

ABL8RPS24100

Regulējams slēdžu barošanas avots, modicon
barošanas avots, 1 vai 2 fāzes, 100...500V,
24V, 10A



Galvenā

Produkta sērija	Modicon Power Supply
Produkta vai sastāvdaļas veids	Energijas padeve
Barošanas avota veids	Regulated switch mode
Nominal input voltage	100...120 V AC vienfāze N-L1 200...500 V AC phase to phase L1-L2
Nominālā jauda W	240 W
Output voltage	24 &V DC
Power supply output current	10 A
Permissible temporary current boost	1.5 x In for 4 s)
Anti-harmonic filter	Low frequency harmonic currents

Papildinošs

Ieejas sprieguma robežas	170...550 V AC 85...132 V AC
Inrush current	30 A
Power factor	0,68 at 240 V AC 0,69 at 120 V AC
Efficiency	87 %
Output voltage adjustment	24...28.8 V adjustable
Power dissipation in W	31 W
Provided equipment	Power factor correction filter IEC 61000-3-2
Output protection type	Against overload manual or automatic reset Against overvoltage 30...32 V, manual reset Against short-circuits manual or automatic reset Against undervoltage tripping if U < 21.6 V Thermal automātiska atiestatīšana
Connections - terminals	Removable screw terminal block 2 x 2,5 mm ² , diagnostic relay Screw type terminals 3 x 0.5...3 x 4 mm ² , AWG 22...AWG 12) input connection Screw type terminals 1 x 0.5...1 x 4 mm ² , AWG 22...AWG 12) input ground connection Screw type terminals 4 x 0.5...4 x 4 mm ² , AWG 22...AWG 12) output connection Screw type terminals 1 x 0.5...1 x 4 mm ² , AWG 22...AWG 12) output ground connection
Statusa gaismas diode	1 LED (green and red) output voltage 1 LED (green, red and orange) output current
Dzīlums	145 mm
Augstums	125 mm
Platums	86 mm
Neto svars	1 kg
Output coupling	Parallel Series
Markējums	CE
Mounting support	35 x 7.5 mm symmetrical DIN rail 35 x 15 mm symmetrical DIN rail
Operating position	Vertical

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.

Supply	SELV IEC 60950-1 SELV IEC 60204-1 SELV IEC 60364-4-41
Dielectric strength	3500 V between input and ground 4000 V between input and output 500 V between output and ground

Vide

Standarti	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1
Product certifications	CCSAus[RETURN]EAC[RETURN]KC[RETURN]RCM[RETURN]JUL
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 IEC 60950-1 Safety EN/IEC 61204-3
Operating altitude	2000 m
IP aizsardzības pakāpe	IP20 atbilst 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

Iepakojšanas vienības

Pirmā iepakojuma vienības tips	PCE
Vienību skaits 1. iepakojumā	1
1. iepakojuma augstums	11,4 cm
1. iepakojuma platums	16,2 cm
1. iepakojuma garums	18,0 cm
1. iepakojuma svars	1,615 kg
Otrā iepakojuma vienības tips	S06
Vienību skaits 2. iepakojumā	60
2. iepakojuma augstums	73,5 cm
2. iepakojuma platums	60,0 cm
2. iepakojuma garums	80,0 cm
2. iepakojuma svars	113,0 kg

Piedāvājiēt ilgspēju

Ilgspējīgs piedāvājuma statuss	Green Premium izstrādājums
REACH regula	REACH Deklarācija
ES RoHS direktīva	Proaktīva atbilstība (uz izstrādājumu neattiecas ES RoHS juridiskās saistības)
Nesatur dzīvsudrabu	Jā
Ķīnas RoHS regula	Ķīnas RoHS Deklarācija
Informācija par RoHS izņēmumiem	Jā
Vides informācijas publicēšana	Produkta Ietekme Uz Vidi
Cirkularitātes profils	Informācija Par Eksploatācijas Izbeigšanu
Nesatur PVH	Jā

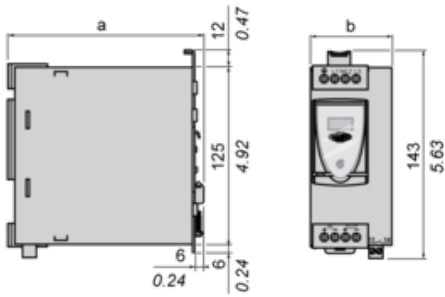
Līguma garantija

Garantija	18 months
-----------	-----------

Regulated Switch Mode Power Supplies

Dimensions

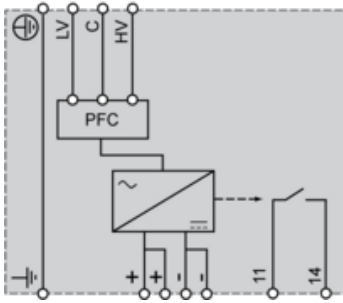
mm
in.



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

Regulated Switch Mode Power Supply

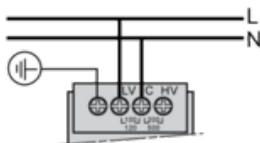
Internal Wiring Diagram



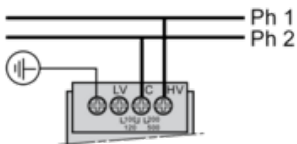
Regulated Switch Mode Power Supply

Line Supply Wiring Diagram

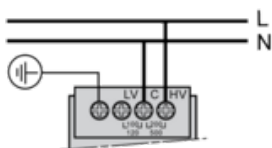
Single-phase (L-N) 100 to 120 V



Phase-to-phase (L1-L2) 200 to 500 V



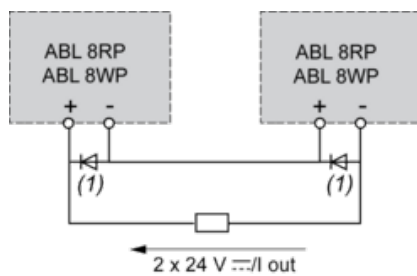
Single-phase (L-N) 200 to 500 V



Regulated Switch Mode Power Supplies

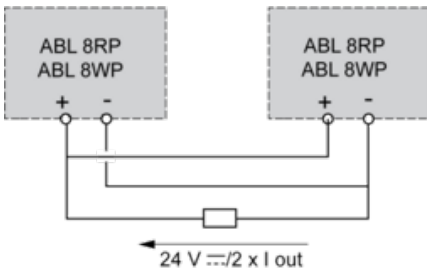
Series or Parallel Connection

Series Connection



(1) Two Schottky 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.

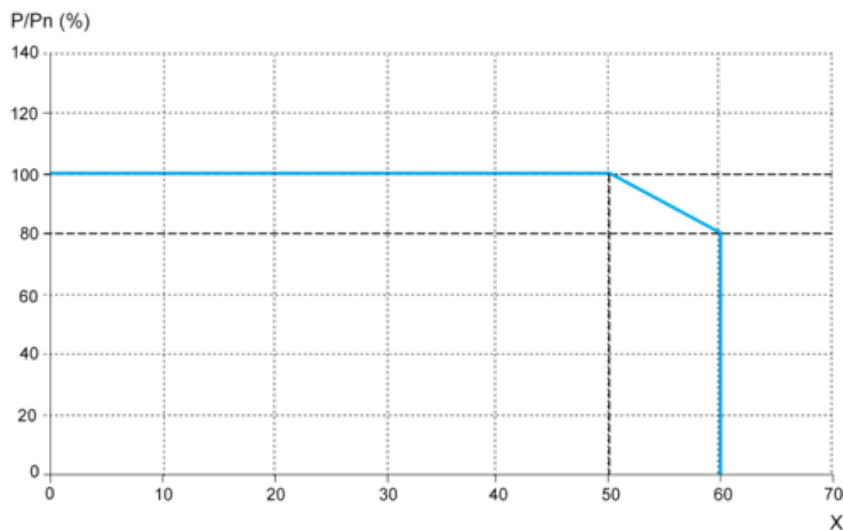
Regulated Switch Mode Power Supplies

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

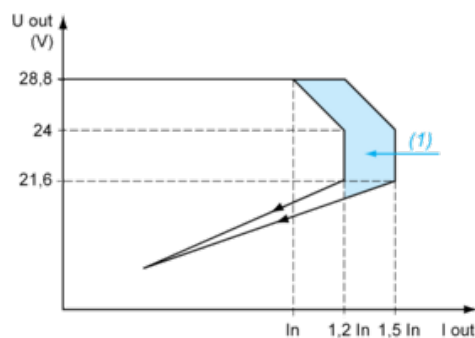
Derating should be considered in extreme operating conditions:

- 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

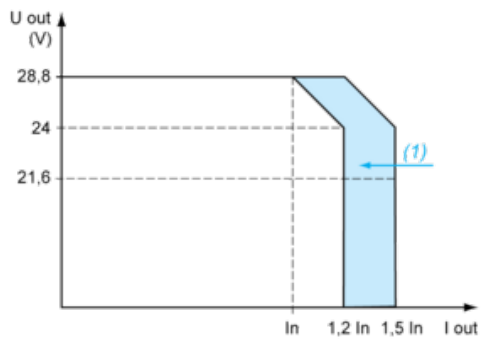
Load Limit

Manual Reset Protection Mode



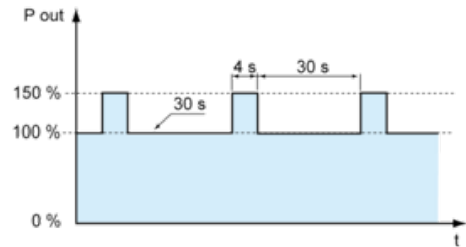
(1) Boost 4s

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.