

Product datasheet

Specifications



electronic protection module - 28..28.8 V DC - 10 A - for regulated SMPS

ABL8PRP24100

Main

Range of product	Phaseo
Product or component type	Electronic protection module
Input voltage	24...28.8 V DC
Output voltage	($U_{in}-0.3$) V DC
Maximum output current	10 A per channel, rating: 1/2.5/4/5/7/8/10

Complementary

Input voltage limits	19...32 V
Input current	40 A
Number of output channels	4
Output protection type	Against overload, protection technology: $1.3 \times I_n$ Against short-circuits, protection technology: automatic reset Line protection, protection technology: 1 x 15 A integrated fuse per channel
Complementary function	2-pole breaking by channel
Breaking capacity	1000 A at 32 V DC by fuse
Connections - terminals	For input connection: screw type terminals, connection capacity: 4 x 0.5...4 x 10 mm ² AWG 20...AWG 8 For diagnostic relay: removable screw terminal block, connection capacity: 1 x 2.5 mm ² AWG 14 For output connection: screw type terminals, connection capacity: 8 x 0.5...8 x 4 mm ² AWG 20...AWG 10
Fixing mode	By clips on 35 mm symmetrical DIN rail, operating position: vertical On panel
Operating altitude	2000 m
Marking	CE
Name of test	Electrostatic discharges conforming to EN/IEC 61000-4-2 Emission conforming to EN 61000-6-3 Induced electromagnetic field conforming to EN/IEC 61000-4-6 level 3 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 level 3 Rapid transient conforming to IEC 61000-4-4 level 3 Surge conforming to EN/IEC 61000-4-5 level 2 Conducted/radiated emissions conforming to EN 55022 class B Emission conforming to EN 50081-1
Local signalling	1 LED per channel (green/red) for channel status 1 relay for channel status
Net weight	0.47 kg

Environment

Product certifications	RCM EAC
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Standards	UL 508 CSA C22.2 No 60950-1
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...85 °C
Environmental characteristic	EMC conforming to EN 61000-6-3 EMC conforming to EN/IEC 61000-6-2 Safety conforming to EN/IEC 60950-1 Safety conforming to EN/IEC 61204-3
IP degree of protection	IP20 conforming to EN/IEC 60529
Dielectric strength	500 V between input and ground 500 V between output and ground
Overvoltage category	Class II conforming to VDE 0106-1
Relative humidity	0...90 % during operation 0...95 % during storage
Vibration resistance	2 gn (f= 11.9...150 Hz) conforming to EN/IEC 61131-2 3.5 mm (f= 3...11.9 Hz) conforming to EN/IEC 61131-2

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.8 cm
Package 1 Width	10.0 cm
Package 1 Length	13.5 cm
Package 1 Weight	582.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	8.937 kg
Unit Type of Package 3	P06
Number of Units in Package 3	128
Package 3 Height	75.0 cm
Package 3 Width	40.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	99.496 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

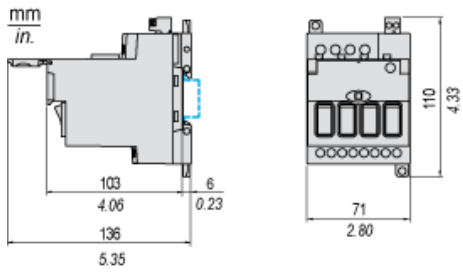
PVC free Yes

Contractual warranty

Warranty 18 months

Downstream Electronic Protection Module

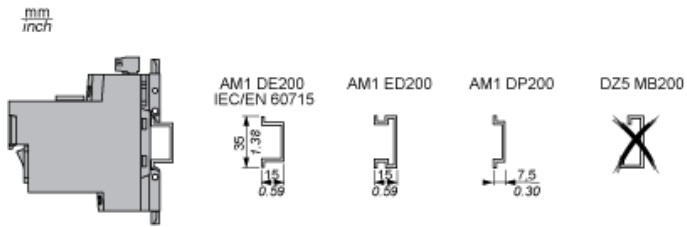
Dimensions



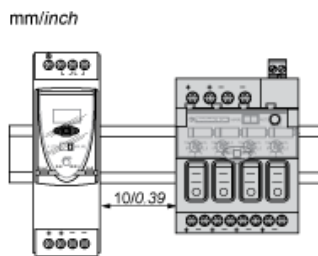
Downstream Electronic Protection Module

Mounting DIN rails

Downstream electronic protection modules can be installed on a DIN rail. The graphic below provides the characteristics and references of the compatible DIN rails for the mounting of the module.

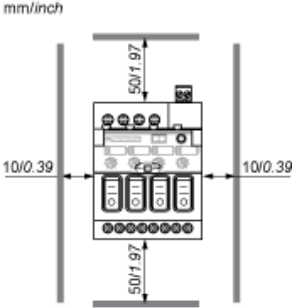


Module Mounting



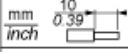

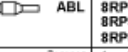
Downstream Electronic Protection Module

Clearance

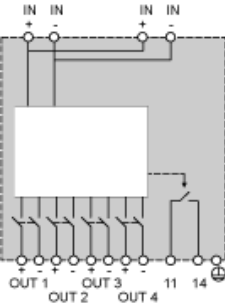


Wiring Requirements

Cable Types and Wire Sizes

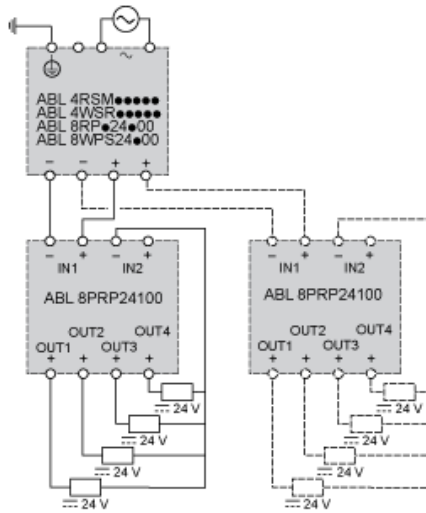
			ABL	8RPS24030	8RPM24200
				8RPS24050	8WPS24200/24400
	lin / Ulin	mm ² /AWG		1...4 / 16...12	4...10 / 12...6
	lout / Uout	mm ² /AWG		0,5...4 / 20...12	
	11...14	mm ² /AWG		0,2...2,5 / 24...14	

Internal Wiring Diagram



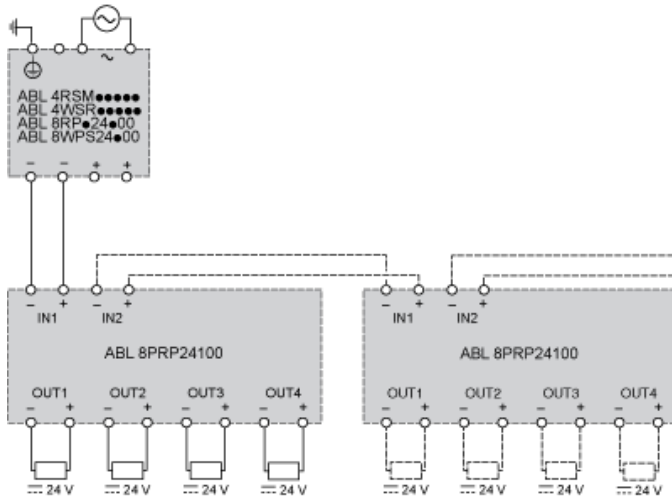
Wiring Diagrams

24 Vdc Output Circuits with Common Point



IN1 and IN2 terminals limited to 40 A

24 Vdc Output Circuits without Common Point



IN1 and IN2 terminals limited to 40 A

Recommended replacement(s)