

Lembar data produk

Spesifikasi



regulated SMPS - 3-phase -
380..500 V AC - 24 V - 20 A

ABL8WPS24200

Main

Range Of Product	Modicon Power Supply
Product Or Component Type	Power supply
Power Supply Type	Regulated switch mode
Nominal Input Voltage	380...500 V AC three phase, terminal(s): L1, L2, L3
Rated Power In W	480 W
Output Voltage	24 V DC
Power Supply Output Current	20 A
Permissible Temporary Current Boost	1.5 x In (for 4 s)
Anti-Harmonic Filter	Low frequency harmonic currents

Complementary

Input Voltage Limits	320...550 V AC
Inrush Current	25 A
Power Factor	0.65 at 24 V DC
Efficiency	92 %
Output Voltage Adjustment	24...28.8 V adjustable
Power Dissipation In W	38.4 W
Provided Equipment	Power factor correction filter conforming to IEC 61000-3-2
Output Protection Type	Against overload, protection technology: manual or automatic reset Against overvoltage, protection technology: 30...32 V, manual reset Against short-circuits, protection technology: manual or automatic reset Against undervoltage, protection technology: tripping if U < 21.6 V Thermal, protection technology: automatic reset
Connections - Terminals	Removable screw terminal block: 2 x 2.5 mm², for diagnostic relay Screw type terminals: 3 x 0.5...3 x 4 mm², (AWG 22...AWG 12) for input connection Screw type terminals: 1 x 0.5...1 x 4 mm², (AWG 22...AWG 12) for input ground connection Screw type terminals: 4 x 0.5...4 x 10 mm², (AWG 22...AWG 8) for output connection
Status Led	1 LED (green and red) output voltage 1 LED (green, red and orange) output current
Depth	160 mm
Height	143 mm
Width	96 mm
Net Weight	1.6 kg
Output Coupling	Series Parallel

Disklaimer: Dokumentasi ini tidak ditujukan sebagai pengganti dan tidak untuk digunakan untuk menentukan kesesuaian atau keandalan produk ini untuk aplikasi pengguna

Marking	CE
Mounting Support	35 x 7.5 mm symmetrical DIN rail 35 x 15 mm symmetrical DIN rail
Operating Position	Vertical
Supply	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to IEC 60364-4-41
Dielectric Strength	3500 V with between input and ground 4000 V with between input and output 500 V with between output and ground

Environment

Standards	CSA C22.2 No 60950-1 UL 508 EN/IEC 62368-1
Product Certifications	CCSAus EAC UL RCM
Environmental Characteristic	EMC conforming to IEC 61000-6-1 EMC conforming to IEC 61000-6-3 EMC conforming to EN 55024 EMC conforming to IEC 61000-6-4 EMC conforming to EN/IEC 61204-3 Safety conforming to EN 61204-4 Safety conforming to IEC 60950-1
Operating Altitude	2000 m
Ip Degree Of Protection	IP20 conforming to IEC 60529
Ambient Air Temperature For Operation	50...60 °C with derating factor mounting position A < 2000 m -25...50 °C without derating mounting position A < 2000 m

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	12.882 cm
Package 1 Width	15.928 cm
Package 1 Length	18.442 cm
Package 1 Weight	2.151 kg
Unit Type Of Package 2	S03
Number Of Units In Package 2	3
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	45
Package 3 Height	73.5 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm

Package 3 Weight	110.0 kg
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Contractual warranty

Warranty	12 months
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Keberlanjutan

Green Premium™ label adalah komitmen Schneider Electric untuk memberikan produk dengan performa lingkungan terbaik di kelasnya. Green Premium menjanjikan kepatuhan pada peraturan terbaru, transparansi pada dampak lingkungan, serta produk melingkar dan rendah CO₂.

Panduan untuk menilai keberlanjutan produk adalah laporan resmi yang menjelaskan standar label lingkungan global dan bagaimana menafsirkan deklarasi lingkungan.

[Pelajari lebih lanjut tentang Green Premium >](#)

[Panduan untuk menilai keberlanjutan produk >](#)



Transparansi RoHS/REACH

Kinerja kesejahteraan

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

Sertifikasi & Standar

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation [China RoHS declaration](#)

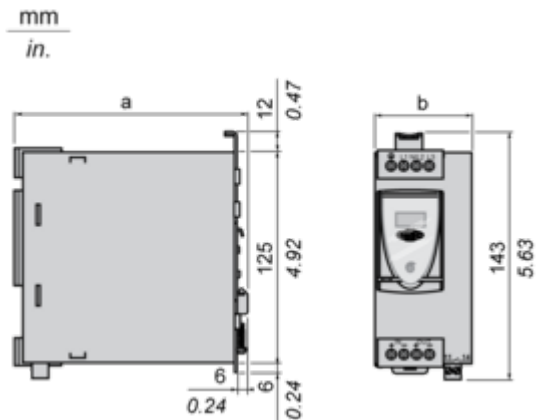
Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile [End of Life Information](#)

Dimensions Drawings

Regulated Switch Mode Power Supplies

Dimensions

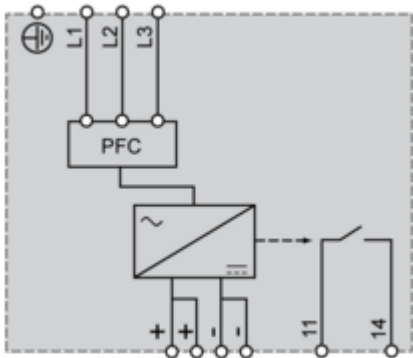


ABL 8	a in mm	a in in.	b in mm	b in in.
RPS24030	125	4.92	45	1.77
RPS24050	125	4.92	56	2.20
RPS24100	145	5.71	86	3.39
RPM24200	145	5.71	146	5.75
WPS24200	160	6.30	96	3.78
WPS24400	160	6.30	166	6.54

Connections and Schema

Regulated Switch Mode Power Supply

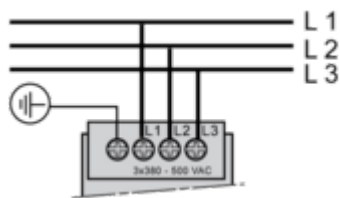
Internal Wiring Diagram



Regulated Switch Mode Power Supply

Line Supply Wiring Diagram

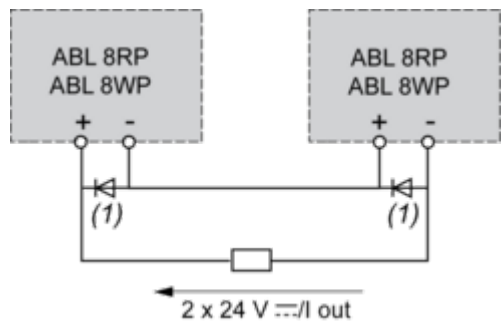
Three-phase (L1-L2-L3) 3 x 380 to 500 V



Regulated Switch Mode Power Supplies

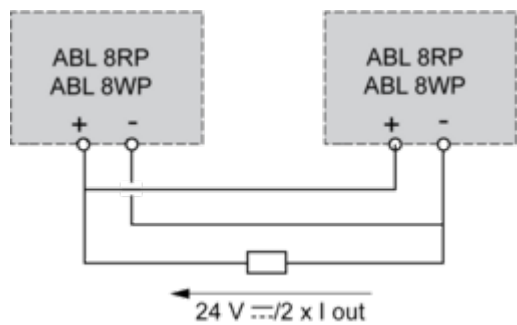
Series or Parallel Connection

Series Connection



(1) Two Shottky diodes I_{min} = power supply I_n and V_{min} = 50 V

Parallel Connection



Family	Series	Parallel
ABL 8RPS/8RPM/8WPS	2 products max. (1)	2 products max.

NOTE: Series or parallel connection is only recommended for products with identical references.

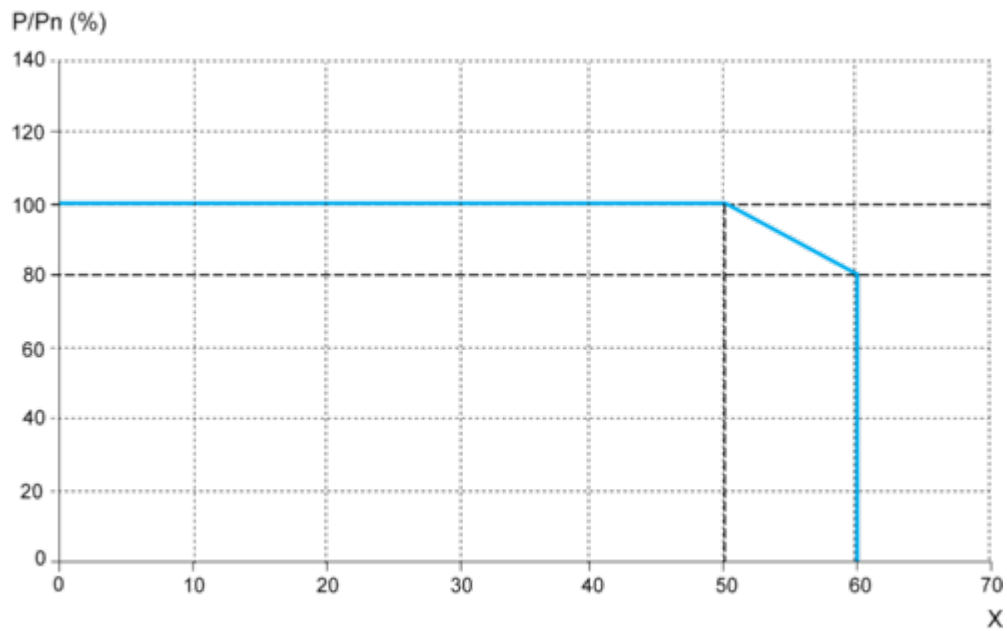
For better availability, the power supplies can also be connected in parallel using the **ABL8RED24400** Redundancy module.

Performance Curves

Regulated Switch Mode Power Supplies

Derating

The ambient temperature is a determining factor that limits the power an electronic power supply can deliver continuously. If the temperature around the electronic components is too high, their life will be significantly reduced. The nominal ambient temperature for the Universal range of Phaseo power supplies is 50°C. Above this temperature, derating is necessary up to a maximum temperature of 60°C. The graph below shows the power (in relation to the nominal power) that the power supply can deliver continuously, depending on the ambient temperature.



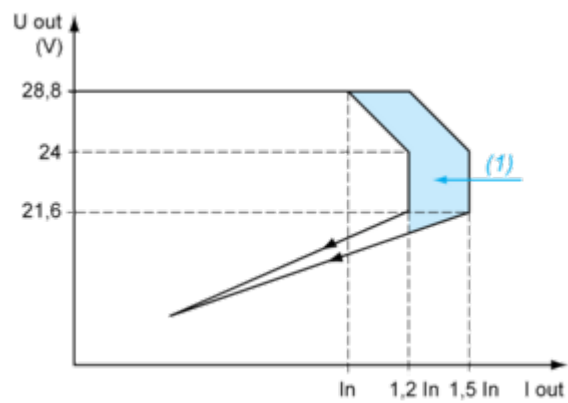
X Maximum operating temperature (°C)
ABL 8RPM, ABL 8RPS, ABL 8WPS mounted vertically
Derating should be considered in extreme operating conditions:

- Intensive operation (output current permanently close to the nominal current, combined with a high ambient temperature)
- Output voltage set above 24 Vdc (to compensate for line voltage drops, for example)
- Parallel connection to increase the total power

Regulated Switch Mode Power Supply

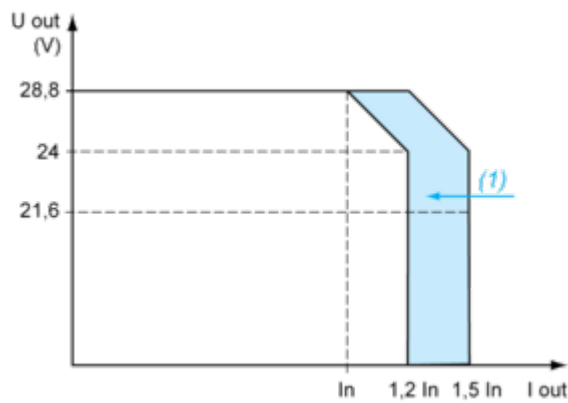
Load Limit

Manual Reset Protection Mode



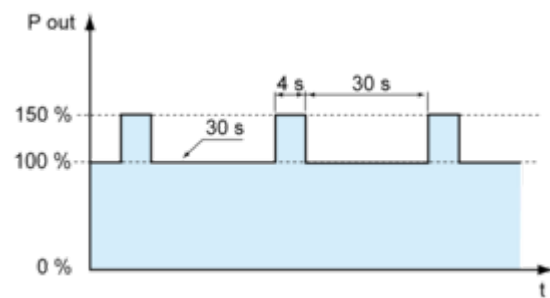
(1) Boost 4s

Automatic Reset Protection Mode



(1) Boost 4s

“Boost” Repeat Accuracy



This type of operation is described in detail in the user manual, which can be downloaded from the website.