

Product datasheet

Specifications



redundancy module - 40A - for regulated SMPS

ABL8RED24400

Main

Range of product	Phaseo
Product or component type	Redundancy module
Input voltage	24...28.8 V DC
Output voltage	(Uin-0.2) V DC
Maximum output current	40 A

Complementary

Input voltage limits	22...30 V
Input current	20 A
Number of output channels	1
Output protection type	Against overload, protection technology: external protection by power supply Against short-circuits, protection technology: external protection by power supply
Connections - terminals	For output connection: screw type terminals, connection capacity: 2 x 0.5...2 x 10 mm² AWG 20...AWG 8 For input connection: screw type terminals, connection capacity: 4 x 0.5...4 x 10 mm² AWG 20...AWG 8 For diagnostic relay: removable screw terminal block, connection capacity: 1 x 2.5 mm² AWG 14
Fixing mode	By clips on 35 mm symmetrical DIN rail, operating position: horizontal By clips on 35 mm symmetrical DIN rail, operating position: vertical
Output coupling	Parallel
Operating altitude	2000 m
Marking	CE
Name of test	Electrostatic discharges conforming to IEC 61000-4-2 Emission conforming to IEC 61000-6-3 Induced electromagnetic field conforming to IEC 61000-4-6 level 3 Radiated electromagnetic field conforming to IEC 61000-4-3 level 3 Rapid transient conforming to IEC 61000-4-4 level 3 Surge conforming to 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 input (green) for power supply status 1 relay for power supply status
Net weight	0.7 kg

Environment

Product certifications	EAC RCM
Standards	CSA C22.2 No 60950-1 UL 508

Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...85 °C
Environmental characteristic	EMC conforming to IEC 61000-6-3 EMC conforming to IEC 61000-6-2 Safety conforming to IEC 60950-1 Safety conforming to EN/IEC 61204
IP degree of protection	IP20 conforming to 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
MTBF reliability	2488391 H at 24 V DC with UTE C80-810 calculation method
Vibration resistance	2 gn (f= 11.9...150 Hz) conforming to IEC 61131-2 3.5 mm (f= 3...11.9 Hz) conforming to IEC 61131-2

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.5 cm
Package 1 Width	16.5 cm
Package 1 Length	16.0 cm
Package 1 Weight	594.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.94 kg
Unit Type of Package 3	PAL
Number of Units in Package 3	80
Package 3 Height	77.0 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	61.724 kg

Offer Sustainability

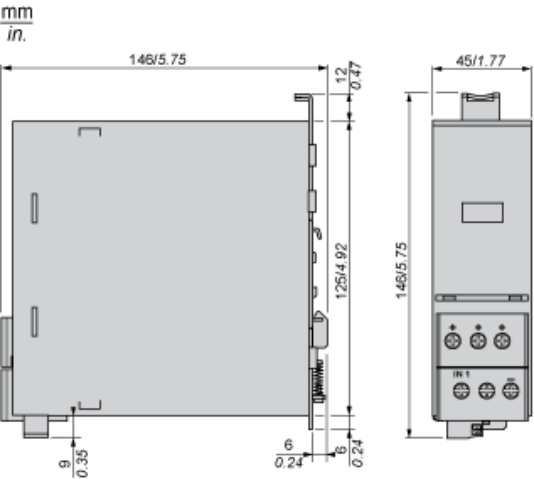
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
PVC free	Yes

Contractual warranty

Warranty	18 months
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Redundancy Module

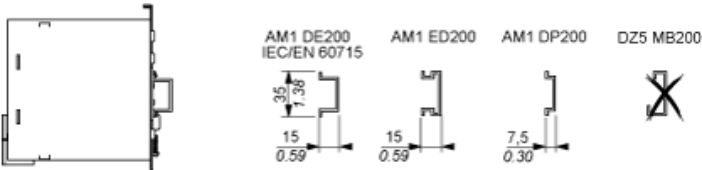
Dimensions



Redundancy Module

Mounting

Redundancy 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.

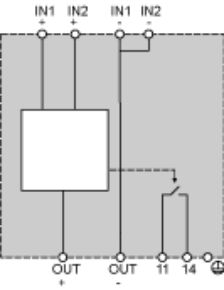


Wiring Requirements

Cable Types and Wire Sizes

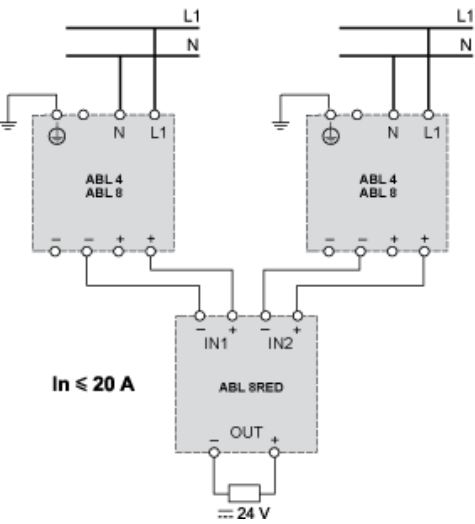
<div><div><div><div><div>mm</div><div>in</div></div><div><div><div><div><div></div><div>10</div><div>0.39</div></div><div><div></div><div></div><div></div></div></div></div><div><div><div><div><div></div><div>17</div><div>0.67</div></div><div><div></div><div></div><div></div></div></div></div></div><div><div><div><div><div></div><div>Ø ≤ 4 mm²</div><div>Ø ≤ 12 AWG</div></div><div><div></div><div>Ø > 4 mm²</div><div>Ø > 12 AWG</div></div></div></div><div><div>ABL</div><div>8RPS24030</div><div>8RPS24050</div><div>8RPS24100</div><div>8RPM24200</div><div>8WPS24200/24400</div></div></div></div></div></div></div>			
<div>+ In –</div> <div>mm²/AWG</div>	1...4 / 16...12		
<div>+ Out –</div> <div>mm²/AWG</div>	1...4 / 16...12	4...10 / 12...6	
<div><div><div><div><div></div><div>⊕</div></div><div><div></div><div></div><div></div></div></div><div><div></div><div></div><div></div></div></div><div>mm/in</div></div>	4 / 0.16		
<div><div><div><div><div></div><div>11</div><div>14</div></div></div></div><div>mm²/AWG</div></div>	–	0,2...2,5 / 24...14	

Internal Wiring Diagram

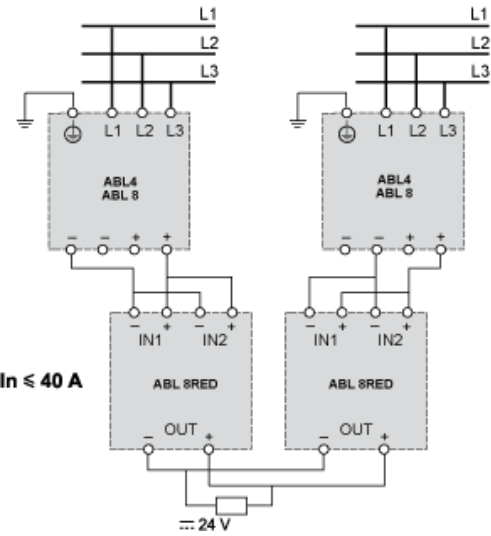


Scheme of Use with Power Supplies

Wiring Diagram with $I_n \leq 20\text{mA}$



Wiring Diagram with $I_n \leq 40\text{mA}$



Recommended replacement(s)