

Product data sheet

Characteristics

ABL8RPS24030

SMPS - 1또는2상 - 200..500 V AC - 24 V - 3 A



기본항목

제품의 범위	Modicon Power Supply
제품 또는 구성요소 타입	전원
전원 타입	조절된 스위치 모드
Nominal input voltage	100 ... 120 V AC 단일 상, 단자(들): N-L1 200 ... 500 V AC 상 대 상, 단자(들): L1 - L2
W 단위로 정격 전력	72 W
출력 전압	24 V DC
전원 출력 전류	3 A
허용되는 일시적 전류 부스트	1.5 x In 4 s 동안)
Anti-harmonic filter	Low frequency harmonic currents

전기적/기계적 특성

입력 전압 제한	170 ... 550 V AC 85 ... 132 V AC
유입 전류	30 A
18 mm pitches	0.51 at 240 V AC 0.59 at 120 V AC
효율	87 %
Output voltage adjustment	24...28.8 V 조정 가능
W 단위의 전력 소모	7.8 W
Provided equipment	Power factor correction filter 일치되는 IEC 61000-3-2
출력 보호 타입	부하 초과 방지, 보호 기술: 수동 또는 자동 리셋 과전압 방지, 보호 기술: 30...32 V, 수동 리셋 단락-회로 방지, 보호 기술: 수동 또는 자동 리셋 부족 전압 방지, 보호 기술: U < 21.6 V인 경우 트립핑 열, 보호 기술: 자동 리셋
결선	스크류 타입 터미널 3 x 0.5...3 x 4 mm ² , AWG 22...AWG 12) 입력 연결 스크류 타입 터미널 1 x 0.5...1 x 4 mm ² , AWG 22...AWG 12) 입력 접지 연결 스크류 타입 터미널 4 x 0.5...4 x 4 mm ² , AWG 22...AWG 12) 출력 연결 스크류 타입 터미널 1 x 0.5...1 x 4 mm ² , AWG 22...AWG 12) 출력 접지 연결
상태 LED	LED 1개 (녹색 및 적색) 출력 전압 LED 1개 (녹색, 적색 및 주황색) 출력 전류
깊이	125 mm
높이	125 mm
너비	45 mm
제품 무게	0.3 kg
출력 커플링	병렬 시리즈
마킹	CE
취부 방식	35 x 15 mm 대칭적 DIN 레일 35 x 7.5 mm 대칭적 DIN 레일
구동 포지션	수직
전원	SELV 일치되는 IEC 60950-1 SELV 일치되는 IEC 60204-1 SELV 일치되는 IEC 60364-4-41
절연내력	3500 V 가진 between input and ground 4000 V 가진 between input and output 500 V 가진 between output and ground

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사용환경

표준	CSA C22.2 No 60950-1 UL 508 EN/IEC 62368-1
제품 인증	CCSAus[RETURN]EAC[RETURN]UL[RETURN]RCM[RETURN]KC
환경적 특성	EMC 일치되는 IEC 61000-6-1 EMC 일치되는 IEC 61000-6-3 EMC 일치되는 IEC 61000-6-2 EMC 일치되는 IEC 61000-6-4 EMC 일치되는 EN / IEC 61204-3 안전 일치되는 IEC 60950-1 안전 일치되는 EN / IEC 61204-3
사용 고도	2000 m
IP 등급	IP20 일치되는 IEC 60529
Ambient air temperature for operation	50...60 °C 있는 mounting position A < 2000 m -25...50 °C 출력감세 없는 mounting position A < 2000 m

포장 단위

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.437 cm
Package 1 Width	14.493 cm
Package 1 Length	16.458 cm
Package 1 Weight	780.0 g
Unit Type of Package 2	S06
Number of Units in Package 2	120
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	100.0 kg

상품의 지속 가능성

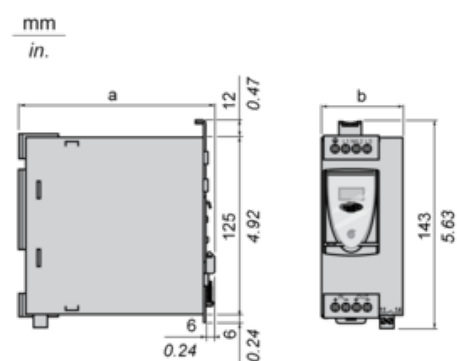
지속 가능성 제공 상태	Green Premium 제품
REACH 규정	 REACH 선언
EU RoHS 지침	선제 준수(EU RoHS 법적 범위 외 제품)
수은 없음	예
중국 RoHS 규정	 중국 RoHS 선언
RoHS 면제 정보	 예
환경 공시	 제품 환경 프로필
순환성 프로필	 수명 종료 정보
PVC 없음	예

계약 보증

보증	18 months
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Regulated Switch Mode Power Supplies

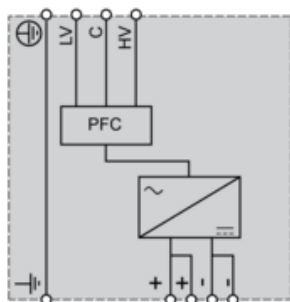
Dimensions



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

Regulated Switch Mode Power Supply

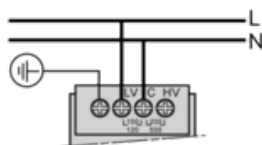
Internal Wiring Diagram



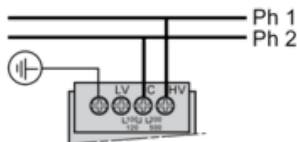
Regulated Switch Mode Power Supply

Line Supply Wiring Diagram

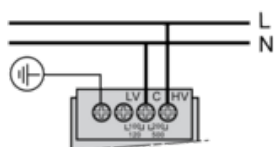
Single-phase (L-N) 100 to 120 V



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



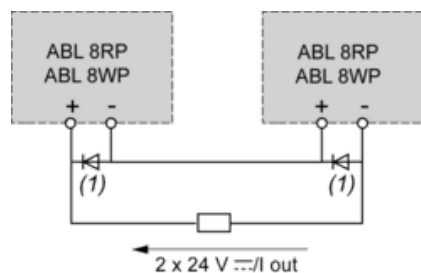
Single-phase (L-N) 200 to 500 V



Regulated Switch Mode Power Supplies

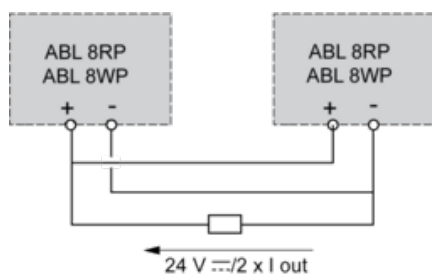
Series or Parallel Connection

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.

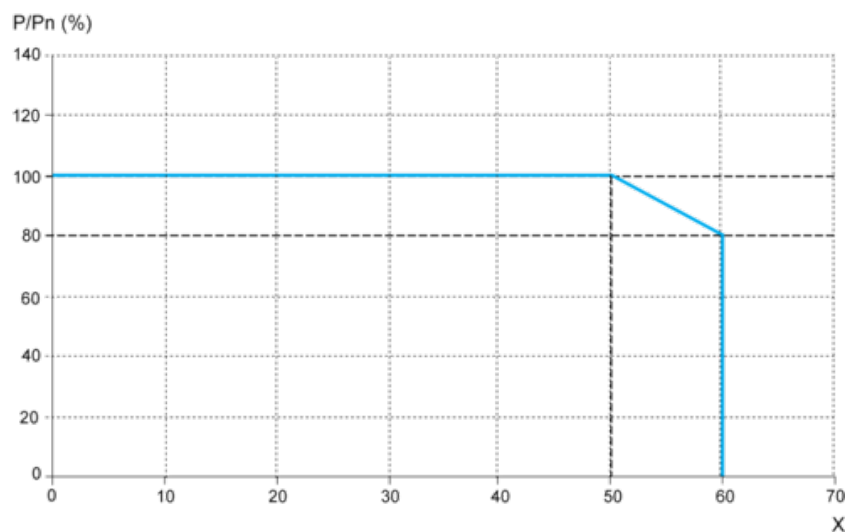
Regulated Switch Mode Power Supplies

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

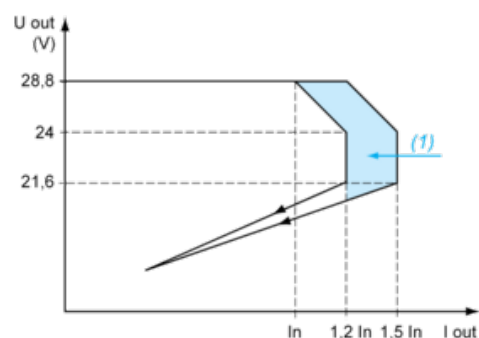
Derating should be considered in extreme operating conditions:

- 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

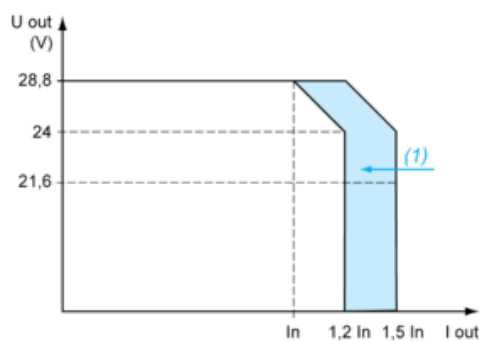
Load Limit

Manual Reset Protection Mode



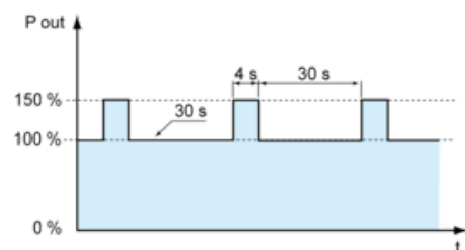
(1) Boost 4s

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.