



Main

| | |
|---------------------------------------|--|
| Range of product | Phaseo |
| Product or component type | Power supply |
| Power supply type | Regulated switch mode |
| Input voltage | 300...350 V DC 120...230 V AC single phase , terminal(s): N-L1 120...230 V AC phase to phase , terminal(s): L1-L2 |
| Output voltage | 24 V DC |
| Rated power in W | 240 W |
| Input protection type | Integrated fuse (not interchangeable) |
| Power supply output current | 10 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 | -20...45 °C without derating 45...60 °C with rated power derating 4.8 W per °C |

Complementary

| | |
|-------------------------------------|---|
| Input voltage limits | 90...132 V 185...264 V |
| Network frequency | 47...63 Hz |
| Inrush current | <= 35 A |
| Cos phi | > 0.6 |
| Efficiency | 88...90 % |
| Output voltage limits | 96...114 % adjustable |
| Power dissipation in W | 27 W 34 W |
| Current consumption | 2 A at 230 V 3.4 A at 120 V |
| Line and load regulation | +/- 1 % |
| Residual ripple | <= 100 mV |
| Holding time | >= 30 ms at 120 V >= 60 ms at 230 V |
| Permissible temporary current boost | 1.5 x I _n for 30 seconds |
| Connections - terminals | Removable screw terminal block for input connection , connection capacity: 2 x 0.2...2 x 2.5 mm ² AWG gauge24...12 Removable screw terminal block for input ground connection , connection capacity: 1 x 0.2...1 x 2.5 mm ² AWG gauge24...12 Removable screw terminal block for output connection , connection capacity: 4 x 0.5...2 x 2.5 mm ² AWG gauge24...12 Removable screw terminal block for diagnostic relay , connection capacity: 2 x 0.2...2 x 2.5 mm ² AWG gauge24...12 Removable screw terminal block for voltage selection connection , connection capacity: 1 x 0.2...1 x 2.5 mm ² AWG gauge24...12 |
| 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 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

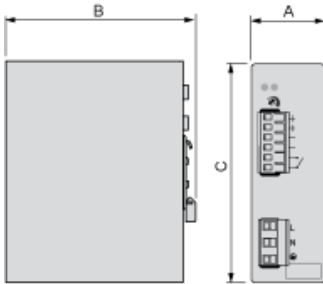
| | |
|----------------|--|
| Name of test | Electrostatic discharges conforming to EN/IEC 61000-4-2 Induced electromagnetic field conforming to EN/IEC 61000-4-6 Magnetic field conforming to EN 61000-4-8 Primary outage conforming to IEC 61000-4-11 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 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 | 0.92 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 | -25...80 °C |
| Relative humidity | 0...90 % during operation 0...95 % 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 |

ABL4RSM240.../4RSM24100/4WSR24... Power Supplies

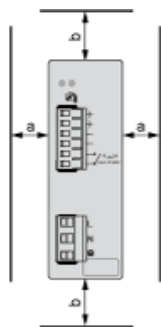
Dimensions



| 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...

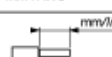

Clearance



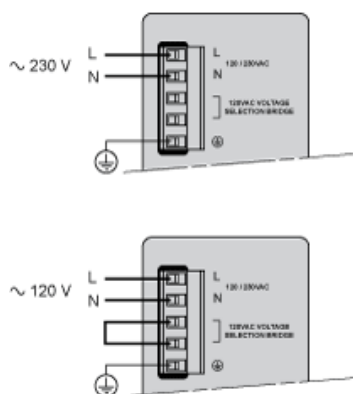
| mm/inch | a | b |
|--------------|---------|----------|
| ABL4RSM24035 | 10/0.39 | 50/1.97 |
| ABL4RSM24050 | 10/0.39 | 50/1.97 |
| ABL4RSM24100 | 20/0.79 | 100/3.94 |
| ABL4RSM24200 | 20/0.79 | 100/3.94 |
| ABL4WSR24200 | 10/0.39 | 50/1.97 |
| ABL4WSR24300 | 10/0.39 | 50/1.97 |
| ABL4WSR24400 | 10/0.39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

Wiring Requirements

Cable Types and Wire Sizes

| | ABL4RSM24035 ABL4RSM24050 ABL4RSM24100 | ABL4RSM24200 ABL4WSR24●●● |
|--|--|------------------------------|
| 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



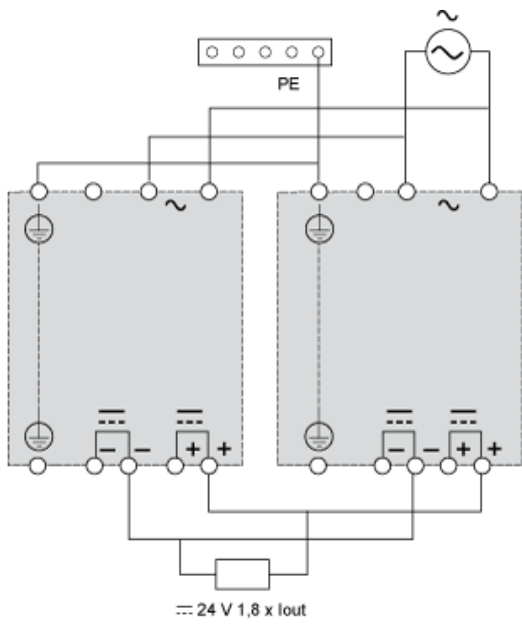
Outputs Connected in Parallel

Paralleling

- Use maximum of 2 power supplies with the same reference.
- For correct current share ($\pm 20\%$) between devices in parallel, adjust VOUT ± 20 mV applying a load $> P_{NOM} \times 0.2$ 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

