

Produktdatablad

Specifikationer



Modicon switchmode strømfor- syning modular til DIN-skinne med 12 VDC 25 W-2.1 A udgang og 100-240 VAC 1-faset forsyning

ABLM1A12021

EAN-nr: 3606481500144

Egenskaber

Produktserie	Modicon Power Supply
Produkttype	Strømfor- syning
strømfor- syningstype	Reguleret switch mode
Variant option	Modular
kaspingsmateriale	Kunststof
Nominal input voltage	100...240 V AC enkel faset 100...240 V AC fase til fase
mærkeeffekt i W	25 W
udgangsspænding	12 V DC
Strømfor- syningens udgangsstrøm	2,1 A

Produktinformationer

indgangsspændingsgrænser	"90...264 V" AC
Nominal network frequency	50...60 Hz
Network system compatibility	TN TT IT
Maximum leakage current	0,25 mA 240 V AC
input beskyttelsestype	Integreret sikring (kan ikke udskiftes) 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
indkoblingsstrøm	25 A ved 115 V 50 A ved 230 V
Antal moduler á 18 mm	0,48 at 115 V AC 0,38 at 230 V AC
effektivitet	85 % ved 115 V AC 85 % ved 230 V AC
Output voltage adjustment	"12...15 V"
Effekttab i W	4,6 W
Strømforbrug	"< 0.8 A" 115 V AC "< 0.6 A" 230 V AC
Turn-on time	"< 2 s"
Holdetid	"> 20 ms" 115 V AC "> 60 ms" 230 V AC
Startup with capacitive loads	3000 µF

resterende ripple	"< 100 mV"
gennemsnitlig tid mellem fejl (MTBF)	2500000 time at 25 °C, fuld belastning 1000000 time at 55 °C, "80 % load"
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...1.5 mm ² , (AWG 20...AWG 16) without wire end ferrule til input/output Skrue forbindelse: 0.5...1 mm ² , (AWG 20...AWG 18) med ledning og samling til input/output
line and load regulation	"< 0,5 %" network in line "< 1 %" network 0 to 100 % load
Statuslysdioder	1 LED (Grøn) output spænding
Dybde	55,6 mm
Højde	91 mm
bredde	36 mm
Vægt	0,170 kg
udgangskobling	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 Tavlemontage
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 input/output
Service life	10 år
Overspændingskategori	II

Miljø

Standarder	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 antal 61010-1 "CSA C22.2 No 61010-2-201" "EN/IEC 62368-1"
productcertificeringer	CE "cUL listed" CUL recognized RCM "CB Scheme" EAC KC "NEC": klasse 2
driftshøjde	< 2000 m overvoltage category III "2000 m...5000 m" overvoltage category II
chokmodstand	"150 m/s ² " til 11 milisekund

IP kapslingsklasse	IP20
ambient air temperature for operation	-25...55 °C uden strømtab mounting position A < 2000 m 55...70 °C with current derating of 2.67 % per °C mounting position A < 2000 m
klasse af beskyttelse against electric shock	Klasse II without PE connection
Forureningsgrad	2
Vibrationsmodstand	"3 mm" (f= 2...9 Hz) conforming to IEC 60721-3-3 10 m/s ² (f= 9...200 Hz) conforming to IEC 60721-3-3
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 Electromagnetisk field immunity test - test level: 15 V/m (80 MHz...2 GHz) conforming to IEC 61000-4-3 Electromagnetisk field immunity test - test level: "5 V/m" (2...2.7 GHz) conforming to IEC 61000-4-3 Electromagnetisk field immunity test - test level: "5 V/m" ("2.7...6 GHz") conforming to IEC 61000-4-3 Immunity til hurtig 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 til conducted 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 - test level: 100 % (1 cyklus) conforming to IEC 61000-4-11 Immunity til spænding dips - test level: "60 %" (10 cycles) conforming to IEC 61000-4-11 Immunity til spænding dips - test level: 30 % ("25 cycles") 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	4,500 cm
Pakke 1 Længde	6,200 cm
Package 1 Length	11,000 cm
Pakke 1 Vægt	176,000 g
Enhedstype af pakke 2	S02
Antal enheder i pakke 2	29
Pakke 2 Højde	15,000 cm
Pakke 2 Bredde	30,000 cm
Pakke 2 Længde	40,000 cm
Pakke 2 Vægt	5,704 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.)

200

Miljøoplysning

[Miljøprofil for produkt](#)

Use Better

Materialer og emballage

Pakke med genbrugspap

No

Emballage uden plast

Yes

[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

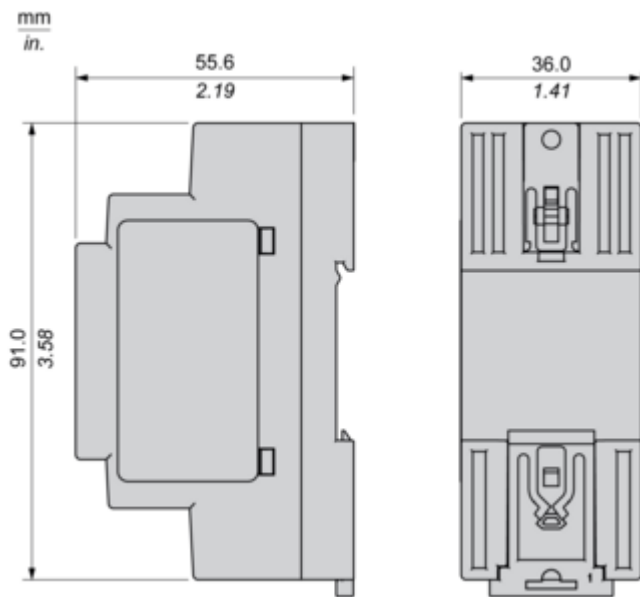
Dimensions Drawings

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

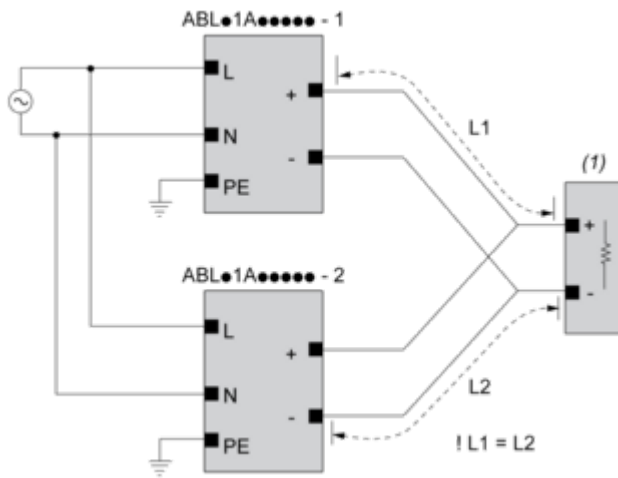
Side and Rear View



Connections and Schema

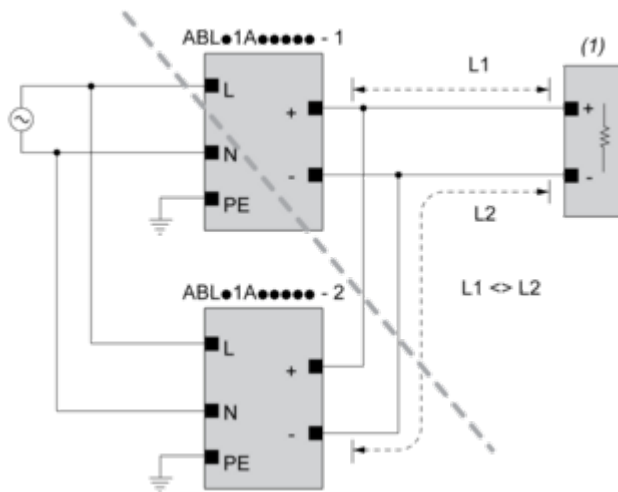
Connections and Schema

Correct Parallel Connection



(1) : Load

Incorrect Parallel Connection



(1) : Load

ABLx1Axxxxx-1 = ABLx1Axxxxx-2

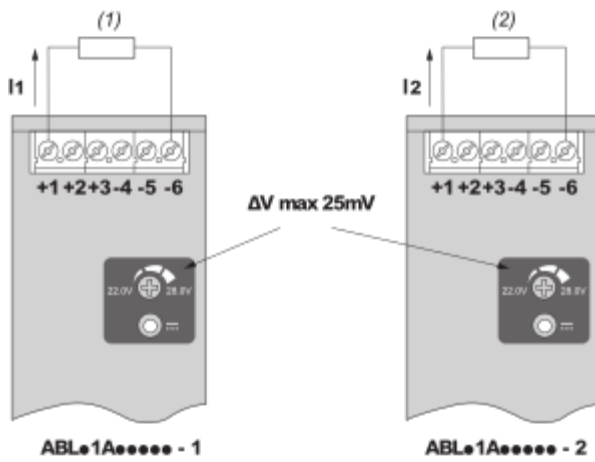
max 2 x ABLx1Axxxxx

L1 = L2

ΔV max 25 mV

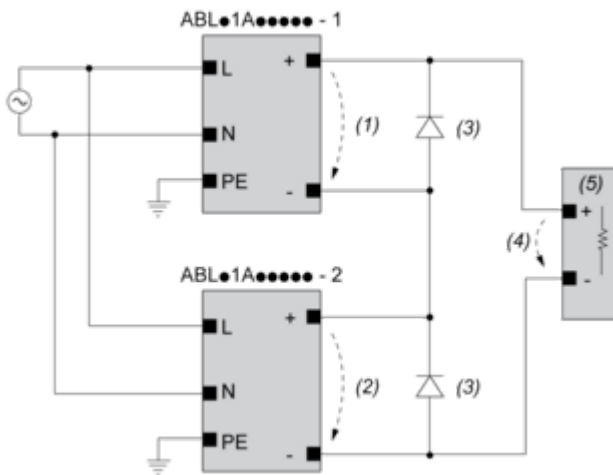
$I_{Load} < 90\% \cdot 2 \times I_{nom}$

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) : $2 \times$ 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

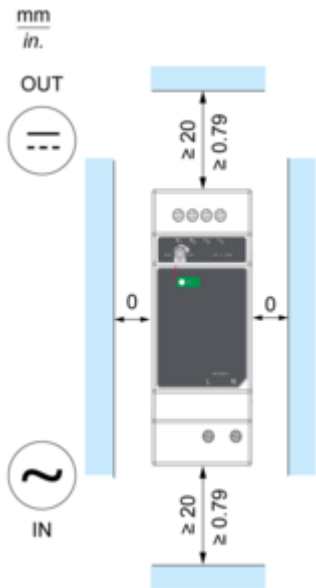
		(1)		
		<40°C	<50°C	<70°C
ABLM1A24004		60°C	75°C	75°C
ABLM1A12010		60°C	75°C	90°C
ABLM1A24006		60°C	75°C	90°C
ABLM1A05036	Input	60°C	75°C	90°C
	Output	75°C	90°C	90°C
ABLM1A12021		60°C	75°C	90°C
ABLM1A24012		60°C	75°C	90°C
ABLM1A12042		60°C	75°C	90°C
ABLM1A24025		60°C	75°C	90°C

(1) : Ambient

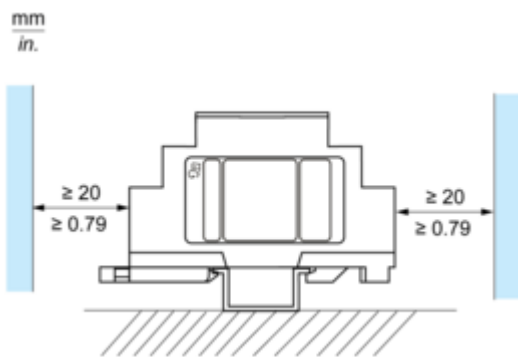
Mounting and Clearance

Mounting

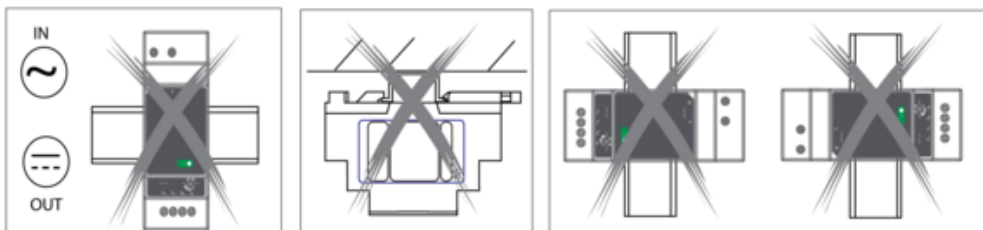
Mounting Position A



Mounting Position B

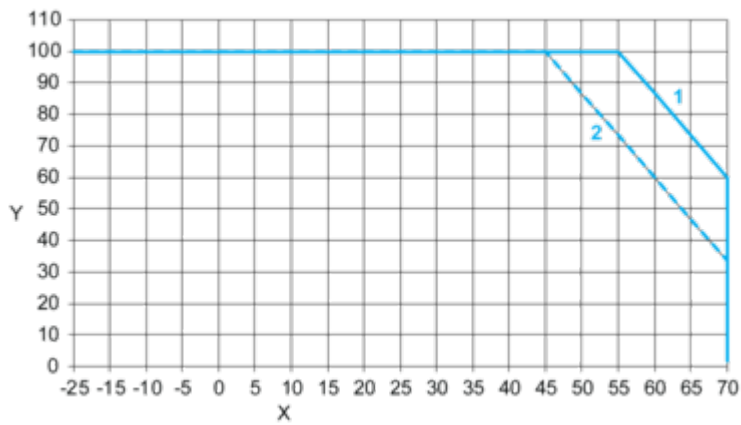


Incorrect Mounting



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

