# **Product data sheet**

Specification





# Regulated switch power supply, modicon power supply, 3 phases, 380 to 500V AC, 24V, 20A

ABL8WPS24200

Product availability: Stock - Normally stocked in distribution

Price\*: 735.00 USD

#### Main

Range Of Product	Modicon Power Supply	
Product Or Component Type	Power supply	
Power Supply Type	Regulated switch mode	
Nominal Input Voltage	380500 V AC three phase L1, L2, L3	
Kw Rating	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

Efficiency At Full Load	320550 V AC	
Inrush Current	25 A	
Power Factor	0.65 at 24 V DC	
Efficiency	92 %	
Output Voltage Adjustment	2428.8 V adjustable	
Power Dissipation In W	38.4 W	
Provided Equipment Power factor correction filter IEC 61000-3-2		
Output Protection Type	Against overload manual or automatic reset Against overvoltage 3032 V, manual reset Against short-circuits manual or automatic reset Against undervoltage tripping if U < 21.6 V Thermal automatic reset	
Connections - Terminals	Removable screw terminal block 2 x 2.5 mm², diagnostic relay Screw type terminals 3 x 0.53 x 4 mm², AWG 22AWG 12) input connection Screw type terminals 1 x 0.51 x 4 mm², AWG 22AWG 12) input ground connection Screw type terminals 4 x 0.54 x 10 mm², AWG 22AWG 8) output connection	
Status Led  1 LED (green and red) output voltage 1 LED (green, red and orange) output current		
Depth	6.30 in (160 mm)	
Height	5.63 in (143 mm)	
Width	3.78 in (96 mm)	
Net Weight	3.53 lb(US) (1.6 kg)	

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Output Coupling	Series Parallel	
Marking	CE	
Mounting Support	$35 \times 7.5$ mm symmetrical DIN rail $35 \times 15$ mm symmetrical DIN rail	
Operating Position	Vertical	
Supply	SELV IEC 60950-1 SELV IEC 60204-1 SELV 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 IEC 61000-6-1 EMC IEC 61000-6-3 EMC EN 55024 EMC IEC 61000-6-4 EMC EN/IEC 61204-3 Safety EN 61204-4 Safety IEC 60950-1	
Operating Altitude 6561.68 ft (2000 m)		
p Degree Of Protection IP20 conforming to IEC 60529		
Ambient Air Temperature For Operation	r Temperature For 122140 °F (5060 °C) with derating factor mounting position A < 6561.68 ft (2000 m) -13122 °F (-2550 °C) without derating mounting position A < 6561.68 ft (2000 m)	

# Ordering and shipping details

Category	US1CP1222525	
Discount Schedule	CP12	
Gtin	3389119405645	
Returnability	Yes	
Country Of Origin	CN	

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.07 in (12.882 cm)
Package 1 Width	6.27 in (15.928 cm)
Package 1 Length	7.26 in (18.442 cm)
Package 1 Weight	4.74 lb(US) (2.151 kg)
Unit Type Of Package 2	S03
Number Of Units In Package 2	3
Package 2 Height	11.81 in (30 cm)

Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	15.43 lb(US) (7 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	45
Package 3 Height	28.94 in (73.5 cm)
Package 3 Width	23.62 in (60.0 cm)
Package 3 Length	31.50 in (80.0 cm)
Package 3 Weight	242.51 lb(US) (110.0 kg)

# **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium\*

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

#### Well-being performance

	Mercury Free	
<b>②</b>	Rohs Exemption Information	Yes
	Pvc Free	

#### **Certifications & Standards**

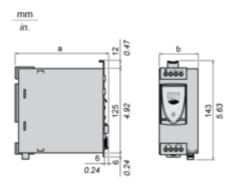
Reach Regulation	REACh Declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End of Life Information		
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov		

#### **ABL8WPS24200**

#### **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

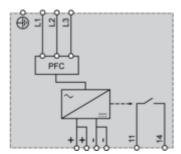
#### **Product data sheet**

# **ABL8WPS24200**

Connections and Schema

#### Regulated Switch Mode Power Supply

#### **Internal Wiring Diagram**



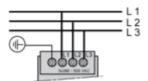
#### **Product data sheet**

# **ABL8WPS24200**

#### Regulated Switch Mode Power Supply

#### **Line Supply Wiring Diagram**

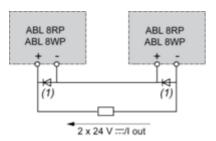
Three-phase (L1-L2-L3) 3 x 380 to 500 V



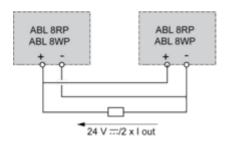
#### **Regulated Switch Mode Power Supplies**

#### **Series or Parallel Connection**

#### **Series Connection**



# (1) Two Shottky diodes Imin = power supply In and Vmin = 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.

#### **ABL8WPS24200**

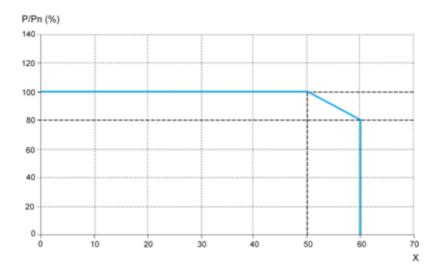
#### Performance Curves

#### **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.



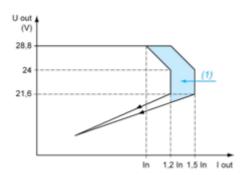
X Maximum operating temperature (°C)
ABL 8RPM, ABL 8RPS, ABL 8WPS mounted vertically
Derating should be considered in extreme operating conditions:

- 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**

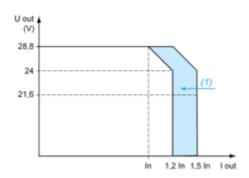
#### **Load Limit**

#### **Manual Reset Protection Mode**

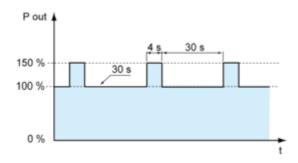


#### (1) Boost 4s

#### **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.