Product data sheet Characteristics

ABL4RSM24050

regulated SMPS - 1 or 2 phase - 120..230 V AC - 24 V - 5A



Main

Range of product	Phaseo
Product or component type	Power supply
Power supply type	Regulated switch mode
Input voltage	100370 V DC 120230 V AC single phase , terminal(s): N-L1 120230 V AC phase to phase , terminal(s): L1-L2
Output voltage	24 V DC
Rated power in W	120 W
Input protection type	Integrated fuse (not interchangeable)
Power supply output current	5 A
Output protection type	Thermal Against overvoltage Against short-circuits , protection technology: automatic reset Against overload , protection technology: 33 V
Ambient air temperature for operation	-2045 °C without derating 4560 °C with rated power derating 2 W per °C

Complementary

Complementary		
Input voltage limits	90264 V	
Network frequency	4763 Hz	
Inrush current	<= 27 A	
Cos phi	> 0.65	
Efficiency	8690 %	
Output voltage limits	96114 % adjustable	
Power dissipation in W	13 W 19 W	
Current consumption	1.1 A at 230 V 1.9 A at 120 V	
Line and load regulation	+/- 1 %	
Residual ripple	<= 100 mV	
Holding time	>= 17 ms at 120 V >= 72 ms at 230 V	
Permissible temporary current boost	1.6 x In for 30 seconds	
Connections - terminals	Removable screw terminal block for input connection , connection capacity: 2 x 0.22 x 2.5 mm² AWG gauge2412 Removable screw terminal block for input ground connection , connection capacity: 1 x 0.21 x 2.5 mm² AWG gauge2412 Removable screw terminal block for output connection , connection capacity: 4 x 0.52 x 2.5 mm² AWG gauge2412 Removable screw terminal block for diagnostic relay , connection capacity: 2 x 0.22 x 2.5 mm² AWG gauge2412	
Marking	CE	
Mounting support	35 x 15 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail	
Operating position	Vertical	
Output coupling	Parallel Series	

Name of test	Electrostatic discharges conforming to EN/IEC 61000-4-2
	Induced electromagnetic field conforming to EN/IEC 61000-4-6
	Magnetic field conforming to EN 61000-4-8
	Primary outage conforming to IEC 61000-4-11
	Radiated electromagnetic field conforming to EN/IEC 61000-4-3
	Radiated emissions conforming to EN 55011 class A
	Rapid transient conforming to IEC 61000-4-4
	Surge conforming to EN/IEC 61000-4-5
	Conducted emissions on the power line conforming to EN 55011 class A
Status LED	1 LED green for output voltage (> 21.6 V)
	1 LED red for overload
Product weight	0.4 kg

Environment

Product certifications	CSA C22-2 No 14 CULus 508		
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 Safety conforming to SELV		
IP degree of protection	IP20 conforming to EN/IEC 60529		
Ambient air temperature for storage	-2580 °C		
Relative humidity	090 % during operation 095 % in storage		
Class of protection against electric shock	Class I conforming to VDE 0106-1		
Dielectric strength	1500 V between input and ground 3000 V between input and output 500 V between output and ground		

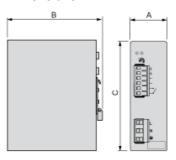


Product data sheet Dimensions Drawings

ABL4RSM24050

ABL4RSM240 ••• /4RSM24100/4WSR24 ••• Power Supplies

Dimensions



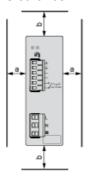
mm/inch	Α	В	С
ABL4RSM24035	39/1.53	128/5.04	115/4.53
ABL4RSM24050	30/1.00	120/0.04	11374.00
ABL4RSM24100	63.5/2.49	140/5.51	118/4.65
ABL4RSM24200		139/5.47	127/5.0
ABL4WSR24200	80/3.15		
ABL4WSR24300	00/3.70		
ABL4WSR24400]		

Product data sheet Mounting and Clearance

ABL4RSM24050

ABL4RSM240•••/4RSM24100/4WSR24•••

Clearance



mm/inch	a	b	
ABL4RSM24035	10/0.39	50/1.97	
ABL4RSM24050	10/0.39	50/1.9/	
ABL4RSM24100	20/0.79	100/3.94	
ABL4RSM24200			
ABL4WSR24200	10/0.39	50/1.97	
ABL4WSR24300	10.0.00	5007.07	
ABL4WSR24400			

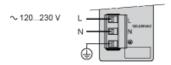
ABL4RSM24050

Wiring Requirements

Cable Types and Wire Sizes

	ABL4RSM24035 ABL4RSM24050 ABL4RSM24100	ABL4RSM24200 ABL4WSR24
mm ² /AWG	0,22,5 / 2412	0,056 / 2410
mmv//r	7 / 0.27	8 / 0.31
Company Nm/lb-in	0,8 / 7.0	1,1 / 9.0

Input Voltage



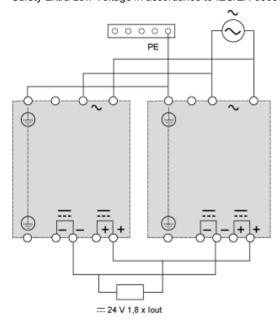
Outputs Connected in Parallel

Paralleling

- Use maximum of 2 power supplies with the same reference.
- For correct current share (±20%) between devices in parallel, adjust VOUT ±20 mV applying a load > PNOM x 0.2 to all ABL4 before connecting them in parallel.

SELV: Safety Extra Low Voltage

Safety Extra Low Voltage in accordance to IEC/EN 60950 and IEC/EN 50178 standards.



PELV: Protection Extra Low Voltage

