


MINI-PS-100-240AC/24DC/4

Order No.: 2938837



DIN rail power supply unit 24 V DC/4 A, primary switched-mode, narrow design

Commercial data		Product notes
EAN	4017918924058	WEEE/RoHS-compliant since: 08/18/2006 
Pack	1 Pcs.	
Customs tariff	85044081	
Weight/Piece	0.4962 KG	
Catalog page information	Page 503 (IF-2007)	

Technical data	
Input data	
Nominal input voltage	100 V AC ... 240 V AC
AC input voltage range	85 V AC ... 264 V AC
DC input voltage range	90 V DC ... 350 V DC
AC frequency range	45 Hz ... 65 Hz

DC frequency range	0 Hz
Current consumption	Approx. 1.3 A (120 V AC)
	0.8 A (230 V AC)
	Approx. 1.3 A (for 90 V DC)
	Approx. 0.4 A (for 350 V DC)
Inrush surge current	< 15 A (typical)
Power failure bypass	> 20 ms (120 V AC)
	> 100 ms (230 V AC)
Input fuse	3.15 A (slow-blow, internal)
Recommended backup fuse	6 A
	10 A
	16 A (characteristic B)
Output data	
Nominal output voltage	24 V DC \pm 1%
Setting range of the output voltage	22.5 V DC ... 28.5 V DC (> 24 V constant capacity)
Output current	4 A (-25°C ... 70°C)
	5 A (with POWER BOOST, -25°C ... 40°C permanent)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	No
Residual ripple	< 20 mVPP
Peak switching voltages nominal load	< 70 mVPP (20 MHz)
Maximum power dissipation idling	2.5 W
Power loss nominal load max.	12 W
General data	
Width	67.5 mm
Height	99 mm
Depth	107 mm
Weight	0.4 kg
Operating voltage display	LED green
Efficiency	> 88 % (At 230 V AC and nominal values)
Insulation voltage input/output	3 kV (routine test)
	3 kV (type test)
Degree of protection	IP20
Class of protection	II (in an enclosed control cabinet)

MTBF	> 500 000 h in acc. with IEC 61709 (SN 29500)
Ambient temperature (operation)	-25 °C ... 70 °C (> 60°C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25°C, no condensation)
Mounting position	Horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontal 0 cm, vertical 5 cm
Electromagnetic compatibility	Conformance with EMC directive 89/336/EEC
Emitted interference	EN 50081-2
Immunity to interference	EN 61000-6-2
Standard – Safety transformers for switched-mode power supply units	EN 61558-2-17
Standard - Electrical safety	EN 60950/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
	DIN VDE 0106-1010
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard – Equipment safety	GS (tested safety)
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	UL/C-UL Listed UL 1604 Class I, Division 2, Groups A, B, C, D

Connection data, input

Type of connection	Pluggable screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Stripping length	7 mm
Screw thread	M3

Connection data, output

Type of connection	Pluggable screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²

Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Stripping length	7 mm

Signaling

Output name	DC OK active
Output description	U _{OUT} > 21.5 V: High signal
Maximum switching voltage	≤ 24 V
Output voltage	+ 24 V (signal)
Continuous load current	≤ 20 mA
Status display	"DC OK" LED green
Note on status display	U _{OUT} > 21.5 V: LED lights up
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3

Certificates / Approvals

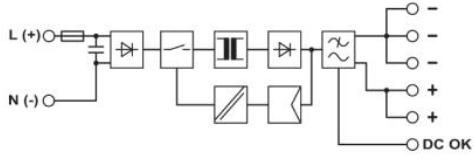


Certification CUL, CUL Listed, UL, UL Listed

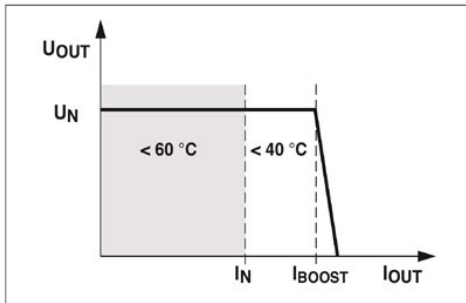
Certification Ex: CUL-EX LIS, UL-EX LIS

Drawings

Block diagram



Diagram



POWER BOOST