

Regulated Power Supply, modicon power supply, 100...240V AC, 24V, 10A, single phase, Panel Mount

ABLP1A24100

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon Power Supply
Product or Component Type	Power supply
Power supply type	Regulated switch mode
Variant option	Panel mount
Enclosure Material	Aluminum
Nominal input voltage	100240 V AC single phase
Kw Rating	240 W
Output voltage	24 V DC
Power supply output current	10 A

Complementary

Efficiency at full load	85264 V AC
Nominal network frequency	5060 Hz
Network system compatibility	TN TT IT
Maximum leakage current	1 mA 240 V AC
Input protection type	Integrated fuse (not interchangeable) 6.3 A
Inrush current	35 A 115 V 60 A 230 V
Power factor	0.95 at 115 V AC 0.91 at 230 V AC
Efficiency	87 % 230 V AC
Output voltage adjustment	21.626.4 V
Power dissipation in W	36 W
Current consumption	< 3.6 A 115 V AC < 1.8 A 230 V AC
Turn-on time	< 1.2 s
Holding time	> 20 ms 115 V AC > 40 ms 230 V AC
Startup with capacitive loads	8000 μF
Residual ripple	< 150 mV
Meantime between failure [MTBF]	700000 h at 77 °F (25 °C), full load conforming to SR 332

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

Output protection type	Against overload and short-circuits, protection technology: automatic reset Against over temperature, protection technology: manual reset Against overvoltage, protection technology: manual reset	
Connections - terminals	Screw connection 0.752.5 mm², AWG 18AWG 14) without wire end ferrule Screw connection 0.751.5 mm², AWG 18AWG 16) with wire end ferrule	
Line and load regulation	< 0.5 % network 0 to 100 % load at 77 °F (25 °C) < 1 % network full voltage range in line at 77 °F (25 °C)	
Status LED	1 LED (Green) output voltage	
Depth	7.5 in (190 mm)	
Height	2.0 in (50 mm)	
Width	3.7 in (93 mm)	
Product Weight	1.87 lb(US) (0.85 kg)	
Output coupling	Parallel Serial	
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 Double-profile DIN rail panel mounting	
Supply	SELV IEC 60950-1 SELV IEC 60204-1 SELV IEC 60364-4-41	
Dielectric strength	3000 V AC with input to output	
Service life	10 year(s)	
Overvoltage category	II	

Environment

Standards	IEC 62368-1			
	EN/IEC 61010-1			
	EN 61010-2-201			
	EN/IEC 61204-3			
	IEC 61000-6-1			
	IEC 61000-6-2			
	IEC 61000-6-3			
	IEC 61000-6-4			
	IEC 61000-3-2			
	EN 61000-3-3			
	UL 62368-1			
	UL 61010-1			
	UL 61010-2-201			
	CSA C22.2 No 62368-1			
	CSA C22.2 No 61010-1			
	CSA C22.2 No 61010-2-201			
	IEC 60335-1			
	EN/IEC 62368-1			
Product certifications	CE			
	CULus			
	EAC			
	RCM			
	CB Scheme			
	KC			
Operating altitude	5000 m			
Shock resistance	150 m/s² 11 ms			
IP degree of protection	IP10			
Ambient air temperature for	14122 °F (-1050 °C) without derating mounting position A, B, C, D, F, G <			
operation	6561.68 ft (2000 m)			
	122158 °F (5070 °C) with current derating of 2.5 % per °C mounting position A,			
	B, C, D, F, G < 6561.68 ft (2000 m)			
	122158 °F (5070 °C) with current derating of 2.5 % per °C < 6561.68 ft (2000 m)			
Electrical shock protection class	Class I			

Pollution degree	2		
Vibration resistance	3 mm (f= 29 Hz) conforming to IEC 60068-2-6		
	10 m/s² (f= 9200 Hz) conforming to IEC 60068-2-6		
Electromagnetic immunity	Immunity to electrostatic discharge - test level: 8 kV (contact discharge) conforming to IEC 61000-4-2		
	Immunity to electrostatic discharge - test level: 15 kV (air discharge) conforming to IEC 61000-4-2		
	Immunity to conducted RF disturbances - test level: 15 V/m (80 MHz2 GHz) conforming to IEC 61000-4-3		
	Immunity to conducted RF disturbances - test level: 5 V/m (22.7 GHz) conforming to IEC 61000-4-3		
	Immunity to conducted RF disturbances - test level: 5 V/m (2.76 GHz) conforming to IEC 61000-4-3		
	Immunity to fast transients - test level: 4 kV (on input-output) conforming to IEC 61000-4-4		
	Surge immunity test - test level: 4 kV (between power supply and earth) conforming to IEC 61000-4-5		
	Surge immunity test - test level: 3 kV (between phases) conforming to IEC 61000-4-5 Immunity to conducted RF disturbances - test level: 15 V (0.1580 MHz) conforming to IEC 61000-4-6		
	Immunity to magnetic fields - test level: 30 A/m (5060 Hz) conforming to IEC 61000-4-8		
	Immunity to voltage dips conforming to IEC 61000-4-11		
	Disturbing field emission conforming to EN 55016-2-3		
	Limits for harmonic current emissions conforming to IEC 61000-3-2		
	conforming to EN 55016-1-2		
	conforming to EN 55016-2-1		
Electromagnetic emission	Conducted emissions IEC 61000-6-3		
	Radiated emissions IEC 61000-6-4		

Ordering and shipping details

Category	US1CP1222524
Discount Schedule	CP12
GTIN	3606481500304
Returnability	Yes
Country of origin	CN

Packing Units

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Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.36 in (6.000 cm)
Package 1 Width	5.51 in (14.000 cm)
Package 1 Length	9.65 in (24.500 cm)
Package weight(Lbs)	34.709 oz (984.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	9
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.435 lb(US) (9.269 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	72
Package 3 Height	29.53 in (75.000 cm)

Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	181.114 lb(US) (82.152 kg)



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

∇ Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	1559
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	E8b5e85f-3dd8-4246-afe7-a3c3cb549e5c
REACh Regulation	REACh Declaration
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

Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Product data sheet

ABLP1A24100

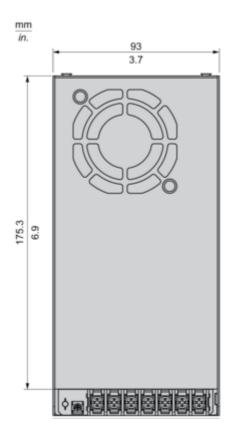
Dimensions Drawings

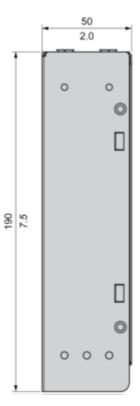
Electrical Safety

- If the unit is use in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- For means of disconnection a switch or circuit breaker, located near the product, must be included in the
 installation. A marking as disconnecting device for the product is required.
- The device has an internal fuse. The unit is tested and approved with branch circuit protective device up to 20A. This circuit breaker can be used as disconnecting device.
- The power supply is only suitable for audio, video, information, communication, industrial and control equipment.

Dimensions

Front and Side Views

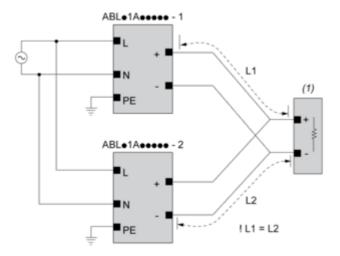




Connections and Schema

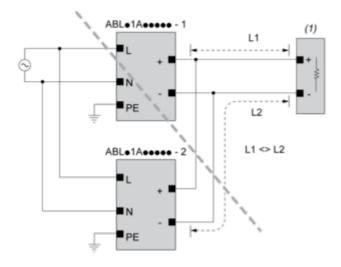
Connections and Schema

Correct Parallel Connection



(1): Load

Incorrect Parallel Connection

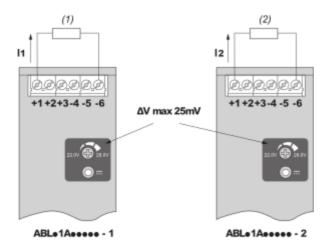


(1): Load ABLx1Axxxxx-1 = ABLx1Axxxxx-2 max 2 x ABLx1Axxxxx L1 = L2 Δ V max 25 mV I_{Load} < 90% 2 x I_{nom}

Output Voltage Balancing

Product data sheet

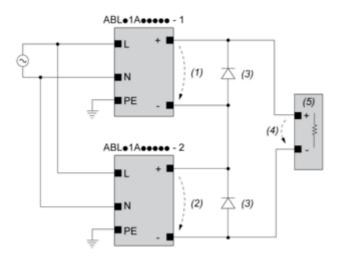
ABLP1A24100



- (1): R_{Load1}
- (2): R_{Load2}
- $R_{Load1} = R_{Load2}$

$$I_1 = I_2 = \sim I_{\text{nom}}$$

Series Connection



- (1): V_{out1}
- $\textbf{(2)}: \mathsf{V}_{out2}$
- (3) : 2 x Diode, V_{RRM}> 2 x V_{out1/2}, I_F > 2 x I_{nom1/2}
- (4): V_{Load} = 2 x V_{out}
- **(5)** : Load

Connections and Schema

	(1)		
	<40°C	<50°C	<70°C
ABLP1A12085	60°C	70°C	90°C
ABLP1A24045	60°C	70°C	90°C
ABLP1A24062	60°C	70°C	90°C
ABLP1A24100	60°C	70°C	90°C

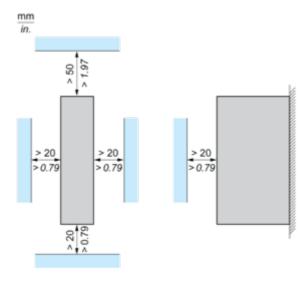
(1): Ambient

Aug 30, 2025

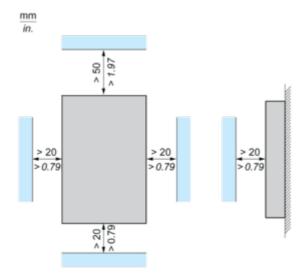
Mounting and Clearance

Mounting

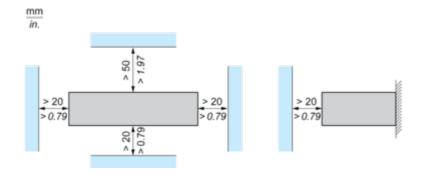
Mounting Position A



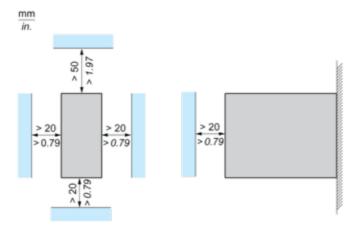
Mounting Position B



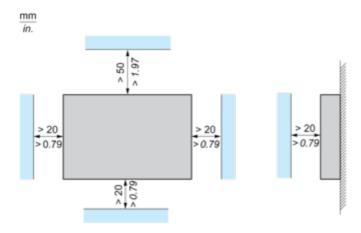
Mounting Position C



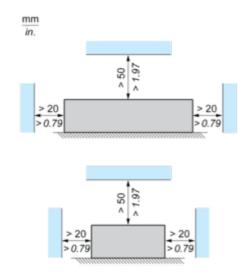
Mounting Position D1



Mounting Position D2 and F



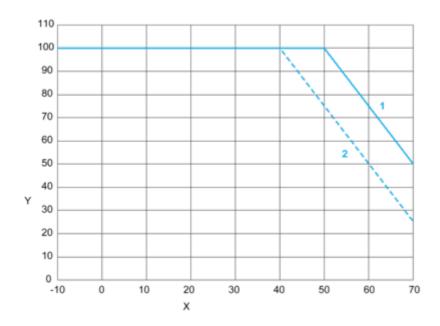
Mounting Position G



Performance Curves

Performance Curves

Mounting Positions A, B, C, D, F and G



X : Surrounding Air Temperature (°C)
Y : Percentage of Max Load (%)

1 : Altitude 2000 m 2 : Altitude 5000 m

Note: < 100 VAC additional derating by 1.33% / VAC

Image of product / Alternate images

Alternative











