

Product datasheet

Specifications



Regulated Power Supply, 100...240V AC, 24V 6.2A, single phase, Panel Mount

ABLP1A24062

EAN Code: 3606481500298

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	Aluminium
Nominal input voltage	100...120 V AC single phase 200...240 V AC single phase
Rated power in W	150 W
Output voltage	24 V DC
Power supply output current	6.25 A

Complementary

Input voltage limits	90...132 V AC 170...264 V AC
Nominal network frequency	50...60 Hz
Network system compatibility	TN TT IT
Maximum leakage current	1 mA 240 V AC
Input protection type	Integrated fuse (not interchangeable) 4 A
Inrush current	35 A at 115 V 70 A at 230 V
Power factor	0.55 at 115 V AC 0.45 at 230 V AC
Efficiency	88.8 % at 230 V AC
Output voltage adjustment	21.6...26.4 V
Power dissipation in W	29 W
Current consumption	< 3.2 A 115 V AC < 1.9 A 230 V AC
Turn-on time	< 500 ms
Holding time	> 20 ms 115 V AC > 40 ms 230 V AC
Startup with capacitive loads	7000 µF
Residual ripple	< 170 mV
Meantime between failure [MTBF]	700000 h at 25 °C, full load conforming to SR 332

Disclaimer: 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

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: 0.75...2.5 mm², (AWG 18...AWG 14) without wire end ferrule Screw connection: 0.75...1.5 mm², (AWG 18...AWG 16) with wire end ferrule
Line and load regulation	< 0.5 % at 0 to 100 % load at 25 °C < 1 % at full voltage range in line at 25 °C
Status LED	1 LED (green) output voltage
Depth	159 mm
Height	30 mm
Width	97 mm
Net weight	0.36 kg
Output coupling	Parallel Serial
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 Double-profile DIN rail panel mounting
Supply	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to IEC 60364-4-41
Dielectric strength	3750 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
Product certifications	CE CULus EAC RCM CB Scheme KC
Operating altitude	5000 m
Shock resistance	150 m/s² for 11 ms
IP degree of protection	IP10
Ambient air temperature for operation	-30...-25 °C with current derating of 4 % per °C mounting position B, G < 2000 m -25...50 °C without derating mounting position B, G < 2000 m 50...70 °C with current derating of 2 % per °C mounting position B, G < 2000 m
Electrical shock protection class	Class I
Pollution degree	2

Vibration resistance	3 mm (f= 2...9 Hz) conforming to IEC 60068-2-6 10 m/s² (f= 9...200 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 MHz...2 GHz) conforming to IEC 61000-4-3 Immunity to conducted RF disturbances - test level: 5 V/m (2...2.7 GHz) conforming to IEC 61000-4-3 Immunity to conducted RF disturbances - test level: 5 V/m (2.7...6 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 (0.15...80 MHz) conforming to IEC 61000-4-6 Immunity to magnetic fields - test level: 30 A/m (50...60 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 conforming to IEC 61000-6-3 Radiated emissions conforming to IEC 61000-6-4

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.000 cm
Package 1 Width	14.600 cm
Package 1 Length	21.500 cm
Package 1 Weight	490.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	17
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.890 kg

Logistical informations

Country of origin	CN
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Contractual warranty

Warranty (in months)	18
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Environmental Data

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

Total lifecycle Carbon footprint	1252
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

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

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

End of life manual availability	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

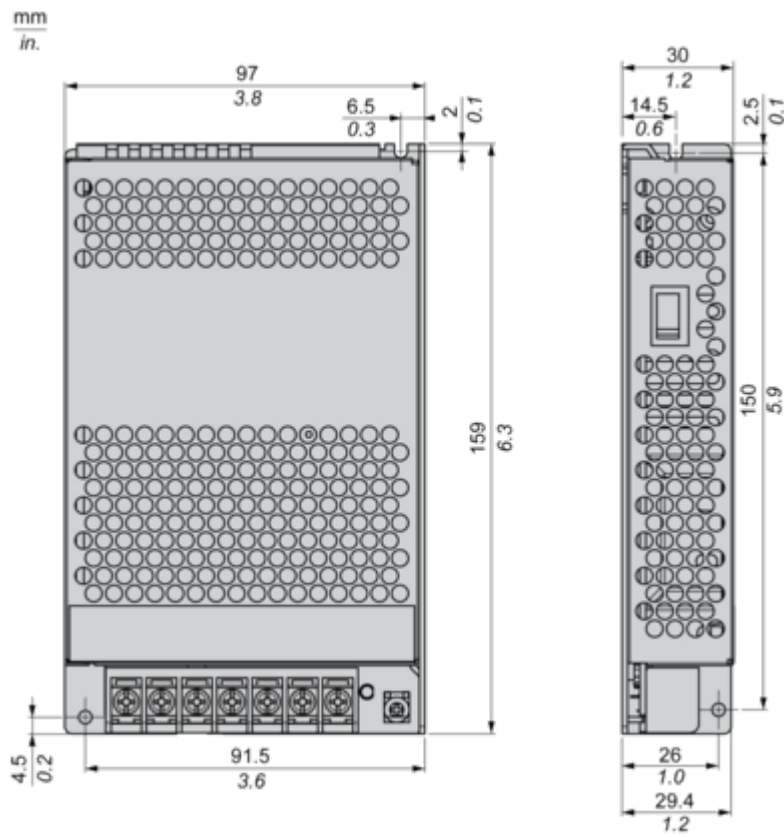
Dimensions Drawings

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

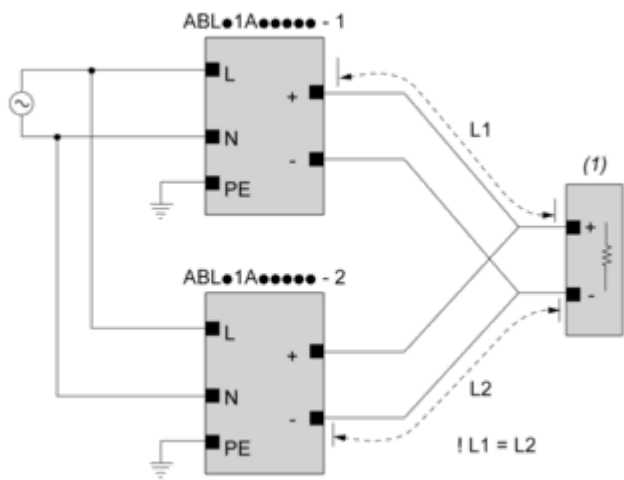
Front and Side Views



Connections and Schema

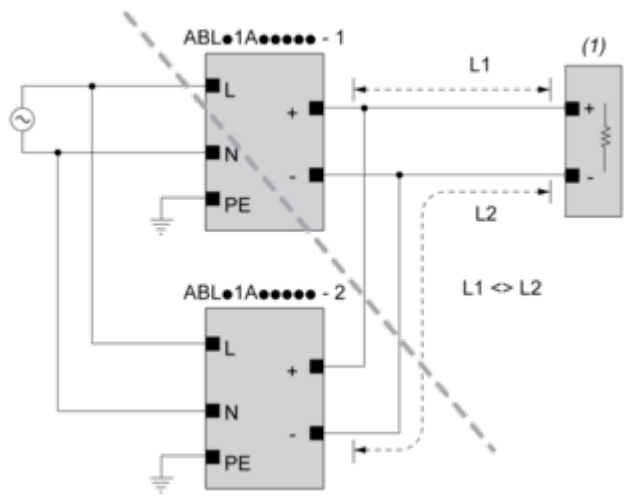
Connections and Schema

Correct Parallel Connection



(1) : Load

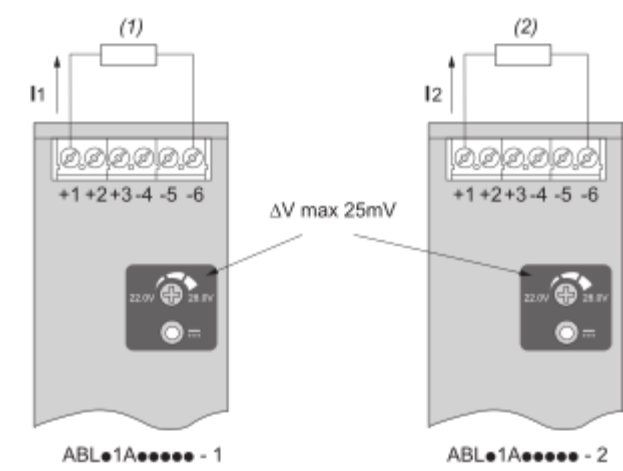
Incorrect Parallel Connection



(1) : Load

ABLx1Axxxx-1 = ABLx1Axxxx-2
max 2 x ABLx1Axxxx
 $L1 = L2$
 $\Delta V \text{ max } 25 \text{ mV}$
 $I_{Load} < 90\% \times 2 \times I_{nom}$

Output Voltage Balancing



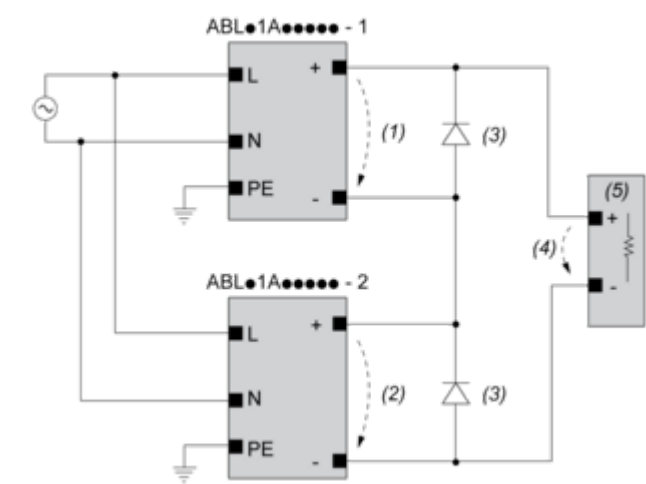
(1) : R_{Load1}

(2) : R_{Load2}

$R_{\text{Load1}} = R_{\text{Load2}}$

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

Series Connection



(1) : V_{out1}

(2) : V_{out2}

(3) : 2 x Diode, $V_{\text{RRM}} > 2 \times V_{\text{out1/2}}$, $I_F > 2 \times I_{\text{nom1/2}}$

(4) : $V_{\text{Load}} = 2 \times V_{\text{out}}$

(5) : Load

Connections and Schema

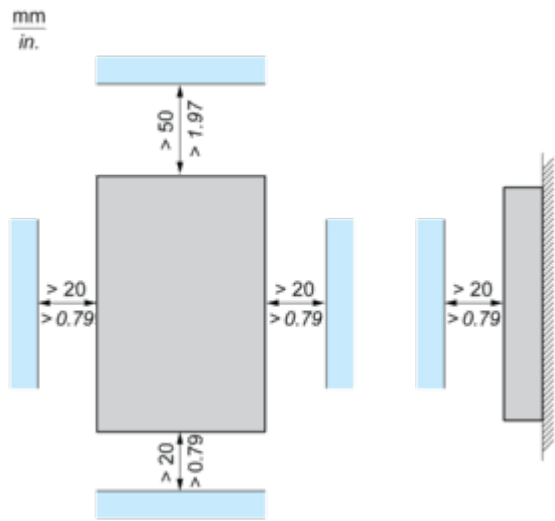
	(1)		
	<40°C	<50°C	<70°C
ABLP1A12085	60°C	70°C	90°C
ABLP1A24045	60°C	70°C	90°C
ABLP1A24062	60°C	70°C	90°C
ABLP1A24100	60°C	70°C	90°C

(1) : Ambient

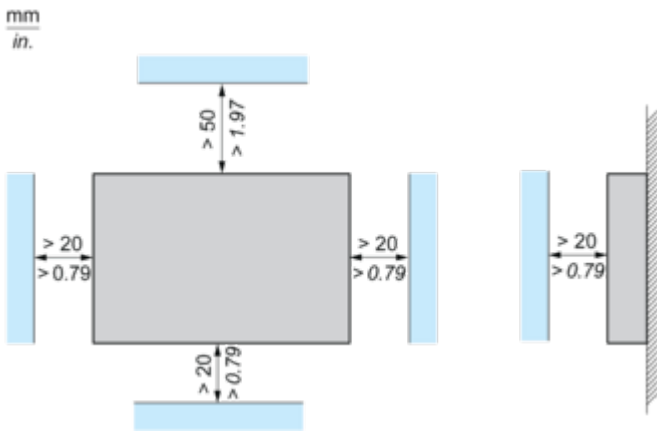
Mounting and Clearance

Mounting

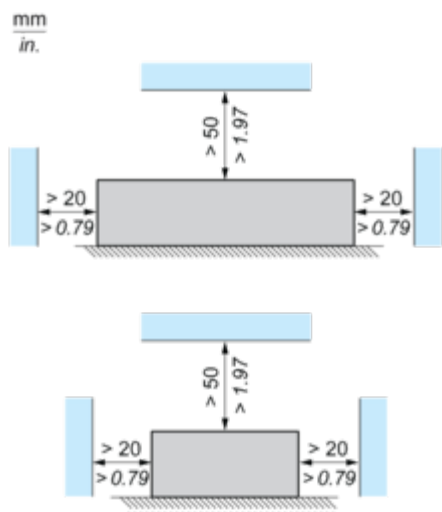
Mounting Position B



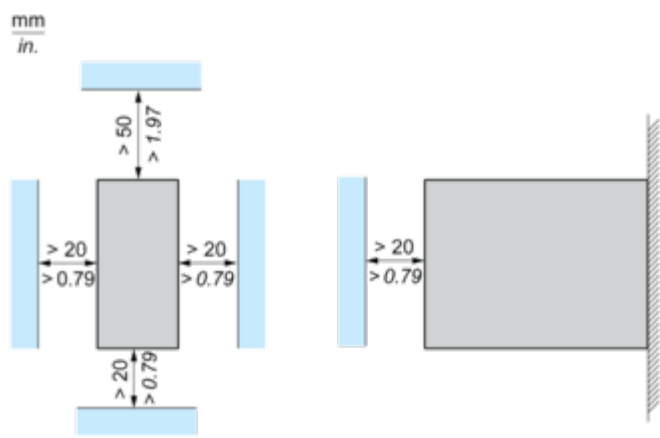
Mounting Position F



Mounting Position G



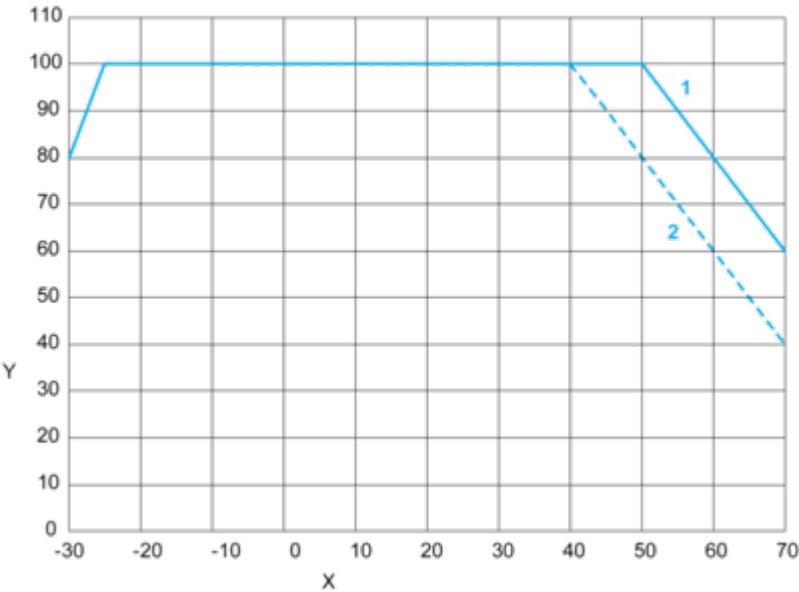
Mounting Position H



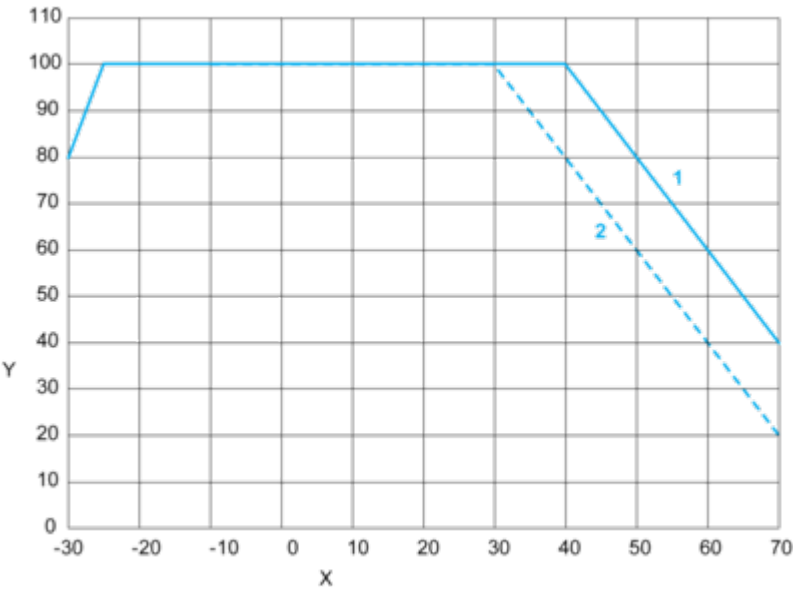
Performance Curves

Performance Curves

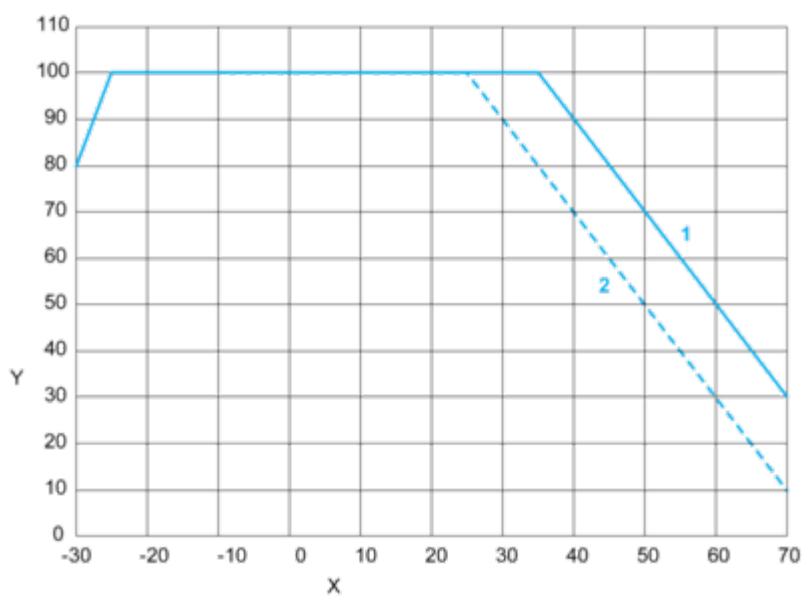
Mounting Position B and G



Mounting Position F



Mounting Position H



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

標準品仕様表

型式	定格電圧電圧		グロープ色	型式	使用電圧範囲	消費電力	入力電流	製品質量
	AC/DC24V							
	AC100/110V							
	AC200/220V							
7kg	AC/DC24V		白	ABLP-240	19~27V	12W	5A	7kg
	AC100/110V		黒	ABLP-100	90~120V	7W	1A	
	AC200/220V		黒	ABLP-200	180~240V	7W	0.5A	
	AC200/220V		黒	ABLP-200V	180~240V	7W	0.5A	
光源		光束角度	IP	防塵構造		電圧		材質
ABLP-24 ABLP-100 ABLP-200		電球	145mm ^φ (^φ 11)	IP65 防塵防構造	End E BT5	007 D064	GLBA115/119 12V5W	本体：樹脂成形アルミ合金製(XXアミック強化材添加) グロープ：樹脂ガラス/メタリウム樹脂(二重構造)

