



Teknisk informasjon

Produktspekter	Modicon Power Supply
Produkt eller type komponent	Strømforsyning
Type strømforsyning	Regulert switch mode
Variant alternativ	Modular
Kapslingsmateriale	Plast
Nominal input voltage	100...240 V AC enfase 100...240 V AC fase til fase
Merkeeffekt i W	50 W
Utgangsspenning	12 V DC
Strømforsyningens utgangsstrøm	4,17 A

Komplementær

Toleranse forsyningsspenning	90...264 V AC
Nominal network frequency	50...60 Hz
Network system compatibility	TN TT IT
Maksimal lekkasjestrøm	0,25 mA 240 V AC
Verntype på inngang	Integret sikring (kan ikke skiftes) 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
Startstrøm	30 A på 115 V 60 A på 230 V
18 mm avstand	0,50 at 115 V AC 0,39 at 230 V AC
Effektivitet	88 % på 115 V AC 88 % på 230 V AC
Output voltage adjustment	12...15 V
Effekttap i W	5,5 W
Strømforbruk	< 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
Diff ripple	< 100 mV
Gjennomsnittlig tid mellom feil (MTBF)	1500000 T at 25 °C, fullastet 1000000 t at 55 °C, 80 % load
Verntype utgang	Against overload and short-circuits, vern teknologi: automatisk reset Against over temperature, vern teknologi: manual reset Mot overspenning, vern teknologi: manual reset
Tilkoblingsklemmer	Skrutilkopling: 0.5...2.5 mm ² , (AWG 20...AWG 14) without wire end ferrule for utgang Skrutilkopling: 0.5...1.5 mm ² , (AWG 20...AWG 16) med lederendehylse for utgang Skrutilkopling: 0.5...1.5 mm ² , (AWG 20...AWG 16) for inngang

Line and load regulation	< 0.5 % network in line < 1 % network 0 til 100 % last
Status LED	1 LED (grønn) utgangsspenning
Dybde	55,6 mm
Høyde	91 mm
Bredde	53 mm
Vekt	0,221 kg
Utgangs sammenkobling	Serie Parallell
Monteringssupport	Topp type TH32-15 skinne i samsvar med IEC 60715 Top hat type TH35-7.5 skinne i samsvar med IEC 60715 Double-profil DIN skinne Montering i panel
Forsyning	SELV i samsvar med IEC 60950-1 SELV i samsvar med IEC 60204-1 SELV i samsvar med IEC 60364-4-41
Dielektrisk styrke	3000 V AC input/output
Service life	10 år
Overspenningskategori	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 No 61010-1 CSA C22.2 No 61010-2-201 EN/IEC 62368-1
Produktsertifikater	CE[RETURN]CUL listed[RETURN]CUL recognized[RETURN]RCM[RETURN]CB Scheme[RETURN]EAC[RETURN]KC[RETURN]NEC: klasse 2
Driftshøyde	< 2000 m overvoltage category III 2000 m...5000 m overvoltage category II
Støtmotstand	150 m/s ² for 11 ms
IP-grad	IP20
Ambient air temperature for operation	-25...55 °C uten strøm belastningsreduksjon mounting position A < 2000 m 55...70 °C with current derating of 2.67 % per °C mounting position A < 2000 m
Beskyttelsesgrad mot elektrisk støt	Klasse II without PE connection
Forurensninggrad	2
Vibrasjonsmotstand	3 mm (f= 2...9 Hz) i samsvar med IEC 60721-3-3 10 m/s ² (f= 9...200 Hz) i samsvar med IEC 60721-3-3

Electromagnetic immunity	Immunity to electrostatic discharge - test level: 8 kV (kontakt utfloed) conforming to IEC 61000-4-2 Immunity to electrostatic discharge - test level: 15 kV (luft utslipp) conforming to IEC 61000-4-2 Elektromagnetisk felt immunitetstest - test level: 15 V/m (80 MHz...2 GHz) conforming to IEC 61000-4-3 Elektromagnetisk felt immunitetstest - test level: 5 V/m (2...2.7 GHz) conforming to IEC 61000-4-3 Elektromagnetisk felt immunitetstest - test level: 5 V/m (2.7...6 GHz) conforming to IEC 61000-4-3 Immunitet mot raske transienter - test level: 4 kV (på input-output) conforming to IEC 61000-4-4 Surge immunitet test - test level: 4 kV (mellom strømforsyningen og jord) conforming to IEC 61000-4-5 Surge immunitet test - test level: 3 kV (mellom fasene) conforming to IEC 61000-4-5 Immunity to conducted disturbances - test level: 15 V (0.15...80 MHz) conforming to IEC 61000-4-6 Immunitet mot magnetiske felter - test level: 30 A/m (50...60 Hz) conforming to IEC 61000-4-8 Immunity to voltage dips - test level: 100 % (en syklus) conforming to IEC 61000-4-11 Immunity to voltage dips - test level: 60 % (10 sykluser) conforming to IEC 61000-4-11 Immunity to voltage dips - test level: 30 % (25 cycles) 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
Elektromagnetiske utslipp	Conducted emissions i samsvar med IEC 61000-6-3 Radiated emissions i samsvar med IEC 61000-6-4

Forpakkingsinformasjon

Enhetstype pakke 1	PCE
Antall enheter i pakke 1	1
Pakke 1 Høyde	6,1 cm
Pakke 1 Bredde	6,1 cm
Pakke 1 Vekt	11 cm
Package 1 Weight	229 g
Enhetstype pakke 2	S02
Antall enheter i pakke 2	24
Pakke 2 Høyde	15 cm
Pakke 2 Bredde	30 cm
Pakke 2 Lengde	40 cm
Pakke 2 Vekt	6 kg
Enhetstype pakke 3	P06
Antall enheter i pakke 3	384
Pakke 3 Høyde	75,0 cm
Pakke 3 Bredde	60,0 cm
Pakke 3 Lengde	80,0 cm
Pakke 3 Vekt	95,2 kg

Bærekraftig

Produktets miljøstatus	Green Premium miljømerket produkt
REACH-regelverk	 REACH-erklæring
EU RoHS-direktiv	Proaktivt i samsvar (Produktet inngår ikke i EUs RoHS direktivet)
Kvikksølvfri	Ja
Kinas RoHS-forskrift	 Kinas RoHS-Erklæring
Informasjon om RoHS-unntak	 Ja
Miljøinformasjon	 Produktmiljøprofil

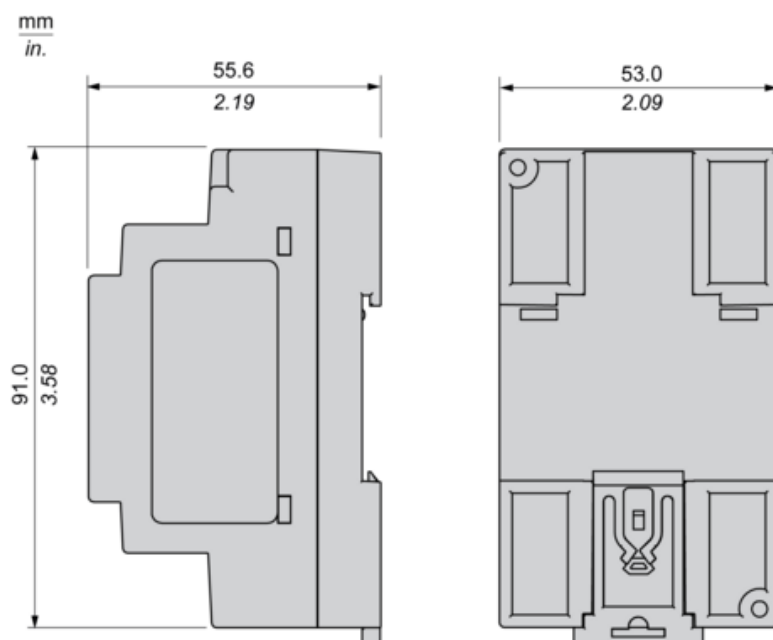
Produktets livssyklus	 Informasjon Om Levetidsslutt
WEEE	Innen EU må produktet avhendes i henhold til bestemte regler for avfallshåndtering og aldri kastes som husholdningsavfall.
Logistisk informasjon	
Opprinnelsesland	TH
Garantiperiode	
Garanti	18 måneder

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.

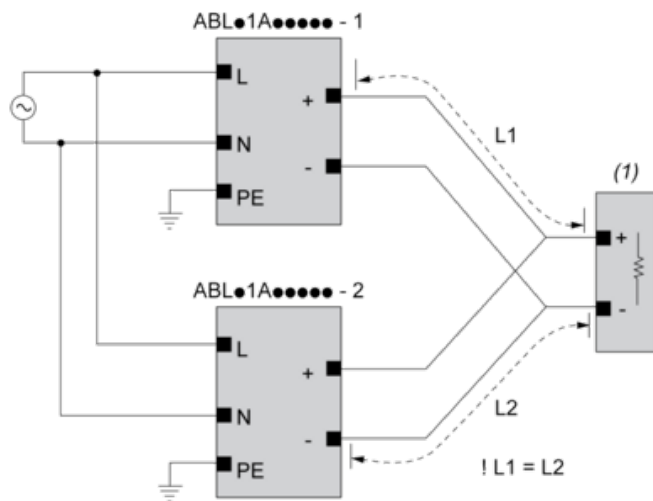
Dimensions

Side and Rear View



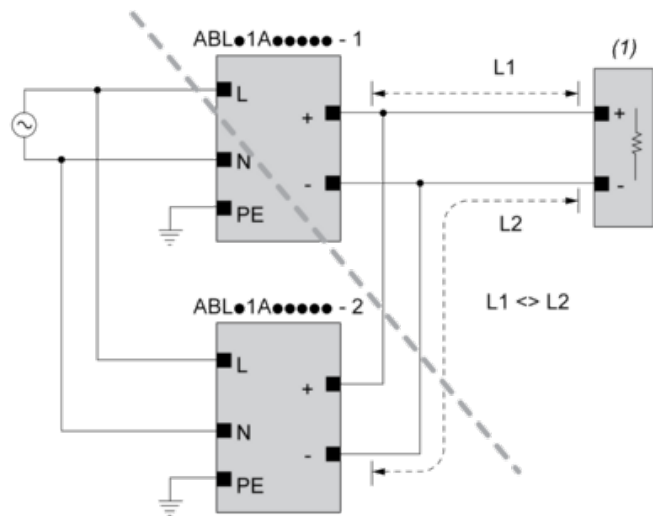
Connections and Schema

Correct Parallel Connection



(1) : Load

Incorrect Parallel Connection



(1) : Load

$ABLx1Axxxx-1 = ABLx1Axxxx-2$

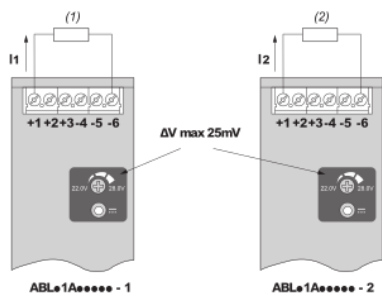
max 2 x ABLx1Axxxx

$I_{L1} = I_{L2}$

ΔV max 25 mV

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

Output Voltage Balancing



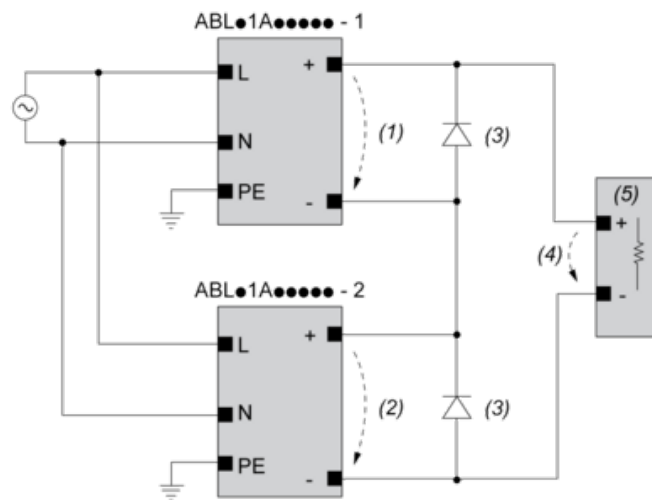
(1) : R_{Load1}

(2) : R_{Load2}

$R_{\text{Load1}} = R_{\text{Load2}}$

$I_1 = I_2 = \sim I_{\text{nom}}$

Series Connection



(1) : V_{out1}

(2) : V_{out2}

(3) : 2 x Diode, $V_{\text{RRM}} > 2 \times V_{\text{out1/2}}$, $I_F > 2 \times I_{\text{nom1/2}}$

(4) : $V_{\text{Load}} = 2 \times V_{\text{out}}$

(5) : Load

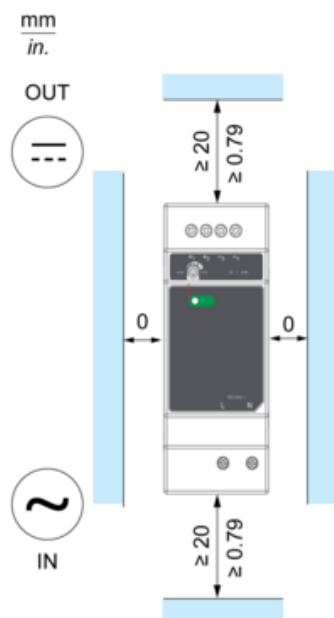
Connections and Schema

		(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

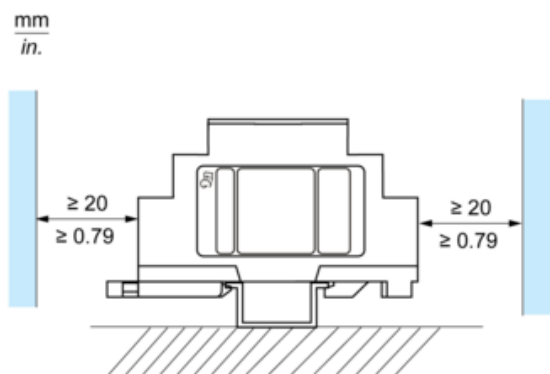
(1) : Ambient

Mounting

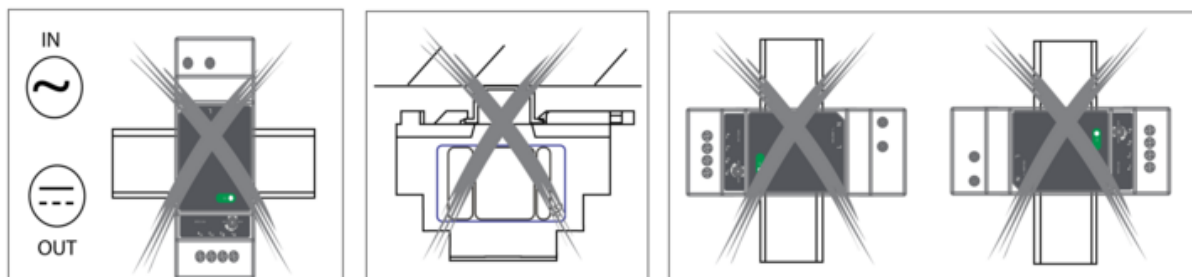
Mounting Position A



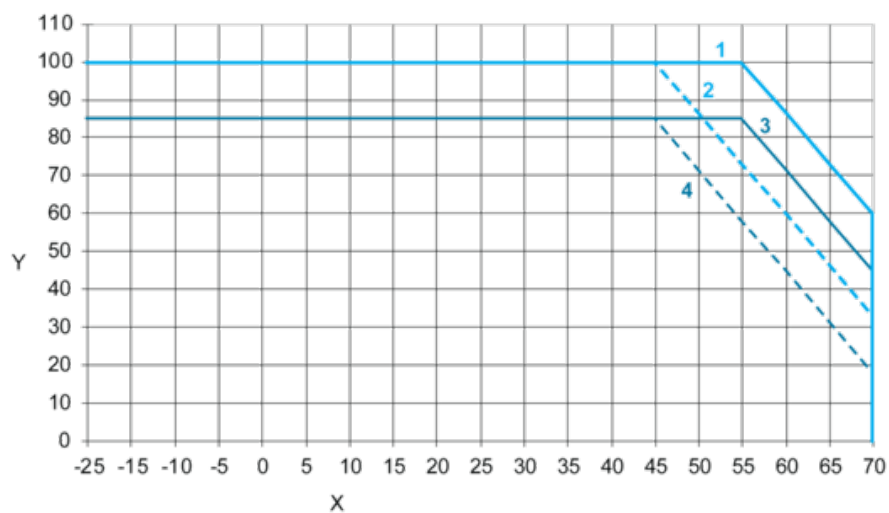
Mounting Position B



Incorrect Mounting



Performance Curve



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