

Fișă tehnică produs

Specificatii



Sursa de tensiune 24V 1.2A MODULAR

ABLM1A24012

Principale

gama de produse	Modicon Power Supply
Tip produs sau componenta	Sursa de alimentare
tip sursa de energie	Mod comutare reglata
Variant option	Modular
material carcasa	Plastic
Nominal input voltage	100...240 V c.a. o singura faza 100...240 V c.a. faza la faza
putere nominala in W	30 W
tensiune de iesire	24 V c.c.
curent de iesire sursa de alimentare	1,25 A

Suplimentare

limite pentru tensiune la intrare	90...264 V c.a.
Nominal network frequency	50...60 Hz
Network system compatibility	TN TT IT
curent de fuga maxim	0,25 mA 240 V AC
tip de protectie intrare	Siguranta integrata (neinterschimbabila) 3,15 A External protection (recommended) 20 A Curve B External protection (recommended) 20 A Curve C External protection (recommended) 4 A Curve B External protection (recommended) 4 A Curve C
curent de varf	25 A la 115 V 50 A la 230 V
pas de 18 mm	0,48 at 115 V c.a. 0,38 at 230 V c.a.
eficienta	87 % la 115 V c.a. 87 % la 230 V c.a.
Output voltage adjustment	24...28 V
puterea disipata in W	5 W
consum de curent	< 0.8 A 115 V AC < 0.6 A 230 V AC
Turn-on time	< 2 s
timp de pastrare	> 20 ms 115 V c.a. > 60 ms 230 V c.a.
Startup with capacitive loads	3000 μ F

riplu rezidual	< 100 mV
media timpului de buna functionare (MTBF)	2500000 H at 25 °C, sarcină nominală 1000000 H at 55 °C, 80 % load
tip de protectie a iesirii	Protecție la suprasarcină și scurtcircuit, tehnologie de protecție: resetare automată Against over temperature, tehnologie de protecție: resetare manuală Protecție la supratensiune, tehnologie de protecție: resetare manuală
conexiuni - borne	Conexiune cu surub 0.5...1.5 mm ² , (AWG 20...AWG 16) without wire end ferrule pentru intrare/ieșire Conexiune cu surub 0.5...1 mm ² , (AWG 20...AWG 18) with wire end ferrule pentru intrare/ieșire
line and load regulation	< 0.5 % network in line < 1 % network 0 to 100 % load
stare LED	1 LED (verde) tensiune de iesire
adancime	55,6 mm
inaltime	91 mm
latime	36 mm
greutate neta	0,170 kg
cuplaj de iesire	Serial Paralel
suport de montare	Top hat type TH35-15 sina conformitate cu IEC 60715 Top hat type TH35-7.5 sina conformitate cu IEC 60715 Sina DIN cu profil dublu sina montare pe panou
alimentare	SELV conformitate cu IEC 60950-1 SELV conformitate cu IEC 60204-1 SELV conformitate cu IEC 60364-4-41
rigiditate dielectrica	3000 V c.a. intrare/ieșire
Service life	10 yr
categorie de supratensiune	II

Mediu

standarde	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 UNE 20315 UL 61010-2-201 CSA C22.2 No 62368-1 CSA C22.2 No 61010-1 CSA C22.2 No 61010-2-201 EN/IEC 62368-1
certificari produs	UE Listat cUL Certificat cUL RCM Schema CB EAC KC NEC class 2
altitudinea de functionare	< 2000 m overvoltage category III 2000 m...5000 m overvoltage category II
rezistenta la socuri	150 m/s ² pentru 11 ms

grad de protectie IP	IP20
ambient air temperature for operation	-25...55 °C fără declasarea curentului mounting position A < 2000 m 55...70 °C with current derating of 2.67 % per °C mounting position A < 2000 m
clasa de protectie la electrocutare	Clasa II without PE connection
Grad de poluare	2
rezistenta la vibratii	3 mm (f= 2...9 Hz) conformitate cu IEC 60721-3-3 10 m/s ² (f= 9...200 Hz) conformitate cu IEC 60721-3-3
Electromagnetic immunity	Immunity to electrostatic discharge - test level: 9 kV (descarcare pe contact) conforming to IEC 61000-4-2 Immunity to electrostatic discharge - test level: 15 kV (descarcare în aer) conforming to IEC 61000-4-2 Test de imunitate la câmp electromagnetic - test level: 15 V/m (80 MHz...2 GHz) conforming to IEC 61000-4-3 Test de imunitate la câmp electromagnetic - test level: 5 V/m (2 - 2.7 GHz) conforming to IEC 61000-4-3 Test de imunitate la câmp electromagnetic - test level: 5 V/m (2.7...6 GHz) conforming to IEC 61000-4-3 Imunitate la tranziții rapide - test level: 4 kV (on input-output) conforming to IEC 61000-4-4 Test de imunitate la supratensiuni - test level: 4 kV (între sursa de alimentare și pământ) conforming to IEC 61000-4-5 Test de imunitate la supratensiuni - test level: 3 kV (between phases) conforming to IEC 61000-4-5 Imunitate la perturbații conduse - test level: 15 V (0.15 - 80 MHz) conforming to IEC 61000-4-6 Imunitate la câmpuri magnetice - test level: 30 A/m (50...60 Hz) conforming to IEC 61000-4-8 Imunitate la goluri de tensiune - test level: 100 % (1 ciclu) conforming to IEC 61000-4-11 Imunitate la goluri de tensiune - test level: 60 % (10 cycles) conforming to IEC 61000-4-11 Imunitate la goluri de tensiune - test level: 30 % (25 cycles) 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
emisie electromagnetica	Emisii conduse conformitate cu IEC 61000-6-3 Emisii radiate conformitate cu IEC 61000-6-4

Unitati de ambalare

Unitate de masura pentru prima forma de impachetare	PCE
Numar unitati in prima forma de impachetare	1
Inaltime prima forma de impachetare	5,000 cm
Latime prima forma de impachetare	6,000 cm
Lungime prima forma de impachetare	11,000 cm
Greutate prima forma de impachetare	172,000 g
Unitate de masura pentru a doua forma de impachetare	S02
Numar unitati in a doua forma de impachetare	29
Inaltime a doua forma de impachetare	15,000 cm
Latime a doua forma de impachetare	30,000 cm
Lungime a doua forma de impachetare	40,000 cm
Greutate a doua forma de impachetare	5,317 kg
Unitate de masura pentru a treia forma de impachetare	P12

Numar unitati in a treia forma de impachetare	464
Inaltime a treia forma de impachetare	45,000 cm
Latime a treia forma de impachetare	80,000 cm
Lungime a treia forma de impachetare	120,000 cm
Greutate a treia forma de impachetare	97,312 kg

Garanție contractuală

Garantie	18 luni
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Environmental Data

Schneider Electric isi propune sa atinga nivelul Net Zero pana in 2050 prin parteneriate la nivelul lantului de aprovizionare, materiale cu impact mai redus si circularitate, prin campania „Use Better, Use Longer, Use Again” pentru a extinde durata de viata a produselor si reciclabilitatea.

[Cum va ajuta aceste informatii >](#)

Amprenta de mediu

Amprenta de carbon (kg CO2 eq.)	217
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Raport de mediu	Profilul ambiental al produsului
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Use Better

Materiale si ambalare

Pachet cu carton reciclabil	Nu
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Ambalaj fara plastic	Da
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Directiva RoHS UE	Conformitate proactiva (Produs in afara domeniului de aplicare a EU RoHS)
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Numar SCIP	12ea84a2-1fbd-460a-b051-6fc2e008caa0
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Regulamentul REACH	Declaratia REACH
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Regulamentul RoHS China	Declaratia RoHS China
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Use Again

Reambalare si refabricare

Profil circularitate	Informatii privind sfarsitul duratei de viata
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DEEE



Produsul trebuie sa fie eliminat de pe piata din Uniunea Europeana dupa colectarea specifica a deseurilor si sa nu ajunga niciodata in pubele de gunoi

Preluare la sfarsitul duratei de viata

No

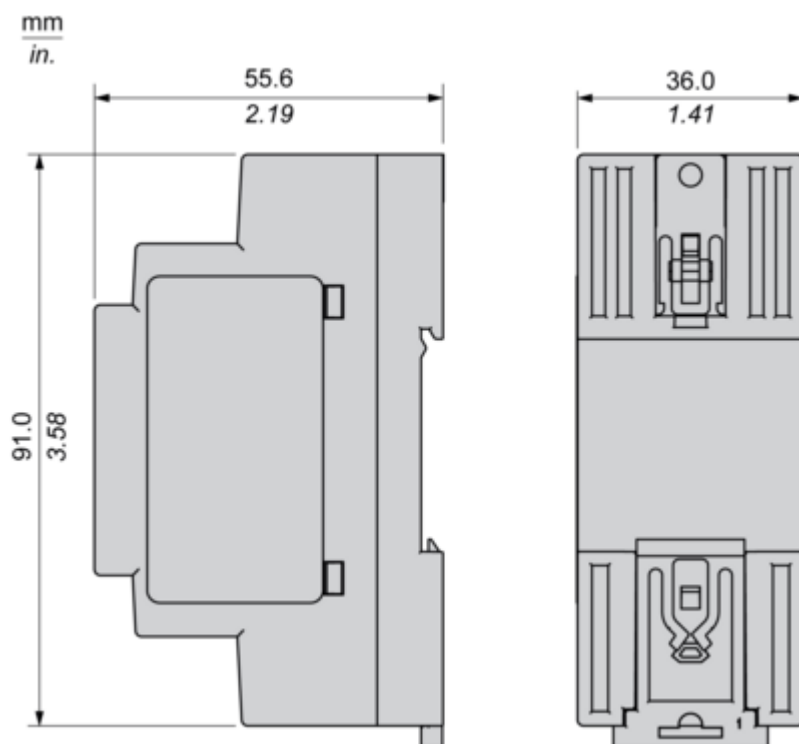
Dimensions Drawings

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

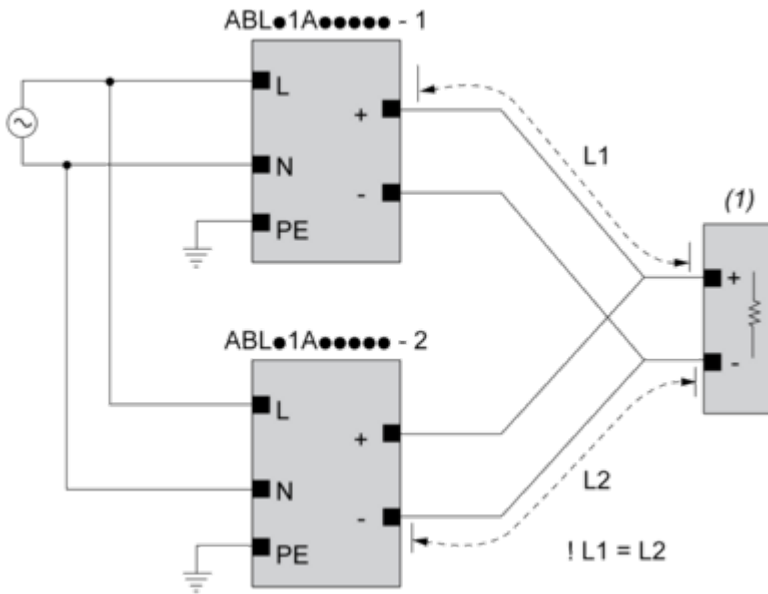
Side and Rear View



Connections and Schema

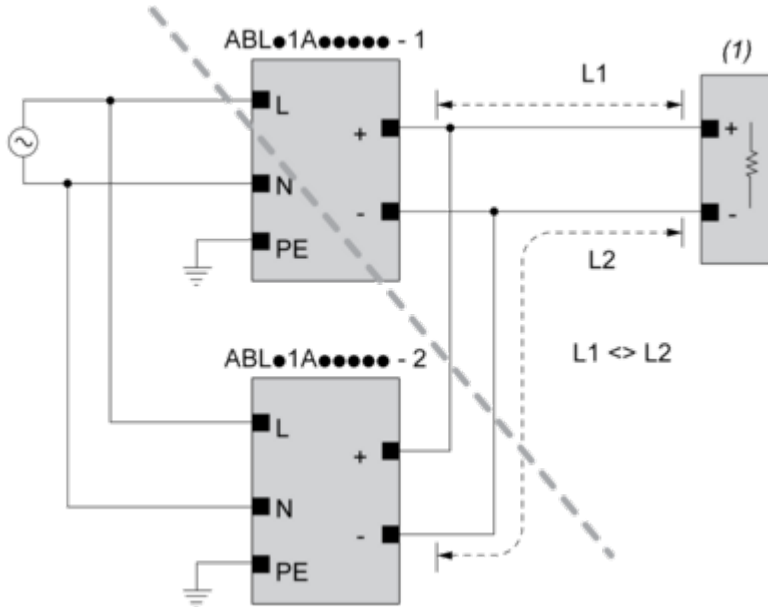
Connections and Schema

Correct Parallel Connection



(1) : Load

Incorrect Parallel Connection



(1) : Load

$ABLx1Axxxxx-1 = ABLx1Axxxxx-2$

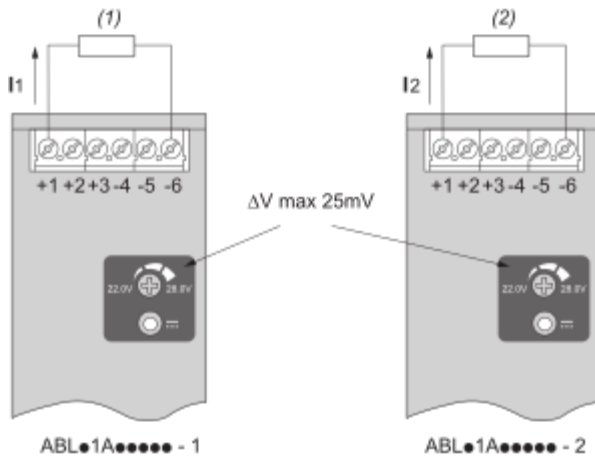
max 2 x $ABLx1Axxxxx$

$L1 = L2$

ΔV max 25 mV

$I_{Load} < 90\% \cdot 2 \times I_{nom}$

Output Voltage Balancing



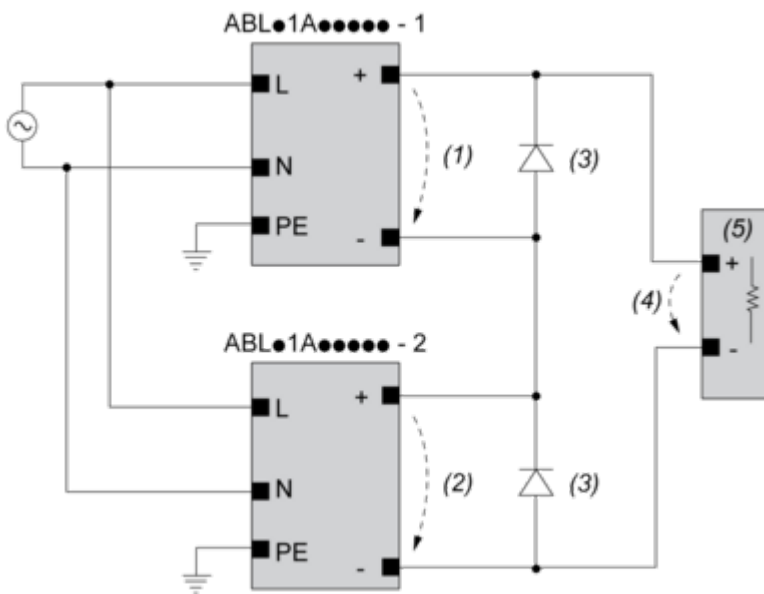
(1) : R_{Load1}

(2) : R_{Load2}

$R_{Load1} = R_{Load2}$

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

Series Connection



(1) : V_{out1}

(2) : V_{out2}

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

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

(5) : Load

Connections and Schema

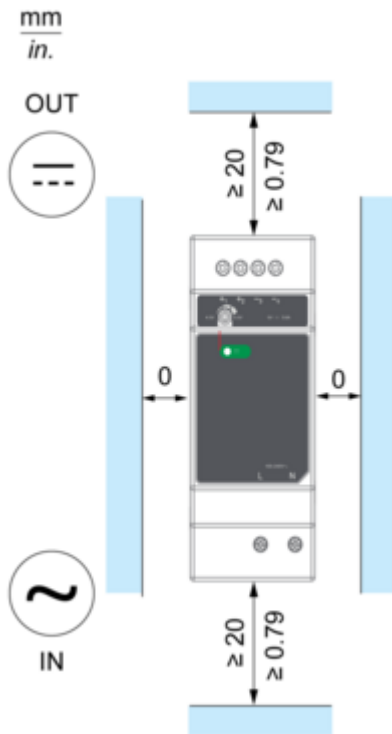
		(1)		
		<40°C	<50°C	<70°C
ABLM1A24004		60°C	75°C	75°C
ABLM1A12010		60°C	75°C	90°C
ABLM1A24006		60°C	75°C	90°C
ABLM1A05036	Input	60°C	75°C	90°C
	Output	75°C	90°C	90°C
ABLM1A12021		60°C	75°C	90°C
ABLM1A24012		60°C	75°C	90°C
ABLM1A12042		60°C	75°C	90°C
ABLM1A24025		60°C	75°C	90°C

(1) : Ambient

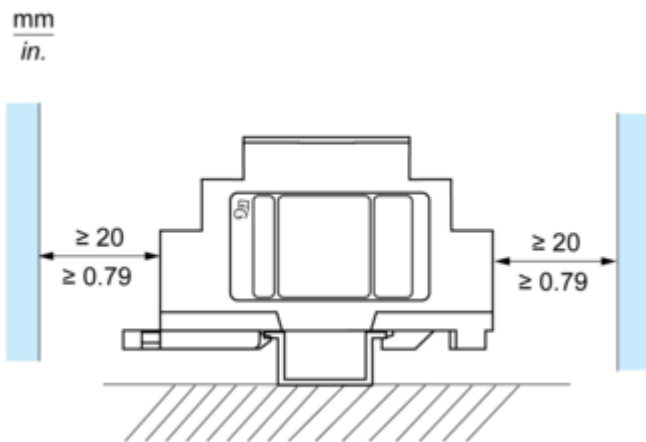
Mounting and Clearance

Mounting

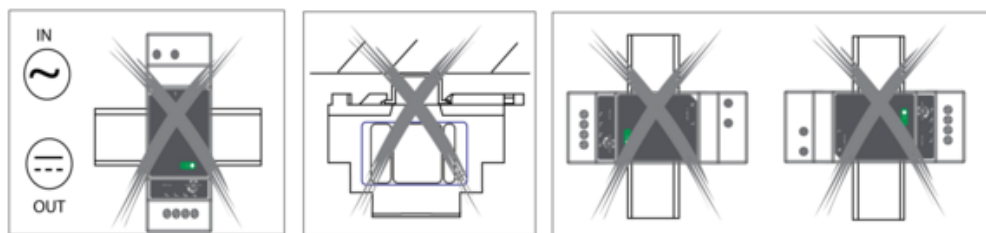
Mounting Position A



Mounting Position B

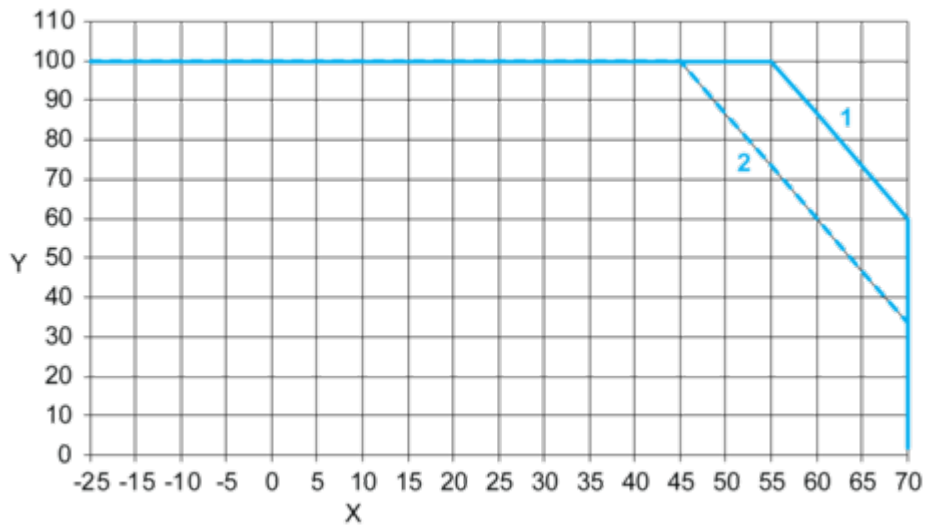


Incorrect Mounting



Performance Curves

Performance Curve



- X : Ambient Temperature (°C)
- Y : Percentage of Max Load (%)
- 1 : Mounting A & B, altitude 2000M
- 2 : Mounting A & B, altitude 5000M

Image of product / Alternate images

Alternative

