

PRO ECO 120W 24V 5A



General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	1469480000
Type	PRO ECO 120W 24V 5A
GTIN (EAN)	4050118275476
Qty.	1 pc(s).

Dimensions and weights

Depth	100 mm
Depth (inches)	3.937 inch
Height	125 mm
Height (inches)	4.921 inch
Width	40 mm
Width (inches)	1.575 inch
Net weight	675 g

Temperatures

Storage temperature	-40 °C...85 °C
Operating temperature	-25 °C...70 °C

Environmental Product Compliance

REACH SVHC

Lead 7439-92-1

SCIP

6d8cdf22-8230-4af8-86c8-3558c716666d

Input

AC current consumption	1,26 A @ 230 V AC / 2,24 A @ 110 V AC
AC input voltage range	85...264 V AC (derating at 100 V AC)
Connection system	Screw connection
DC current consumption	0,39 A @ 370 V DC / 1,16 A @ 120 V DC
DC input voltage range	80...370 V DC (Derating @ 120 V DC)
Frequency range AC	47...63 Hz
Input frequency	47...63 Hz
Input fuse (internal)	Yes
Inrush current	max. 40 A
Nominal power consumption	137.9 VA
Rated input voltage	100...240 V AC
	4 A / DI, safety fuse
Recommended back-up fuse	6 A, Char. B, circuit breaker 3...5 A, Char. C, circuit breaker
Surge protection	Varistor

Output

Capacitive load	unrestricted
Connection system	Screw connection
Continuous output current @ U_{Nominal}	5 A @ 55 °C, 3,75 A @ 70 °C
Nominal output current for U_{nom}	5 A at 55 °C
Output power	120 W
Output voltage, max.	28 V
Output voltage, min.	22 V
Output voltage, note	(adjustable via potentiometer)
Overload protection	Yes
Parallel connection option	yes, max. 5
Protection against inverse voltage	Yes
Ramp-up time	≤ 100 ms
Rated output voltage	24 V DC ± 1 %
Residual ripple, breaking spikes	< 50 mV _{PP} @ 24 V DC, I_N

General data

AC failure bridging time @ I_{nom}	> 80 ms @ 230 V AC / > 20 ms @ 115 V AC
---	---

Degree of efficiency	87 %
Earth leakage current, max.	3.5 mA
Housing version	Metal, corrosion resistant
Indication	Green LED ($U_{\text{output}} > 21.6 \text{ V DC}$), Yellow
	LED ($I_{\text{output}} > 90 \% I_{\text{Rated typ.}}$), red LED
	(overload, overtemperature, short-circuit, $U_{\text{output}} < 20.4 \text{ V DC}$)

MTBF	According to Standard	SN 29500
	Operating time (hours), min.	2,100,000 h
	Ambient temperature	25 °C
	Input voltage	230 V
	Output power	120 W
	Duty cycle	100 %
	According to Standard	SN 29500
	Operating time (hours), min.	1,000,000 h
	Ambient temperature	40 °C
	Input voltage	230 V
	Output power	120 W
	Duty cycle	100 %

Max. perm. air humidity (operational)	5 %...95 % RH
Mounting position, installation notice	on terminal rail TS 35
Power factor (approx.)	> 0.5...230 V AC / > 0.53...115 V AC
Power loss, idling	4 W
Power loss, nominal load	15 W
Protection against over-heating	Yes
Protection against reverse voltages from the load	30...35 V DC
Protection degree	IP20
Short-circuit protection	Yes
Surge voltage category	II

EMC / shock / vibration

Interference immunity test acc. to	EN 61000-4-2 (ESD), EN 61000-4-3 (RS),
	EN 61000-4-4 (burst), EN 61000-4-5
	(surge), EN 61000-4-6 (conducted),
Limiting of mains voltage harmonic currents	EN61000-4-8 (Fields), EN61000-4-11
	(Dips)
Noise emission in accordance with EN55032	Class B
Shock resistance IEC 60068-2-27	15 g In all directions

Vibration resistance IEC 60068-2-6 1 g according to EN 50178

Insulation coordination

Insulation voltage input / earth	2 kV
Insulation voltage output / earth	0.5 kV
Insulation voltage, input/output	3 kV
Pollution severity	2
Protection class	I, with PE connection
Surge voltage category	II

Electrical safety (applied standards)

Electrical machine equipment	Acc. to EN60204
For use with electronic equipment	Acc. to EN50178 / VDE0160
Protection against dangerous shock currents	Acc. to VDE0106-101
Protective separation / protection against electrical shock	VDE0100-410 / acc. to DIN57100-410
Safety extra-low voltage	SELV acc. to IEC 60950-1, PELV according to EN 60204-1
Safety transformers for switch-mode power supplies	According to EN 61558-2-16

Connection data (input)

Conductor cross-section, AWG/kcmil , max.	12
Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , min.	0.5 mm ²
Conductor cross-section, rigid , max.	6 mm ²
Conductor cross-section, rigid , min.	0.5 mm ²
Connection system	Screw connection
Wire connection cross section, flexible (input), max.	2.5 mm ²

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	12
Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , max.	2.5 mm ²
Conductor cross-section, flexible , min.	0.5 mm ²
Conductor cross-section, rigid , max.	6 mm ²
Conductor cross-section, rigid , min.	0.5 mm ²
Connection system	Screw connection

Number of terminals 6 (++,--,13,14)

Signalling

Contact load (NO contact) max. 30 V DC / 1 A

Floating contact Yes

Relay on/off Output voltage >21.6 V DC/ <20.4 V DC,
overload

Approbations

Certificate no. (cULus) E258476

Institute (cULus) CULUS

Downloads

Approval/Certificate/Document of
Conformity [**UL508 CSA C22.2 Certificate.pdf**](#)
[**Declaration of Conformity**](#)

Engineering Data [**CAD data -- STEP**](#)

Engineering Data [**Zuken E3.S**](#)

Eplan Data Portal [**Eplan data**](#)

CADENAS eCATALOG [**CAX data**](#)

WSCAD Universe [**WSCAD data**](#)

User Documentation [**Operating instructions**](#)

Catalogues [**Catalogues in PDF-format**](#)

Classifications

ETIM 6.0 EC002540

ETIM 7.0 EC002540

ETIM 8.0 EC002540

ETIM 9.0 EC002540

ECLASS 9.0 27-04-07-01

ECLASS 9.1 27-04-07-01

ECLASS 10.0 27-04-07-01

ECLASS 11.0 27-04-07-01

ECLASS 12.0 27-04-07-01

ECLASS 13.0 27049002

Approvals

Approvals



ROHS Conform

UL File Number Search [**UL Website**](#)

Certificate no. (cULus)

E258476

Related products:



Order No.: 1469570000

Type: PRO ECO 72W 12V 6A

Version:

Power supply, switch-mode power supply unit, 12 V

[PDF data sheet](#)[Add to Inquiry List](#)

Order No.: 1469470000

Type: PRO ECO 72W 24V 3A

Version:

Power supply, switch-mode power supply unit, 24 V

[PDF data sheet](#)[Add to Inquiry List](#)

Order No.: 1469580000

Type: PRO ECO 120W 12V 10A

Version:

Power supply, switch-mode power supply unit, 12 V

[PDF data sheet](#)[Add to Inquiry List](#)

Order No.: 1469490000

Type: PRO ECO 240W 24V 10A

Version:

Power supply, switch-mode power supply unit, 24 V

[PDF data sheet](#)[Add to Inquiry List](#)

Order No.: 1469590000

Type: PRO ECO 240W 48V 5A

Version:

Power supply, switch-mode power supply unit, 48 V

[PDF data sheet](#)
[Add to Inquiry List](#)



Order No.: 1469610000
Type: PRO ECO 480W 48V 10A

Version:
Power supply, switch-
mode power supply
unit, 48 V

[PDF data sheet](#)
[Add to Inquiry List](#)



Order No.: 1469510000
Type: PRO ECO 480W 24V 20A

Version:
Power supply, switch-
mode power supply
unit, 24 V

[PDF data sheet](#)
[Add to Inquiry List](#)



Order No.: 1469520000
Type: PRO ECO 960W 24V 40A

Version:
Power supply, switch-
mode power supply
unit, 24 V

[PDF data sheet](#)
[Add to Inquiry List](#)