Fişă tehnică produs

Specificatii

Sursa de tensiune 24V 10A Monofazat OPTIMIZED

ABLS1A24100

Principale

gama de produse	Modicon Power Supply
Tip produs sau componenta	Sursa de alimentare
tip sursa de energie	Mod comutare reglata
Variant option	Optimized
material carcasa	Aluminiu
Nominal input voltage	100...240 V c.a. o singura faza 100...240 V c.a. faza la faza 140...340 V c.c.
putere nominala in W	240 W
tensiune de iesire	24 V c.c.
curent de iesire sursa de alimentare	10 A

Suplimentare

limite pentru tensiune la intrare	85...264 V c.a. without temperature derating 120...375 V c.c. without temperature derating
Nominal network frequency	50…60 Hz
Network system compatibility	TN TT IT
curent de fuga maxim	1 mA 240 V AC
tip de protectie intrare	Siguranta integrata (neinterschimbabila) 6,3 A External protection (recommended) 20 A Curve B External protection (recommended) 20 A Curve C External protection (recommended) 6 A Curve B External protection (recommended) 6 A Curve C
curent de varf	30,0 A la 115 V 60,0 A la 230 V
pas de 18 mm	0,95 at 115 V c.a. 0,95 at 230 V c.a.
eficienta	85 % la 115 V c.a. 88 % la 230 V c.a.
Output voltage adjustment	22...28 V
puterea disipata in W	36 W
consum de curent	< 2.8 A 115 V AC < 1.4 A 230 V AC < 2.4 A 140 V c.c.
Turn-on time	< 1 s

timp de pastrare	> 20 ms 115 V c.a. > 20 ms 230 V c.a.
Startup with capacitive loads	8000 µF
riplu rezidual	< 120 mV
media timpului de buna functionare (MTBF)	700000 H at 25 °C, sarcină nominală conforming to SR 332
tip de protectie a iesirii	Protecție la suprasarcină și scurtcircuit, protection technology: resetare automata Against over temperature, protection technology: resetare manuala Protecție la supratensiune, protection technology: resetare manuala
conexiuni - borne	Conexiune cu surub 0.5...4 mm131, (AWG 20 - AWG 12) without wire end ferrule pentru ieşire Conexiune cu surub 0.5...2.5 mm², (AWG 20...AWG 14) with wire end ferrule pentru ieşire Conexiune cu surub 0.75...4 mm², (AWG 18...AWG 12) without wire end ferrule pentru interior Conexiune cu surub 0.75...4 mm², (AWG 18...AWG 12) with wire end ferrule pentru interior
line and load regulation	< 0.5 % network 0 to 100 % load at 25 °C < 1 % network full voltage range in line at 25 °C
stare LED	1 LED (verde) tensiune de iesire
adancime	117,6 mm
inaltime	123,6 mm
latime	60 mm
greutate neta	0,8 kg
cuplaj de iesire	Paralel Serial
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
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. cu input to output izolaţie
Service life	10 yr
categorie de supratensiune	II

Mediu

standarde	IEC 62368-1 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 CSA C22.2 No 62368-1 UL 60947-1 CSA C22.2 Nr. 107.1 EN/IEC 62368-1
certificari produs	UE Listat cUL Certificat cUL RCM Schema CB EAC KC
altitudinea de functionare	< 5000 m

rezistenta la socuri	150 m/s² pentru 11 ms
grad de protectie IP	IP20
ambient air temperature for operation	-20…40 °C fără declasare mounting position A 115 V AC < 2000 m -20…50 °C fără declasare mounting position A 230 V AC < 2000 m 40…70 °C with current derating of 1.67 % per °C mounting position A 115 V AC < 2000 m 50…70 °C with current derating of 2.5 % per °C mounting position A 230 V AC < 2000 m
clasa de protectie la electrocutare	Clasa I
Grad de poluare	2
rezistenta la vibratii	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: 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 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 Imunitate la tranzienți rapizi - 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 Immunity to conducted RF disturbances - 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 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	7,000 cm
Latime prima forma de impachetare	17,500 cm
Lungime prima forma de impachetare	18,500 cm
Greutate prima forma de impachetare	990,000 g
Unitate de masura pentru a doua forma de impachetare	S03
Numar unitati in a doua forma de impachetare	9
Inaltime a doua forma de impachetare	30,000 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	9,495 kg
Unitate de masura pentru a treia forma de impachetare	P12

Numar unitati in a treia forma de impachetare	216
Inaltime a treia forma de impachetare	105,000 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	241,000 kg

Garanţie contractuală

Garantie	18 luni

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.

Environmental Data explicate >

Cum evaluam sustenabilitatea produselor >

Amprenta de mediu

Amprenta de carbon (kg CO2 eq.)	**1557**
Raport de mediu	**Profilul ambiental al produsului**

Use Better

Materiale si ambalare

Pachet cu carton reciclabil	**Nu**
Ambalaj fara plastic	**Da**
Directiva RoHS UE	**Conformitate proactiva (Produs in afara domeniului de aplicare a EU RoHS)**
Numar SCIP	**698d9b2a-7a6a-4b8f-a149-489156f55645**
Regulamentul REACh	**Declaratia REACH**

Use Again

Reambalare si refabricare

Profil circularitate	**Informatii privind sfarsitul duratei de viata**
Preluare la sfarsitul duratei de viata	**No**
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**

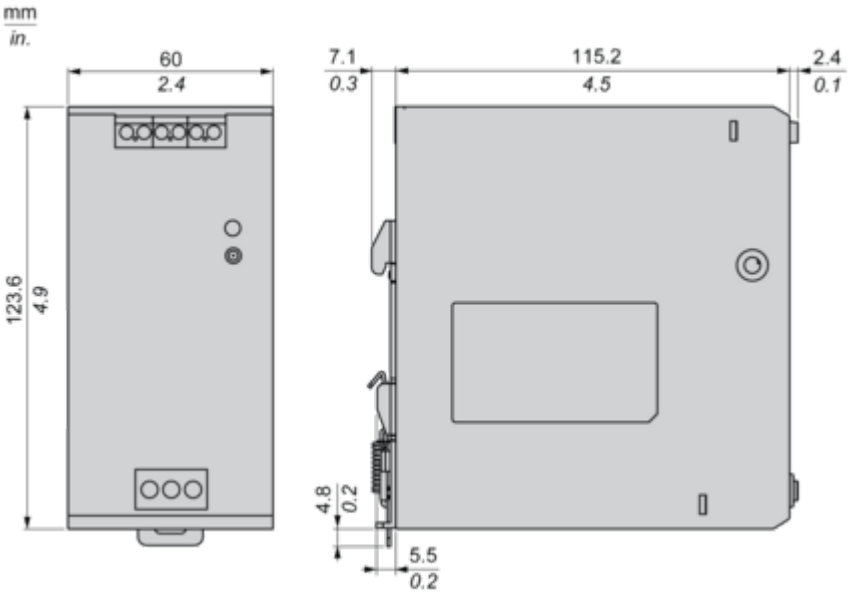
Dimensions Drawings

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

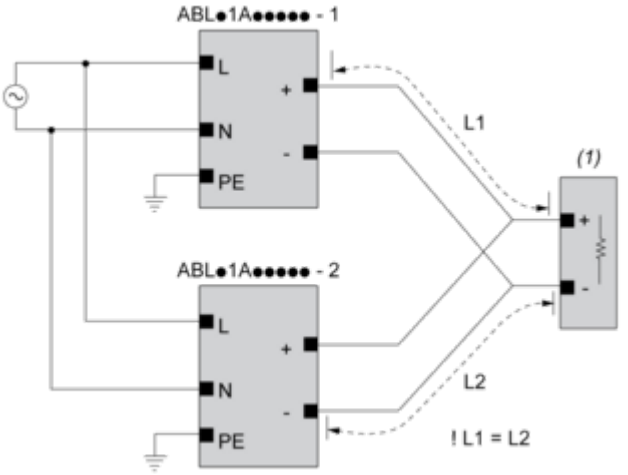
Front and Side Views



Connections and Schema

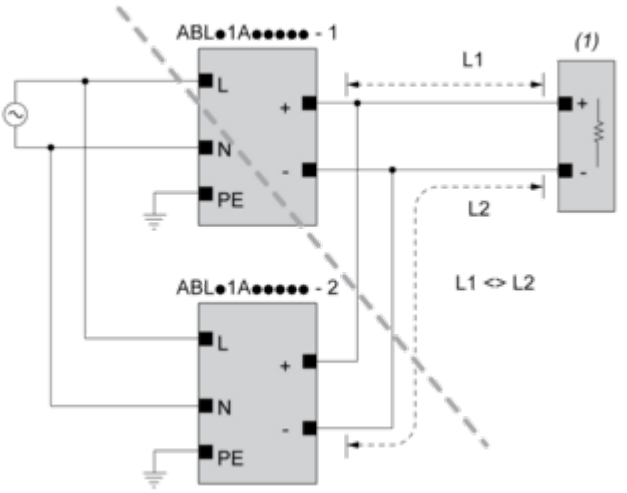
Connections and Schema

Correct Parallel Connection



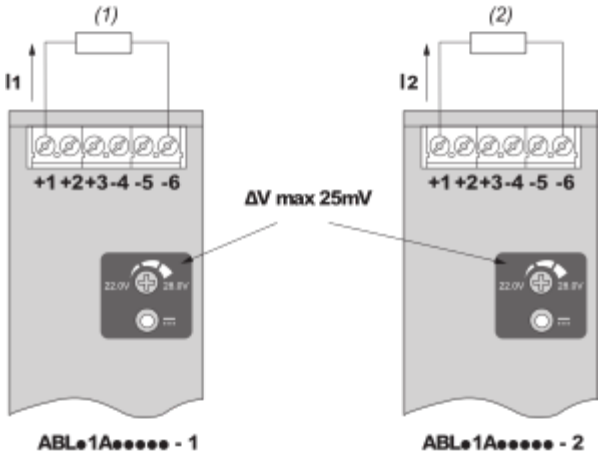
(1) : Load

Incorrect Parallel Connection



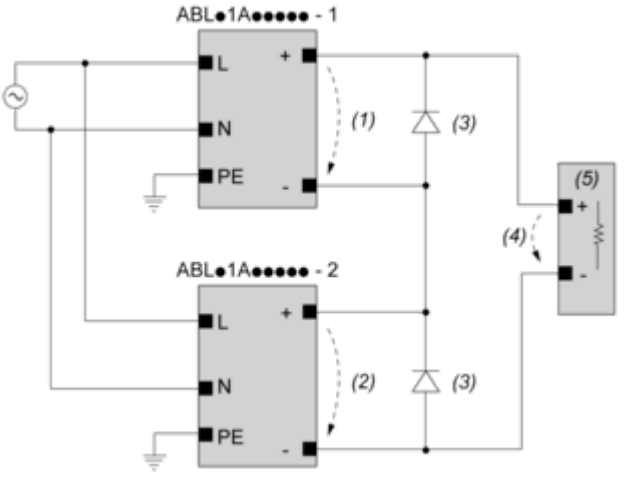
(1) : Load
ABLx1Axxxxx-1 = ABLx1Axxxxx-2
max 2 x ABLx1Axxxxx
L1 = L2
ΔV max 25 mV
I_{Load} < 90% 2 x I_{nom}

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 x 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

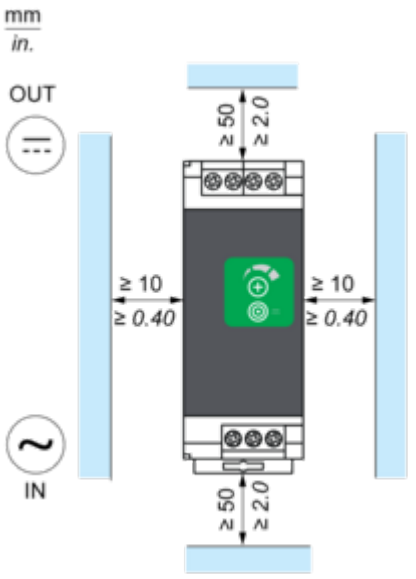
	(1)		
	<40°C	<50°C	<70°C
ABLS1A24021	50°C	60°C	75°C
ABLS1A24038	50°C	60°C	75°C
ABLS1A12062	50°C	60°C	80°C
ABLS1A24031	50°C	60°C	80°C
ABLS1A12100	60°C	70°C	90°C
ABLS1A24050	60°C	70°C	90°C
ABLS1A48025	60°C	70°C	90°C
ABLS1A24100	60°C	70°C	90°C
ABLS1A24200	95°C	95°C	90°C

(1) : Ambient

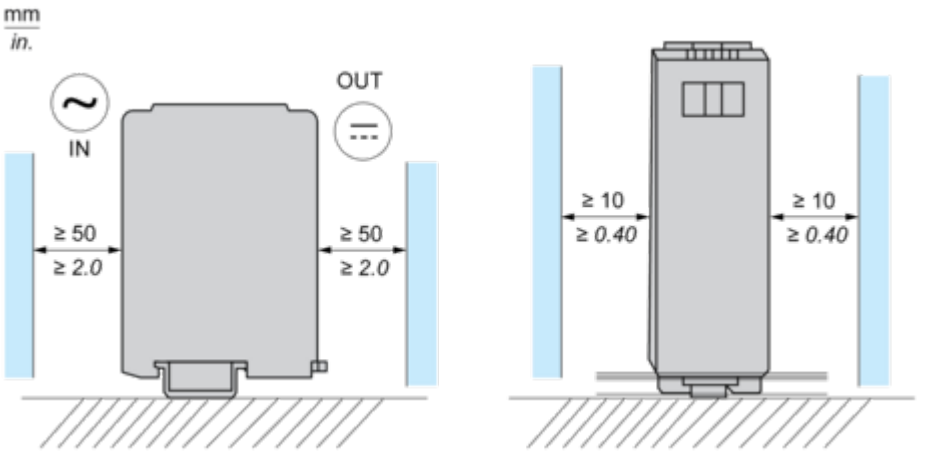
Mounting and Clearance

Mounting

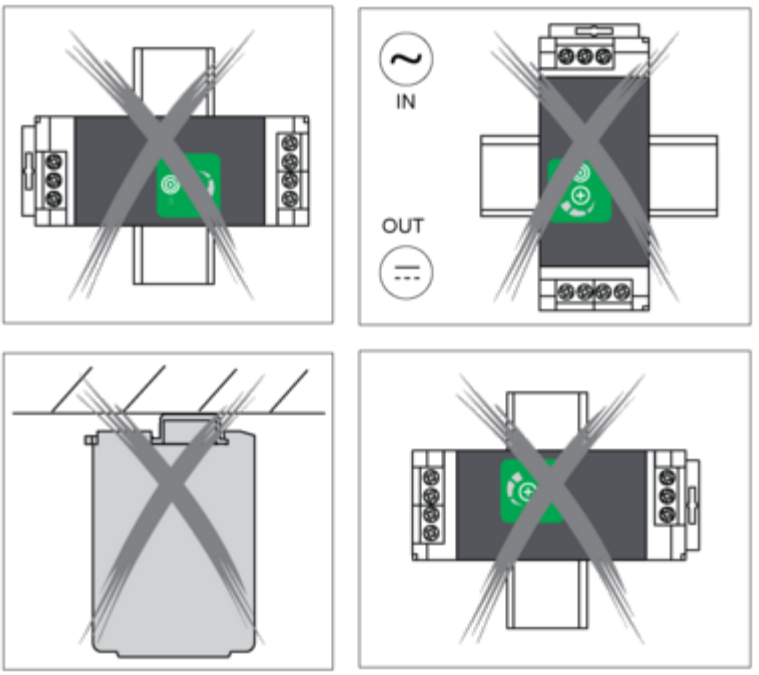
Mounting Position A



Mounting Position B



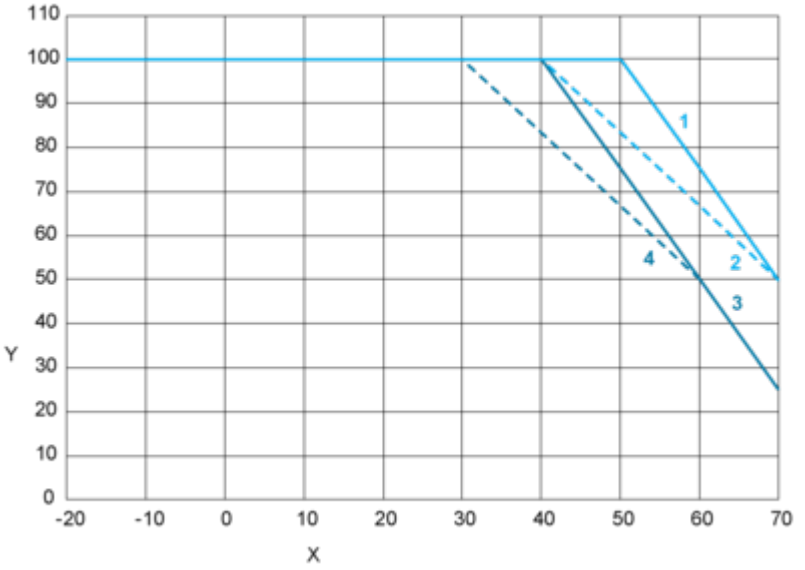
Incorrect Mounting


IN
OUT

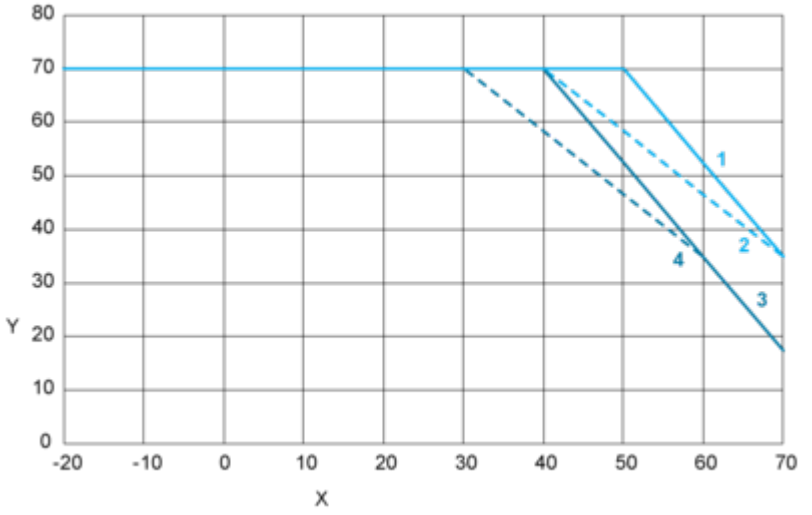
Performance Curves

Performance Curve

Mounting Position A



Mounting Position B



X : Surrounding Air Temperature (°C)
Y : Percentage of Maximum Load (%)
1 : Altitude ≤ 2000 m (6561 ft), Input voltage = 230 VAC / 325 VDC
2 : Altitude ≤ 2000 m (6561 ft), 115 VAC / 162 VDC
3 : Altitude ≤ 5000 m (16404 ft), Input voltage = 230 VAC / 325 VDC
4 : Altitude ≤ 5000 m (16404 ft), 115 VAC / 162 VDC