

Product data sheet

Specifications



Regulated Switch Power Supply, 3 phase, 400..500V AC, 24V, 40A

ABL4WSR24400

! Discontinued on: 31 December 2013

! End-of-service on: 31 December 2013

! Discontinued - Service only

Main

Range of product	Modicon Power Supply
Product or component type	Power supply
Power supply type	Regulated switch mode
Nominal input voltage	400...500 V AC three phase, terminal(s): L1, L2, L3 507...770 V DC
Input voltage limits	340...550 V AC
Rated power in W	960 W
Output voltage	24 V DC
Power supply output current	40 A
Permissible temporary current boost	1.5 x I _n (for 5 seconds)

Complementary

Inrush current	10 A
Power factor	0.65 at 24 V DC
Efficiency	91 % at 400 V AC 91 % at 500 V AC
Output voltage adjustment	100...116 % adjustable
Power dissipation in W	79 W 81 W
Current consumption	2.2 A 500 V AC 2.8 A 400 V AC
Output protection type	Against short-circuits, protection technology: automatic reset Against overload, protection technology: 33 V Thermal Against overvoltage
Connections - terminals	Screw type terminals: 2 x 0.5...2 x 4 mm ² , (AWG 24...AWG 10) for input connection Screw type terminals: 1 x 0.5...1 x 4 mm ² , (AWG 24...AWG 10) for input ground connection Screw type terminals: 2 x 0.5...2 x 4 mm ² , (AWG 24...AWG 10) for output connection Removable screw terminal block: 2 x 0.5...2 x 4 mm ² , (AWG 24...AWG 10) for diagnostic relay
Status LED	1 LED (green)output voltage (> 21.6 V) 1 LED (red)overload, overtemperature, overvoltage
Depth	139 mm
Height	127 mm
Width	80 mm

Net weight	2 kg
Output coupling	Series Parallel
Marking	CE
Mounting support	35 x 15 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail
Operating position	Vertical
Supply	SELV conforming to EN/IEC 60950-1 SELV conforming to EN/IEC 60204-1 SELV conforming to IEC 60364-4-41

Environment

Standards	CULus 508 EN/IEC 62368-1
Product certifications	CULus 508 CSA C22-2 No 14
Environmental characteristic	EMC conforming to EN 50081-1 EMC conforming to EN 50082-2 EMC conforming to EN/IEC 61000-6-2 Safety conforming to EN/IEC 60950
IP degree of protection	IP20 conforming to EN/IEC 60529
Ambient air temperature for operation	-20...45 °C (without) 45...60 °C (with rated power derating 16 W per °C)
Ambient air temperature for storage	-25...80 °C
Relative humidity	0...90 % during operation 0...95 % in storage
Electrical energy source class conforming to IEC 62368-1	ES1
Dielectric strength	3000 V between input and output 500 V between output and ground 2000 V between input and ground

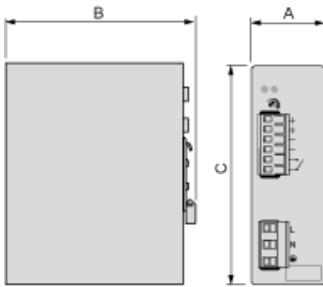
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	1.438 kg
Package 1 Height	8.6 cm
Package 1 width	14.3 cm
Package 1 Length	17.4 cm

Contractual warranty

Warranty	18 months
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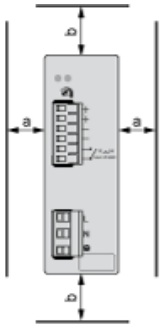
Dimensions



mm/inch	A	B	C
ABL4RSM24035	39/1.53	128/5.04	115/4.53
ABL4RSM24050			
ABL4RSM24100	63.5/2.49	140/5.51	118/4.65
ABL4RSM24200			
ABL4WSR24200	80/3.15	139/5.47	127/5.0
ABL4WSR24300			
ABL4WSR24400			

ABL4RSM240.../4RSM24100/4WSR24...




Clearance



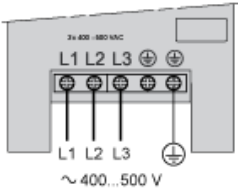
mm/inch	a	b
ABL4RSM24035	10/0.39	50/1.97
ABL4RSM24050	10/0.39	50/1.97
ABL4RSM24100	20/0.79	100/3.94
ABL4RSM24200	20/0.79	100/3.94
ABL4WSR24200	10/0.39	50/1.97
ABL4WSR24300	10/0.39	50/1.97
ABL4WSR24400	10/0.39	50/1.97

Wiring Requirements

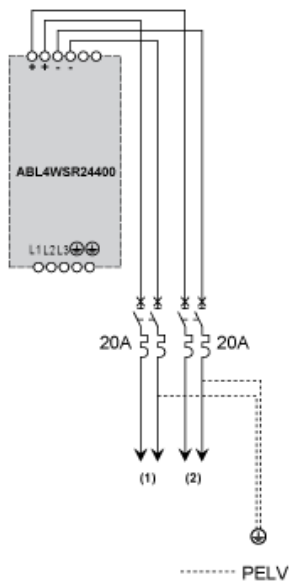
Cable Types and Wire Sizes

	ABL4RSM24035 ABL4RSM24050 ABL4RSM24100	ABL4RSM24200 ABL4WSR24400
mm ² /AWG	0,2...2,5 / 24...12	0,05...6 / 24...10
 mm/in	7 / 0.27	8 / 0.31
 Nm/lb-in	0,8 / 7.0	1,1 / 9.0

Input Voltage



Outputs Wiring Diagram



- (1) Circuit 1, 24 V/20 A max
- (2) Circuit 2, 24 V/20 A max

Recommended replacement(s)

ABL4WSR24400 is replaced by:



Regulated Switch Power Supply, 3-phase, 380..500V, 24V, 40 A
ABL8WPS24400
