Produktdatablad

Specifikationer

Modicon switchmode strømforsyning optimized til DIN-skinne med 24 VDC 120 W-5 A udgang og 100-240 VAC 1-faset forsyning

ABLS1A24050

EAN-nr: 3606481500236

Egenskaber

Produktserie	Modicon Power Supply
Produkttype	Strømforsyning
strømforsyningstype	Reguleret switch mode
Variant option	Optimized
kasplingsmateriale	Aluminium
Nominal input voltage	100...240 V AC enkel faset 100...240 V AC fase til fase "140...340 V" DC
mærkeeffekt i W	120 W
udgangsspænding	24 V DC
Strømforsyningens udgangsstrøm	5 A

Produktinformationer

indgangsspændingsgrænser	85...264 V AC without temperature derating "120...375 V" DC without temperature derating
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) 4 A External protection (recommended) 20 A Curve C External protection (recommended) 13 A Curve C
indkoblingsstrøm	30,0 A ved 115 V 60,0 A ved 230 V
Antal moduler á 18 mm	0,55 at 115 V AC 0,45 at 230 V AC
effektivitet	85 % ved 115 V AC 88 % ved 230 V AC
Output voltage adjustment	22...28 V
Effekttab i W	25 W
Strømforbrug	"< 2.5 A" 115 V AC "< 1.4 A" 230 V AC "< 1.3 A" "140 V" DC
Turn-on time	"< 1 s"
Holdetid	"> 20 ms" 115 V AC "> 40 ms" 230 V AC

Startup with capacitive loads	8000 µF
resterende rippel	"< 120 mV"
gennemsnitlig tid mellem fejl (MTBF)	700000 time at 25 °C, fuld belastning 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...4 mm², (AWG 20...AWG 12) without wire end ferrule til udgang Skrue forbindelse: 0.5...2.5 mm², (AWG 20...AWG 14) med ledning og samling til udgang Skrue forbindelse: "0.75...4 mm²", ("AWG 18...AWG 12") without wire end ferrule til indgang Skrue forbindelse: "0.75...4 mm²", ("AWG 18...AWG 12") med ledning og samling til indgang
line and load regulation	"< 0.5 %" network 0 to 100 % load at 25 °C "< 1 %" network full voltage range in line at 25 °C
Statuslysdiode	1 LED (Grøn) output spænding
Dybde	117,6 mm
Højde	123,6 mm
bredde	40 mm
Vægt	0,55 kg
udgangskobling	Parallel Seriel
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 insolering
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
driftshøjde	"< 5000 m"
chokmodstand	"150 m/s²" 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…40 °C uden tab mounting position A 115 V AC < 2000 m -10…50 °C uden tab 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
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/s² (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 (luftafladning) 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 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 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

Forpakningsinformation

Enhedstype af pakke 1	PCE
Antal enheder i pakke 1	1
Pakke 1 Højde	5,000 cm
Pakke 1 Længde	17,500 cm
Package 1 Length	18,000 cm
Pakke 1 Vægt	696,000 g
Enhedstype af pakke 2	S03
Antal enheder i pakke 2	13
Pakke 2 Højde	30,000 cm
Pakke 2 Bredde	30,000 cm
Pakke 2 Længde	40,000 cm
Pakke 2 Vægt	9,468 kg
Enhedstype af pakke 3	P12
Antal enheder i pakke 3	312
Pakke 3 Højde	105,000 cm
Pakke 3 Bredde	80,000 cm
Pakke 3 Længde	120,000 cm

Pakke 3 Vægt	252,000 kg

Environmental Data

Schneider Electrics 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.)	**1082**
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	**698d9b2a-7a6a-4b8f-a149-489156f55645**
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**

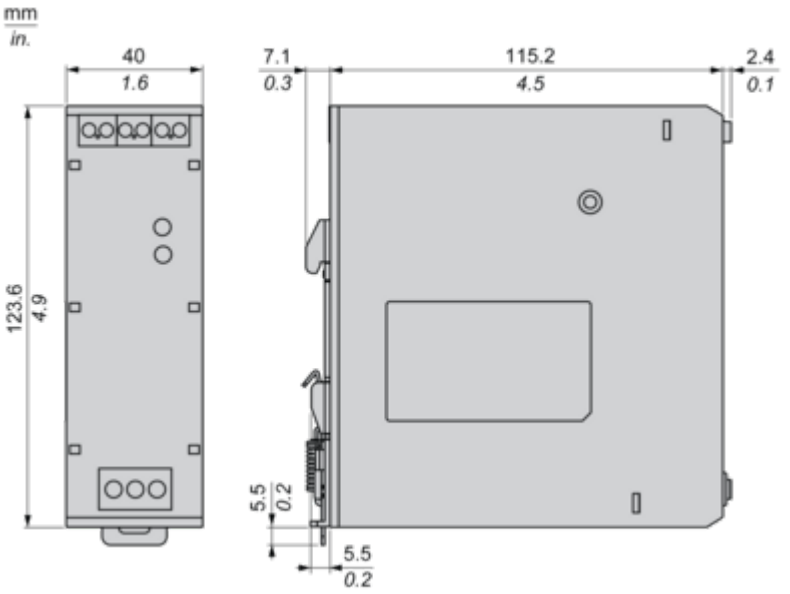
Dimensions Drawings

Electrical Safety

- If the unit is 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

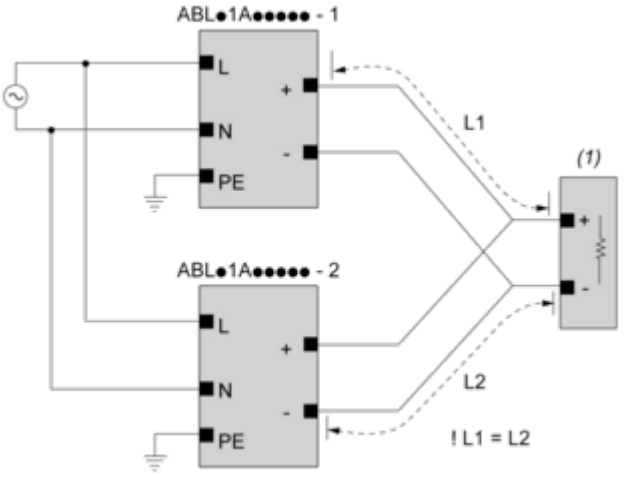
Front and Side Views



Connections and Schema

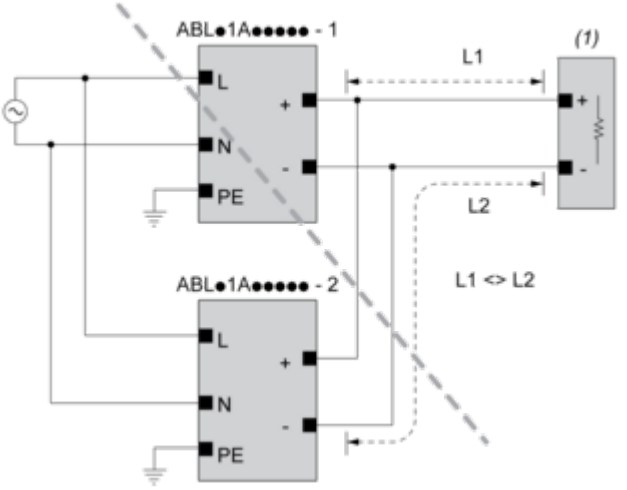
Connections and Schema

Correct Parallel Connection



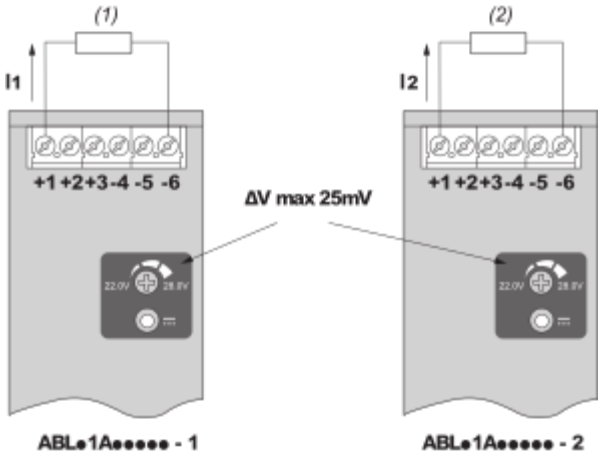
(1) : Load

Incorrect Parallel Connection



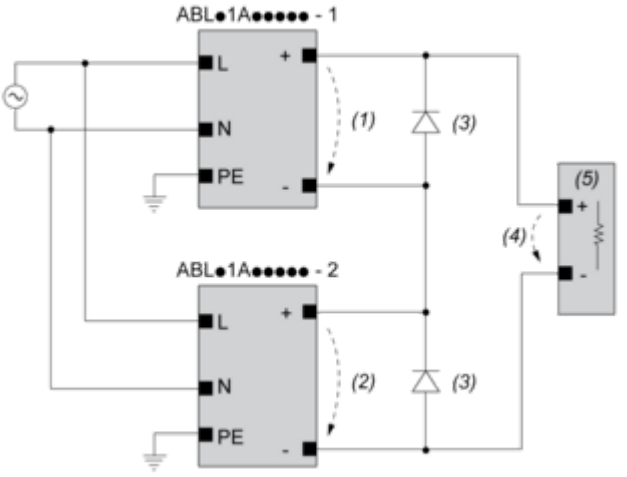
(1) : Load
ABLx1Axxxxx-1 = ABLx1Axxxxx-2
max 2 x ABLx1Axxxxx
L1 = L2
ΔV max 25 mV
I_{Load} < 90% 2 x I_{nom}

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

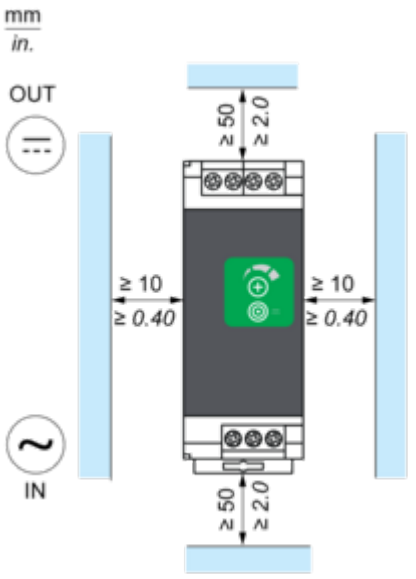
	(1)		
	<40°C	<50°C	<70°C
ABLS1A24021	50°C	60°C	75°C
ABLS1A24038	50°C	60°C	75°C
ABLS1A12062	50°C	60°C	80°C
ABLS1A24031	50°C	60°C	80°C
ABLS1A12100	60°C	70°C	90°C
ABLS1A24050	60°C	70°C	90°C
ABLS1A48025	60°C	70°C	90°C
ABLS1A24100	60°C	70°C	90°C
ABLS1A24200	95°C	95°C	90°C

(1) : Ambient

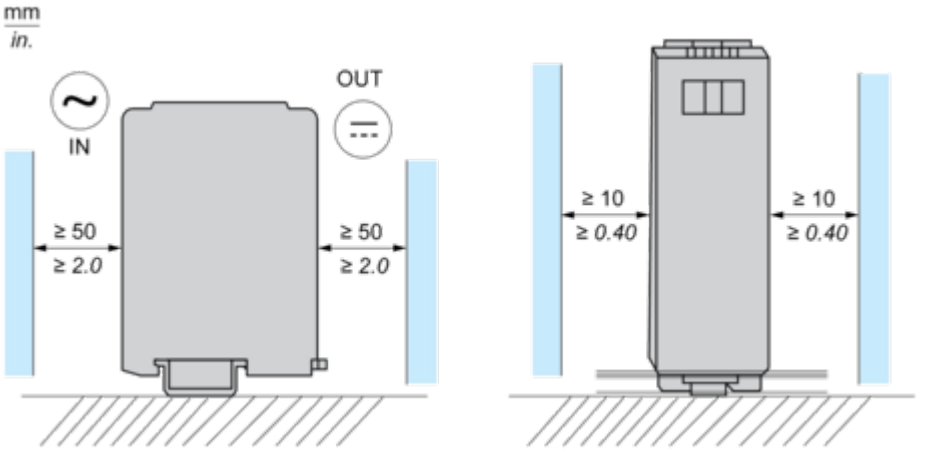
Mounting and Clearance

Mounting

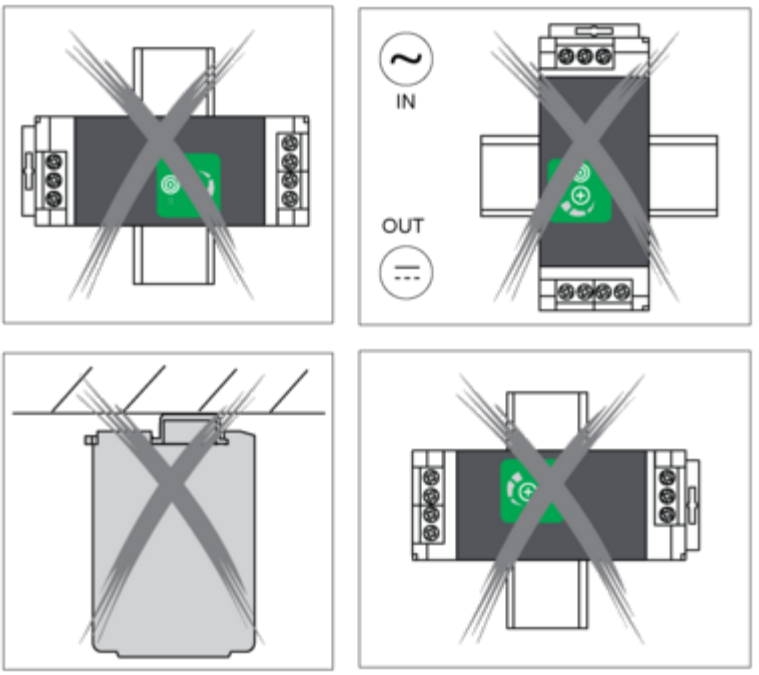
Mounting Position A



Mounting Position B



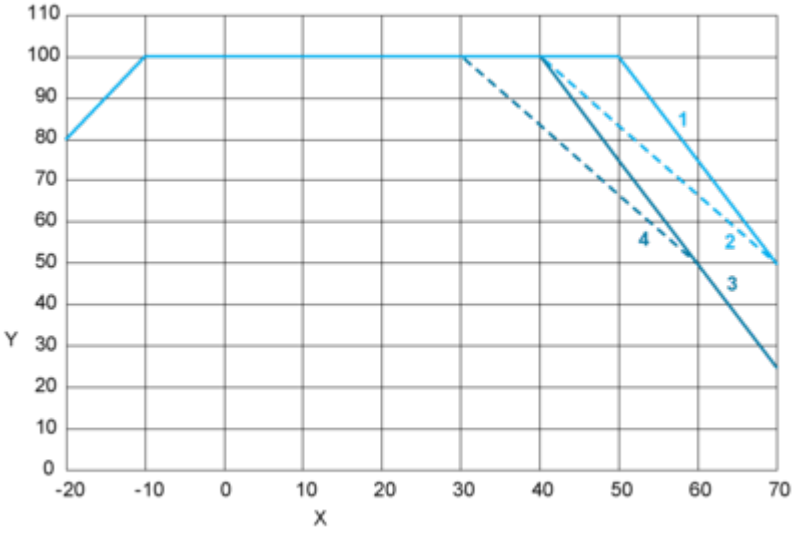
Incorrect Mounting


IN
OUT

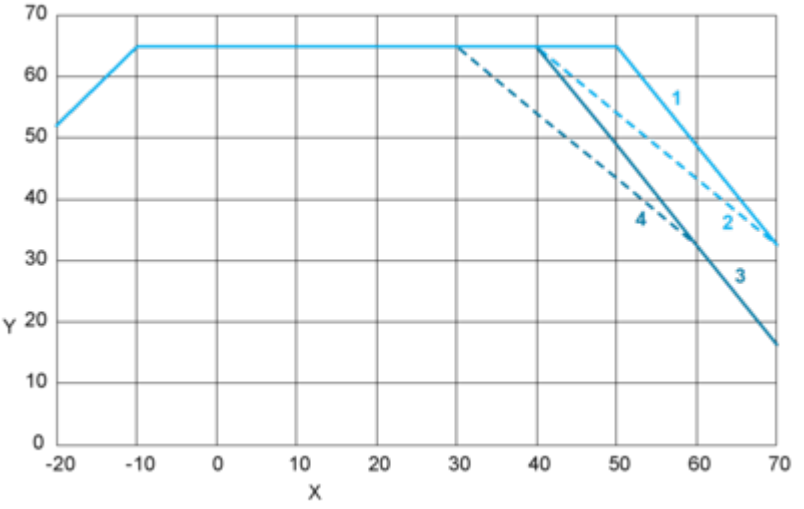
Performance Curves

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

Image of product / Alternate images

Alternative


24V⎓5A
22.0V
28.0V
Schneider
ABLS1A24050
100-240V~
140-340V⎓
L(+) N(-)