

Produktdatablad

Specifikationer



Modicon switchmode strømfor syning optimized til DIN-skinne med 24 VDC 50 W-2.1 A udgang og 100-240 VAC 1-faset for syning

ABLS1A24021

EAN-nr: 3606481500182

Egenskaber

Produktserie	Modicon Power Supply
Produkttype	Strømfor syning
strømfor syningstype	Reguleret switch mode
Variant option	Optimized
kasplingsmateriale	Kunststof
Nominal input voltage	100...240 V AC enkel faset 100...240 V AC fase til fase
mærkeeffekt i W	50 W
udgangsspænding	24 V DC
Strømfor syningens udgangsstrøm	2,1 A

Produktinformationer

indgangsspændingsgrænser	85...264 V AC
Nominal network frequency	50...60 Hz
Network system compatibility	TN TT IT
Maximum leakage current	1 mA 240 V AC
input beskyttelsestype	Integreret sikring (kan ikke udskiftes) 3,15 A External protection (recommended) 20 A Curve C External protection (recommended) 10 A Curve B External protection (recommended) 6 A Curve C
indkoblingsstrøm	35,0 A ved 115 V 75,0 A ved 230 V
Antal moduler á 18 mm	0,45 at 115 V AC 0,35 at 230 V AC
effektivitet	86 % ved 115 V AC 88 % ved 230 V AC
Output voltage adjustment	"24...28 V"
Effekttab i W	7,5 W
Strømfor brug	"< 1.1 A" 115 V AC "< 0.65 A" 230 V AC
Turn-on time	"< 3 s"
Holdetid	"> 20 ms" 100 V AC "> 100 ms" 230 V AC
Startup with capacitive loads	3000 µF

resterende ripple	"< 75 mV"
gennemsnitlig tid mellem fejl (MTBF)	2000000 time at 25 °C, fuld belastning conforming to "SR 332" 900000 time at 55 °C, "80 % load" conforming to "SR 332"
output beskyttelse type	Mod overspænding og kortslutning, protection technology: automatisk reset Against over temperature, protection technology: manual reset Imod overspænding, protection technology: manual reset
tilslutningsklemmer	Skrue forbindelse: 0.5...2.5 mm ² , (AWG 20...AWG 14) til input/output
line and load regulation	"< 0.5 %" network 0 to 100 % load at 25 °C "< 1 %" network full voltage range in line at 25 °C
Statuslysdioder	1 LED (Grøn) output spænding
Dybde	89,5 mm
Højde	75 mm
bredde	30 mm
Vægt	0,180 kg
udgangskobling	Parallel Serial
montagevejledning	Top hved type TH35-15 skinne i henhold til "IEC 60715" Top hat type TH35-7.5 skinne i henhold til "IEC 60715" Dobbel-profil DIN skinne
forsyning	"SELV" i henhold til IEC 60950-1 "SELV" i henhold til IEC 60204-1 "SELV" i henhold til IEC 60364-4-41
dielektrisk gennemslagsholdbarhed	3000 V AC med input to output insulering
Service life	10 år
Overspændingskategori	II

Miljø

Standarder	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 508 CSA C22.2 No 107.1 "EN/IEC 62368-1"
productcertificeringer	CE "cUL listed" CUL recognized RCM "CB Scheme" EAC KC "NEC": klasse 2
driftshøjde	< 2000 m
chokmodstand	"150 m/s ² " til 11 milisekund
IP kapslingsklasse	IP20
ambient air temperature for operation	-20...-10 °C med strømtab af 2 % pr. °C mounting position A < 2000 m -10...55 °C uden tab mounting position A < 2000 m 55...70 °C with current derating of 3.33 % per °C mounting position A < 2000 m
klasse af beskyttelse against electric shock	Klasse I

Forureningsgrad	2
Vibrationsmodstand	"3 mm" (f= 2...9 Hz) conforming to IEC 60068-2-6 10 m/s ² (f= 9...200 Hz) conforming to IEC 60068-2-6
Electromagnetic immunity	Immunity to electrostatic discharge - test level: 8 kV (kontaktafledning) conforming to IEC 61000-4-2 Immunity to electrostatic discharge - test level: 15 kV (luftafledning) 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 til hurtigt transients - test level: 4 kV (på input-output) conforming to IEC 61000-4-4 Surge immunity test - test level: 4 kV (mellem strømforsyning og earth) conforming to IEC 61000-4-5 Surge immunity test - test level: 3 kV (Imellem faser) 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 til spænding dips conforming to IEC 61000-4-11 Disturbing field emission conforming to "EN 55016-2-3" Limits til harmonic strøm emissions conforming to IEC 61000-3-2 conforming to "EN 55016-1-2" conforming to "EN 55016-2-1"
Elektromagnetisk stråling	Conducted emissions i henhold til IEC 61000-6-3 Radiated emissions i henhold til IEC 61000-6-4

Forpakkingsinformation

Enhedstype af pakke 1	PCE
Antal enheder i pakke 1	1
Pakke 1 Højde	3,800 cm
Pakke 1 Længde	8,600 cm
Package 1 Length	10,900 cm
Pakke 1 Vægt	215,000 g
Enhedstype af pakke 2	S02
Antal enheder i pakke 2	30
Pakke 2 Højde	15,000 cm
Pakke 2 Bredde	30,000 cm
Pakke 2 Længde	40,000 cm
Pakke 2 Vægt	6,977 kg

Environmental Data

Schneider Electric's mål er at opnå Net Zero-status i 2050 gennem partnerskaber med forsyningskæden, materialer med lavere påvirkning og cirkularitet via vores igangværende kampagne "Use Better, Use Longer, Use Again" for at forlænge produkternes levetid og genbrugelighed.

[Forklaring af Environmental Data >](#)

[Sådan vurderer vi produktets bæredygtighed >](#)

Miljøfodaftryk

CO2-belastning (kg CO2 eq.)

326

Miljøoplysning

[Miljøprofil for produkt](#)

Use Better

Materialer og emballage

Pakke med genbrugspap

No

Emballage uden plast

No

[EU RoHS-direktivet](#)

Proaktiv overensstemmelse (produkt ikke omfattet af EU RoHS)

SCIP-nummer

62de79a2-8637-4aef-b8c2-40b954e90401

Reach-forordning

[REACH-erklæring](#)

Use Again

Ompakning og genfremstilling

Cirkularitetsprofil

[Oplysninger om udtjent udstyr](#)

Returnering

No

WEEE



Produktet skal bortskaffes på EU's markeder efter en specifik affaldsindsamling og må aldrig ende i skraldespande

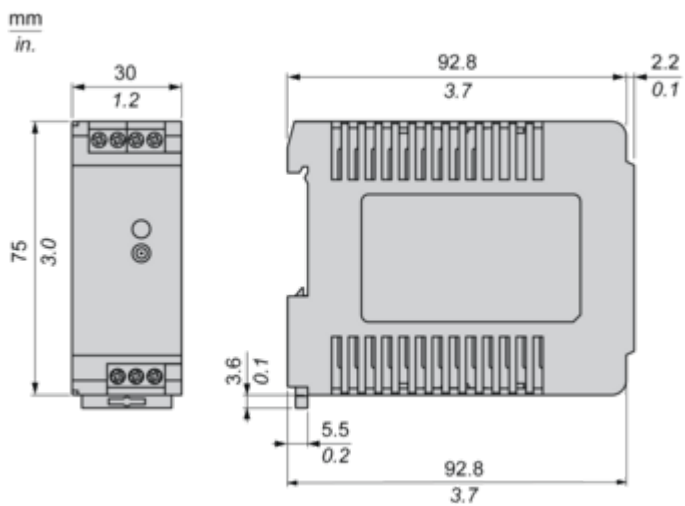
Dimensions Drawings

Electrical Safety

- If the unit is used 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

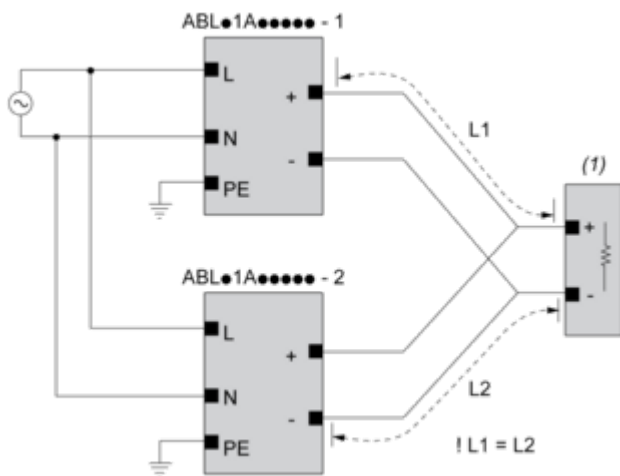
Front and Side Views



Connections and Schema

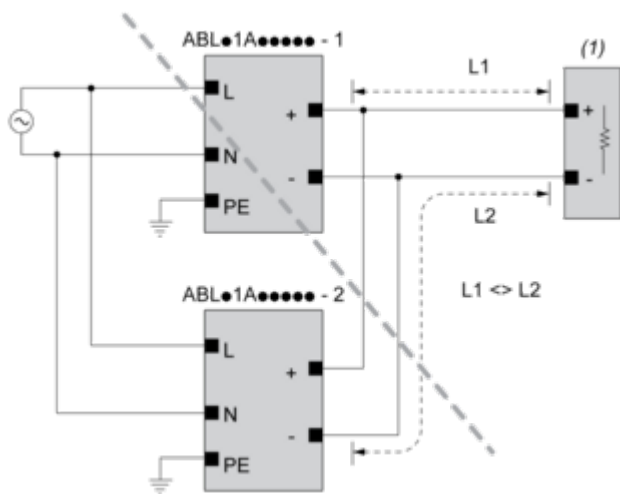
Connections and Schema

Correct Parallel Connection



(1) : Load

Incorrect Parallel Connection



(1) : Load

ABLx1Axxxxx-1 = ABLx1Axxxxx-2

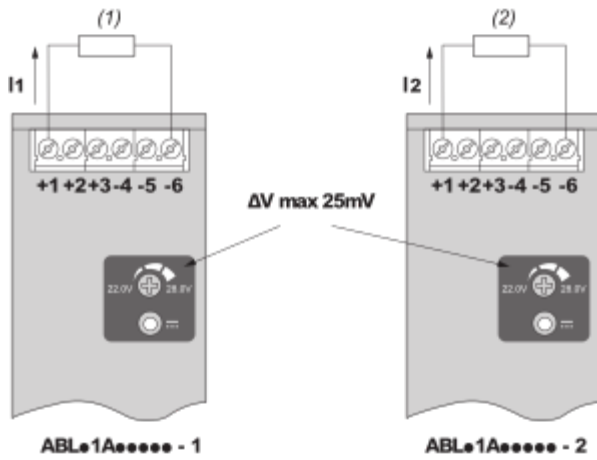
max 2 x ABLx1Axxxxx

L1 = L2

ΔV max 25 mV

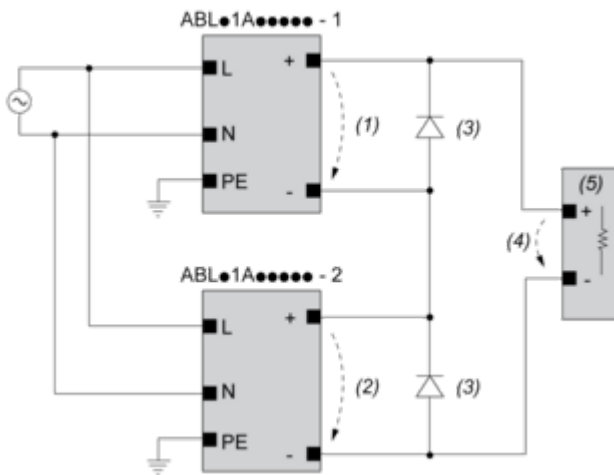
$I_{Load} < 90\% \cdot 2 \times I_{nom}$

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 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

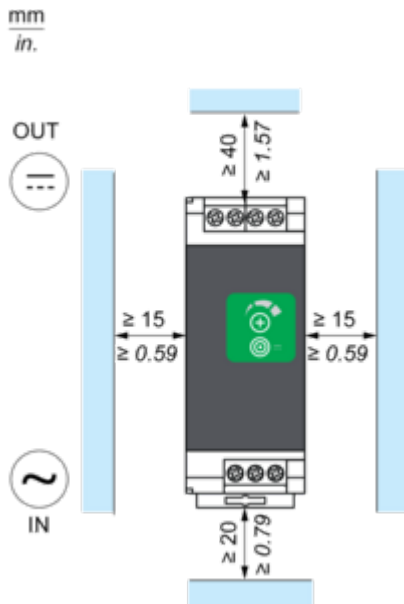
	(1)		
	<40°C	<50°C	<70°C
ABLS1A24021	50°C	60°C	75°C
ABLS1A24038	50°C	60°C	75°C
ABLS1A12062	50°C	60°C	80°C
ABLS1A24031	50°C	60°C	80°C
ABLS1A12100	60°C	70°C	90°C
ABLS1A24050	60°C	70°C	90°C
ABLS1A48025	60°C	70°C	90°C
ABLS1A24100	60°C	70°C	90°C
ABLS1A24200	95°C	95°C	90°C

(1) : Ambient

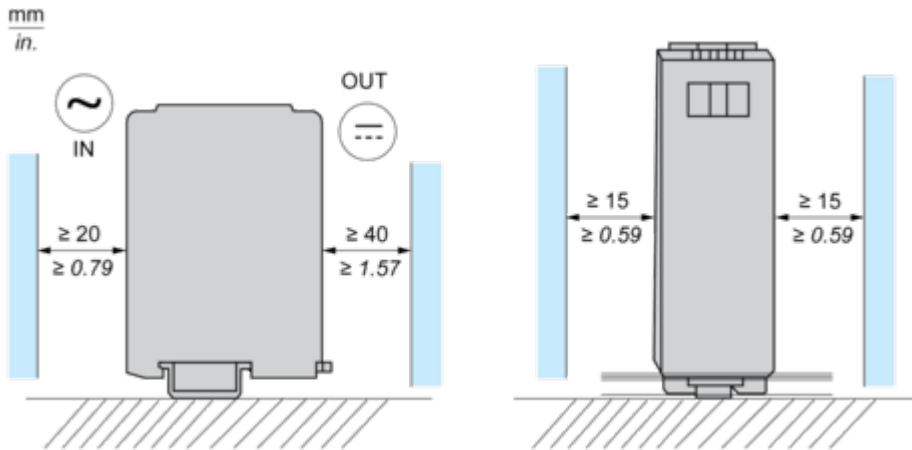
Mounting and Clearance

Mounting

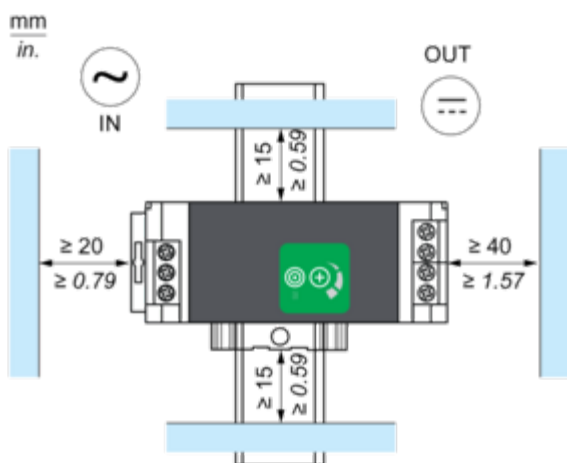
Mounting Position A



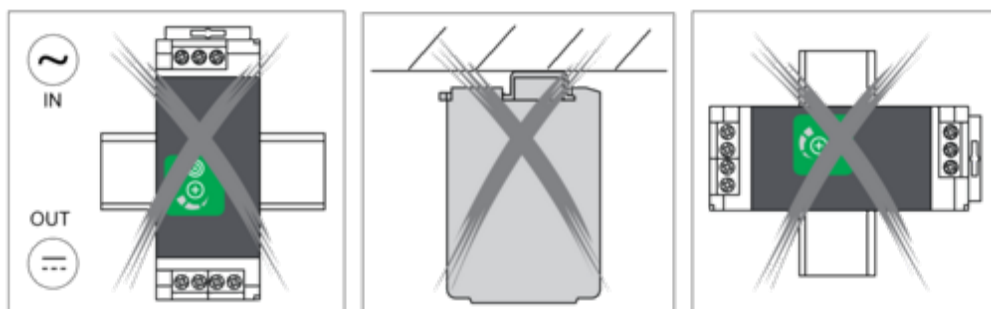
Mounting Position B



Mounting Position C

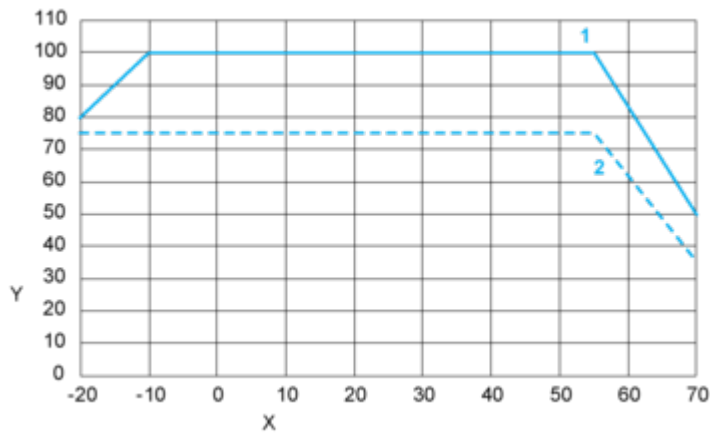


Incorrect Mounting



Performance Curves

Performance Curve



X : Surrounding Air Temperature (°C)
Y : Percentage of Maximum Load (%)
1 : Position A
2 : Position B + C
Note : Altitude ≤ 2000 m (6561 ft)

Image of product / Alternate images

Alternative



