

# Produktdatablad

Specifikationer



## Modicon switchmode strømforsyning modular til DIN-skinne med 24 VDC 60 W-2.5 A udgang og 100-240 VAC 1-faset forsyning

ABLM1A24025

EAN-nr: 3606481500175

### Egenskaber

Produktserie	Modicon Power Supply
Produkttype	Strømforsyning
strømforsyningstype	Reguleret switch mode
Variant option	Modular
kasplingsmateriale	Kunststof
Nominal input voltage	100...240 V AC enkel faset 100...240 V AC fase til fase
mærkeeffekt i W	60 W
udgangsspænding	24 V DC
Strømforsyningens udgangsstrøm	2,5 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) 10 A Curve B External protection (recommended) 6 A Curve C
indkoblingsstrøm	30 A ved 115 V 60 A ved 230 V
Antal moduler á 18 mm	0,50 at 115 V AC 0,39 at 230 V AC
effektivitet	90 % ved 115 V AC 90 % ved 230 V AC
Output voltage adjustment	"24...28 V"
Effekttab i W	6,5 W
Strømforbrug	"< 1,5 A" 115 V AC "< 1 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)	1300000 time at 25 °C, fuld belastning 700000 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...2.5 mm <sup>2</sup> , (AWG 20...AWG 14) without wire end ferrule til udgang Skrue forbindelse: 0.5...1.5 mm <sup>2</sup> , (AWG 20...AWG 16) med ledning og samling til udgang Skrue forbindelse: 0.5...1.5 mm <sup>2</sup> , (AWG 20...AWG 16) til indgang
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	53 mm
Vægt	0,221 kg
udgangskobling	Seriel Parallel
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 <sup>2</sup> " til 11 milisekund
IP kapslingsklasse	IP20
ambient air temperature for operation	-25...-10 °C med current derating of 1 % per °C mounting position A < 2000 m -10...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 <sup>2</sup> (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	6,000 cm
Pakke 1 Længde	6,000 cm
Package 1 Length	11,000 cm
Pakke 1 Vægt	227,000 g
Enhedstype af pakke 2	S02
Antal enheder i pakke 2	24
Pakke 2 Højde	15,000 cm
Pakke 2 Bredde	30,000 cm
Pakke 2 Længde	40,000 cm
Pakke 2 Vægt	5,681 kg
Enhedstype af pakke 3	P06
Antal enheder i pakke 3	384

<b>Pakke 3 Højde</b>	75,000 cm
<b>Pakke 3 Bredde</b>	60,000 cm
<b>Pakke 3 Længde</b>	80,000 cm
<b>Pakke 3 Vægt</b>	98,896 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.)

282

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

86cefe39-f12b-4dc7-bf4d-ccd095c653fe

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

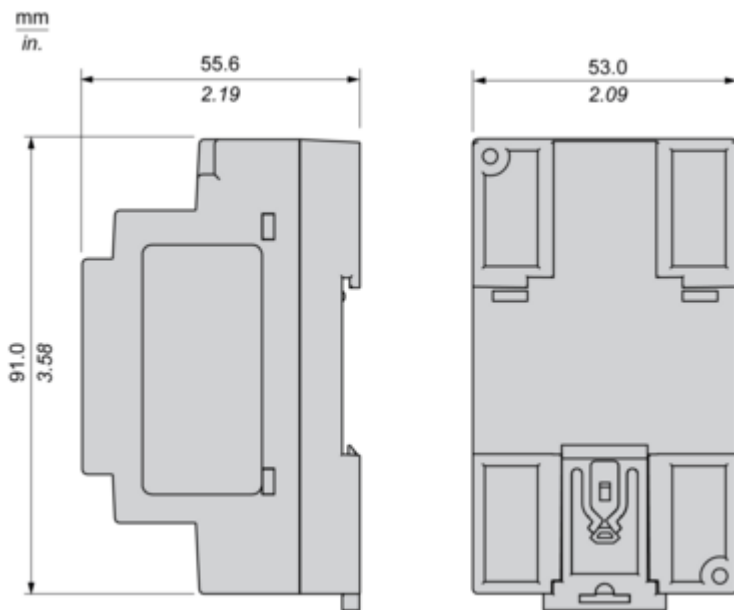
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- If the unit is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- For means of disconnection a switch or circuit breaker, located near the product, must be included in the installation. 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

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Side and Rear View

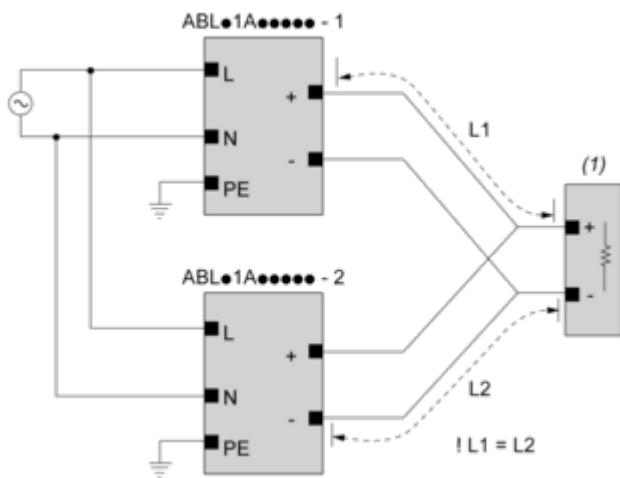


Connections and Schema

Connections and Schema

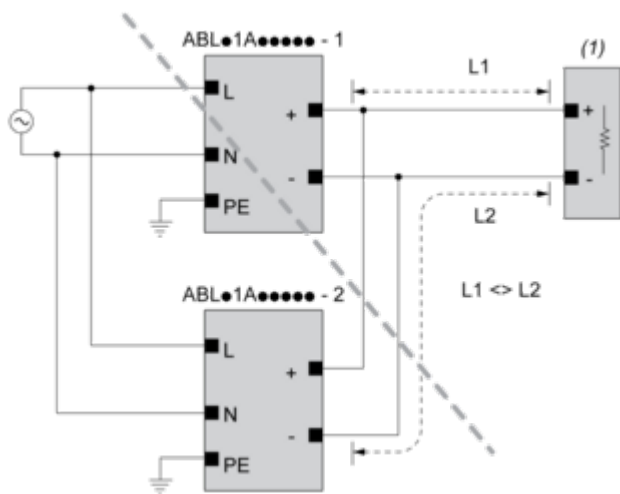
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Correct Parallel Connection



(1) : Load

Incorrect Parallel Connection



(1) : Load

ABLx1Axxxxx-1 = ABLx1Axxxxx-2

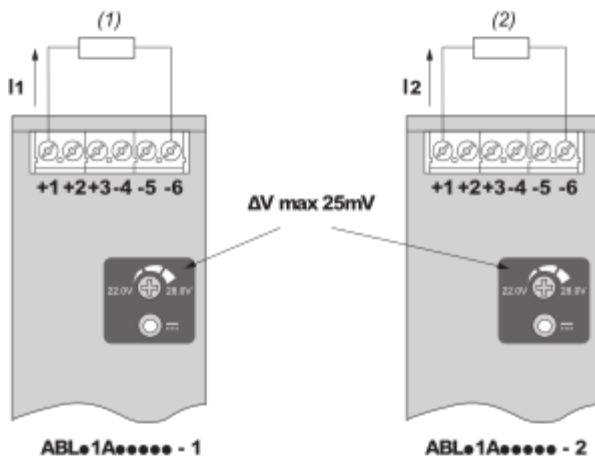
max 2 x ABLx1Axxxxx

L1 = L2

$\Delta V$  max 25 mV

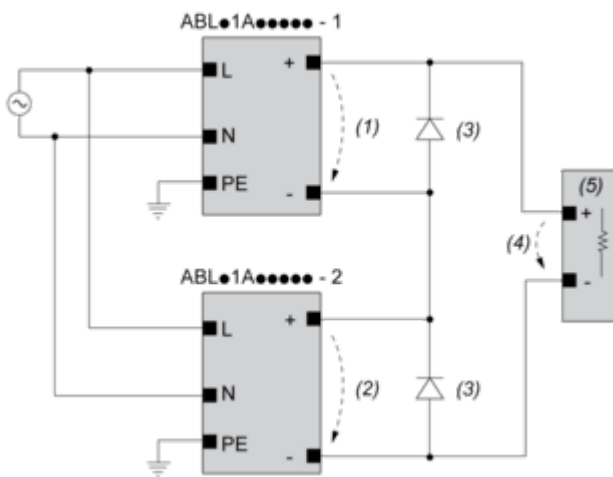
$I_{Load} < 90\% \cdot 2 \times I_{nom}$

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

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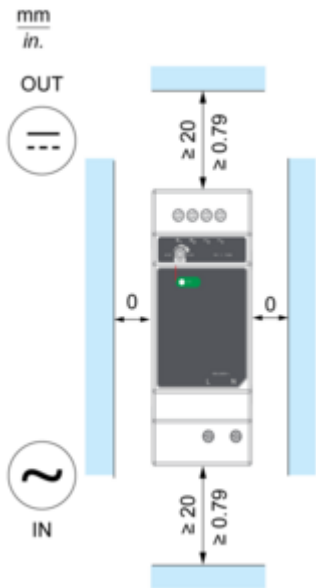
		(1)		
		<40°C	<50°C	<70°C
ABLM1A24004		60°C	75°C	75°C
ABLM1A12010		60°C	75°C	90°C
ABLM1A24006		60°C	75°C	90°C
ABLM1A05036	Input	60°C	75°C	90°C
	Output	75°C	90°C	90°C
ABLM1A12021		60°C	75°C	90°C
ABLM1A24012		60°C	75°C	90°C
ABLM1A12042		60°C	75°C	90°C
ABLM1A24025		60°C	75°C	90°C

(1) : Ambient

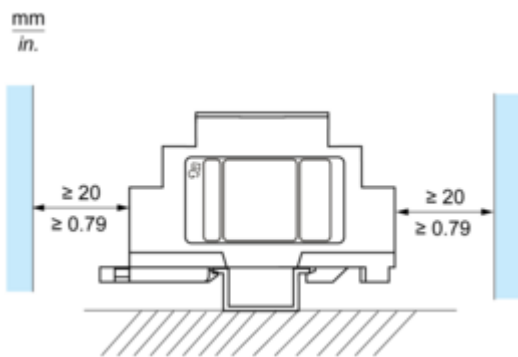
Mounting and Clearance

Mounting

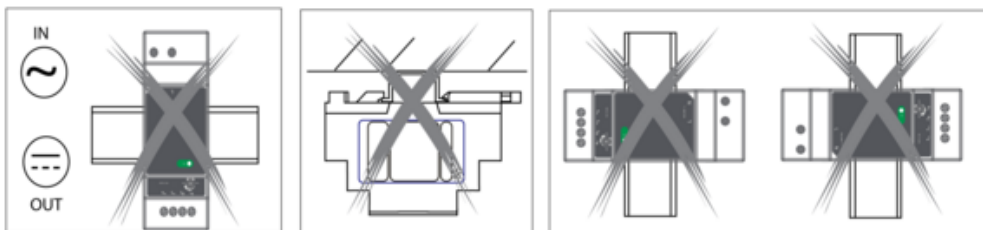
Mounting Position A



Mounting Position B



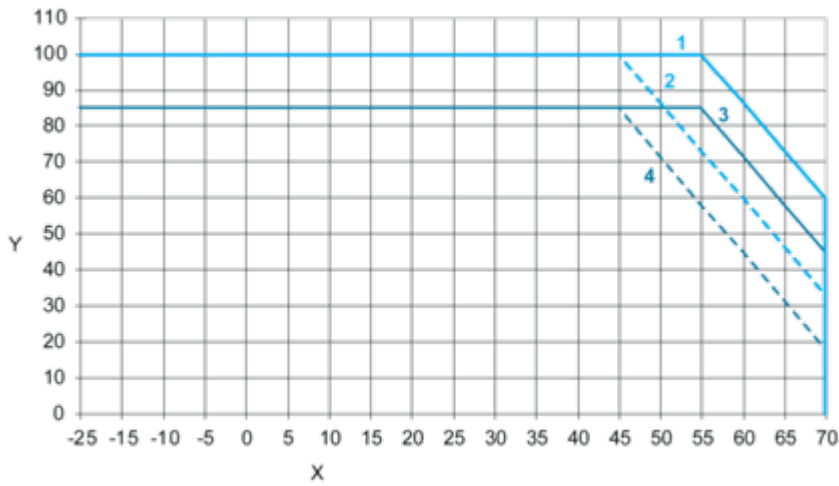
Incorrect Mounting



Performance Curves

Performance Curve

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- X : Ambient Temperature (°C)
- Y : Percentage of Max Load (%)
- 1 : Altitude @2000M with Mounting A
- 2 : Altitude @5000M with Mounting A
- 3 : Altitude @2000M with Mounting B
- 4 : Altitude @5000M with Mounting B

Image of product / Alternate images

Alternative

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