA-M-406 6 A p. ch. PISA-M-408 8 A p. ch. PISA-M-4CL2 3.75 A (24 V) or 5 A (12 V) p. ch.



PISA-M-4ADJ

Fully configurable
current limits
1, 2, 3, 4, 6, 8 A

PISA-M-402

2 A per channel

PISA-M-404

4 A per channel

PISA-M-406

6 A per channel
Total max. 20 A

PISA-M-408

8 A per channel
Total max. 20 A

PISA-M-4CL2

NEC Class 2 version
3.75 A (24 V) or 5 A
(12 V) per channel
Total max. 20 A

Comparison MCB vs ECB



Miniature
Circuit
Breakers

VS

Electronic
Circuit
Breakers



4 modules = 4 channels	Channels	1 module = 4 independently controlled channels
72 (4x 18) x 90 x 68 mm	Size (w x h x d)	22.5 x 104 x 100 mm
440 ccm ³	Volume	234 ccm ³
Thermal, electromagnetic	Overload trigger	Electronic
Peak current needed (e.g. 5 or 10 × I _n)	Tripping	No “peak” current needed for fast tripping
No or delayed reaction with small overloads	Reaction time	Fast reaction (1 ms) also with small overloads
Wider tolerance range	Accuracy	Accurate current limitation

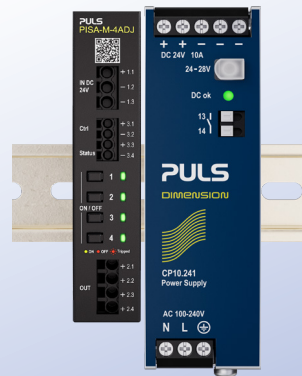
Power supply selection A beautiful couple

The combination of PISA-M with a PULS DIN rail power supply is the best foundation for an efficient and reliable power supply system.

PISA-M is compatible with almost any DIN rail power supply in the power range from 90 to 480 W. For best results we recommend a PULS DIN rail power supply.



PIC120
120 W
DC 24 V, 5 A



CP10
240 W
DC 24 V, 10 A



CP20
480 W
DC 24 V, 20 A

Mini in format, big on features
Benefits at a Glance

Flexible and easy to use



Flexible auto-voltage select for DC 12 V or DC 24 V operation



Quick and easy installation and configuration without tools



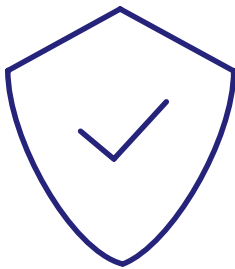
Fast
 Sensitive loads
 e.g. sensors



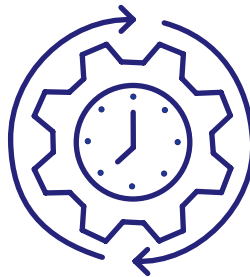
Slow
 Capacitive loads
 e.g. motors

Tripping speed can be adjusted according to the connected load.

Robust and reliable

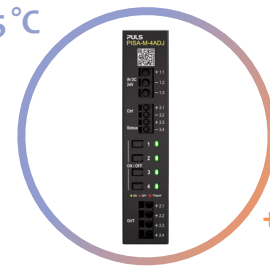


Sustainable electronic self-protection based on a fuse-less & fail-safe design



Very long lifetime of > 200,000 h

- 25°C



+ 70°C

Broad operating temperature range

Safe and secure

voltage dips

overload

fire hazard

short circuit



Efficient and fast power supply protection



Two-colour LEDs show status of each output channel in real-time

Big brother. PISA-B. 8-channel ECB



Higher availability

Identify and isolate individual faulty branches



Higher reliability

Fast trouble-shooting via real-time LED matrix and alarm signal



Higher flexibility

Easy system expansion – up to 64 output channels via bus bar connection



Higher packing density

8 channels, including + and - terminals, in a 52 mm wide unit

PISA-B is an excellent fit for DC 24 V applications with higher power demands. The channels 1 and 2 provide up to 12 A and are optimised for large capacitive loads. In total PISA-B is capable to supply 40 A.

PISA-B modules are based on a modular product design. Up to 8 ECBs can be connected in parallel via thin copper bars, the so called bus bars, the so called bus bars. This results in up to 64 channels powered with only one power supply.

An innovative LED matrix on the front of the device helps to understand and evaluate your loads, detect peak currents and change your settings.

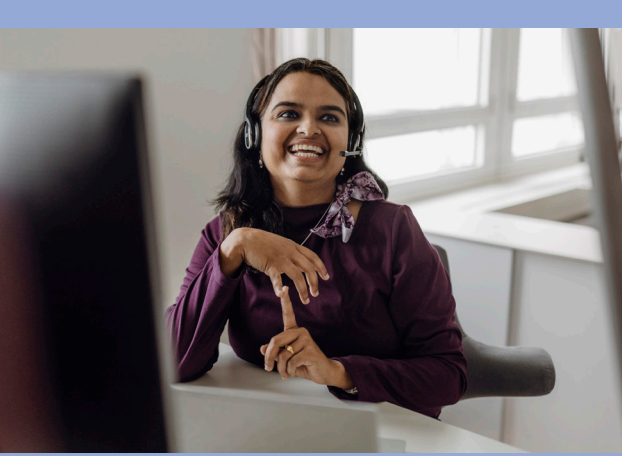
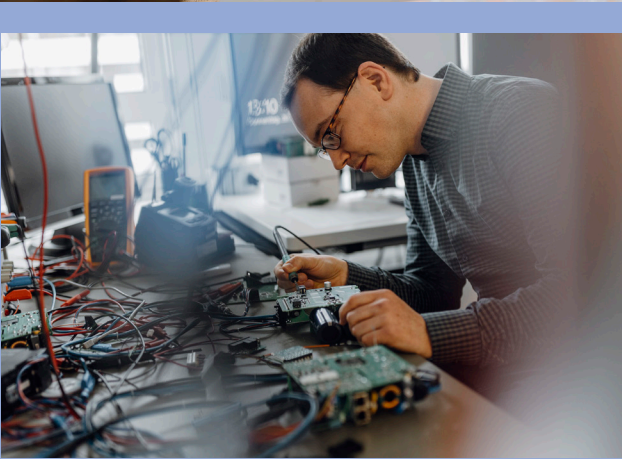


Scan the QR code to learn more about PISA-B

Overview

PISA-B portfolio

	Standard versions	NEC Class 2 versions
Input		
Voltage	DC 24 V - 20 % / + 25 %	DC 24 V - 20 % / + 25 %
Current	40 A	40 A
Output		
Number of channels	8	8
Voltage	DC 24 V - 20 % / + 25 %	DC 24 V - 20 % / + 25 %
Current	Total: 40 A CH1 and CH2: 1-12 A CH3 to CH8: 1-10 A	Fixed 3.75 A per channel Total: max. 30 A
Tripping		
Characteristics	Slow or fast selectable	Slow or fast selectable
Delay	CH1-Ch2: 2 ms - 2 s at short circuit CH3-Ch8: < 10 ms at short circuit CH1-Ch8: 0.22 s for fast tripping at 1.5 x nominal current CH1-Ch8: 1.1 s for slow tripping at 1.5 x nominal current	CH1-Ch2: 2 ms - 2 s at short circuit CH3-Ch8: < 10 ms at short circuit CH1-Ch8: 0.22 s for fast tripping at 1.5 x nominal current CH1-Ch8: 1.1 s for slow tripping at 1.5 x nominal current
Further information		
Temperature range	- 25 °C to + 70 °C	- 25 °C to + 70 °C
Dimensions WxHxD	52 x 124 x 130 mm	52 x 124 x 130 mm
Weight	370 g	370 g
Terminals	Push-in	Push-in
Commercial information		
Order numbers	PISA-B-812-B1 Common signaling relay contact PISA-B-812-B4 Digital coded signal output	PISA-B-8CL2-B1 Common signaling relay contact PISA-B-8CL2-B4 Digital coded signal output



About PULS

PULS is the leading manufacturer of DIN rail power supplies, decentralised Field Power Supplies, and pioneering wireless charging systems.

The company was founded in Munich in 1980 by Bernhard Erdl and currently has around 1400 employees worldwide.

The division Wiferion - a PULS brand develops innovative technologies in the field of inductive charging systems for automated guided vehicle systems and mobile robots. PULS manufactures all its products in its own factories in Chomutov / Czech Republic, Suzhou/China and Drebach/Germany.

How to contact PULS

Contact our product experts today for a personalised technical support and the best power supply solutions.

Let us empower your business success with our innovative and reliable products.

Reach out to our product experts and find the best fit for your application today.

Contact us:



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