

## PRO ECO 120W 24V 5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)



You are looking for a reliable power supply with basic functions.

With PROeco we can offer you low-cost switch-mode power supply units with high efficiency and system capability. Let's connect. In the series production of machines, in particular, switch-mode power supply units with above-average performance values can deliver genuine competitive advantages.

The low-cost PROeco series offers all the basic functions and delivers impressively high performance and flexibility.

Our PROeco switch-mode power supply units feature a compact design, high efficiency and are extremely easy to maintain. Thanks to temperature protection, short-circuit and overload resistance they can be universally used in all applications.

Wide-ranging safety functions and compatibility with our diode and capacitance modules, together with UPS components for setting up a redundant power supply, characterise solutions with PROeco.

### General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	<a href="#">1469480000</a>
Type	PRO ECO 120W 24V 5A
GTIN (EAN)	4050118275476
Qty.	1 pc(s).

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**Technical data**
**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
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**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**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
Recommended back-up fuse	4 A / DI, safety 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
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 <sub>PP</sub> @ 24 V DC, $I_N$		

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## Technical data

### 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 ( $U_{output} > 21.6$ V DC), Yellow LED ( $I_{output} > 90\%$ $I_{Rated}$ typ. ), red LED (overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC)	Max. perm. air humidity (operational)	5 %...95 % RH
Mounting position, installation notice	on terminal rail TS 35	Operating temperature	-25 °C...70 °C
Power factor (approx.)	> 0.5...230 V AC / > 0.53...115 V AC	Power loss, idling	4 W
Protection against over-heating	Yes	Protection against reverse voltages from the load	30...35 V DC
Short-circuit protection	Yes		

### 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), EN61000-4-8 (Fields), EN61000-4-11 (Dips)	Limiting of mains voltage harmonic currents	According to EN 61000-3-2
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/output	3 kV	Pollution severity	2
Protection class	I, with PE connection		

### 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 <sup>2</sup>	Conductor cross-section, rigid , max.	6 mm <sup>2</sup>
Conductor cross-section, rigid , min.	0.5 mm <sup>2</sup>	Connection system	Screw connection
Wire connection cross section, flexible (input), max.	2.5 mm <sup>2</sup>		

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## Technical data

### 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 <sup>2</sup>	Conductor cross-section, flexible , min.	0.5 mm <sup>2</sup>
Conductor cross-section, rigid , max.	6 mm <sup>2</sup>	Conductor cross-section, rigid , min.	0.5 mm <sup>2</sup>
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		

### Approvals

Certificate no. (cULus)	E258476	Institute (cULus)	CULUS
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### Classifications

ETIM 6.0	EC002540	ETIM 7.0	EC002540
ETIM 8.0	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		

### Approvals

Approvals



ROHS	Conform
UL File Number Search	E258476

### Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD, Zuken E3.S</a>
User Documentation	<a href="#">Operating instructions</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

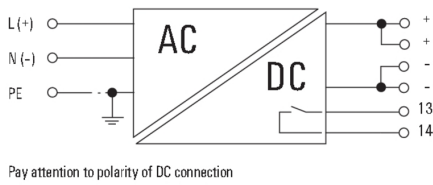
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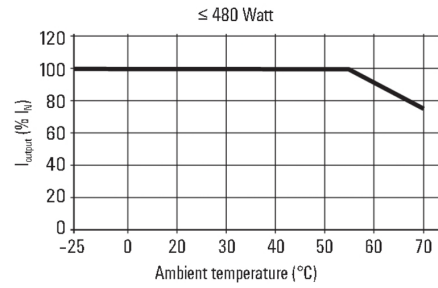
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**Drawings**

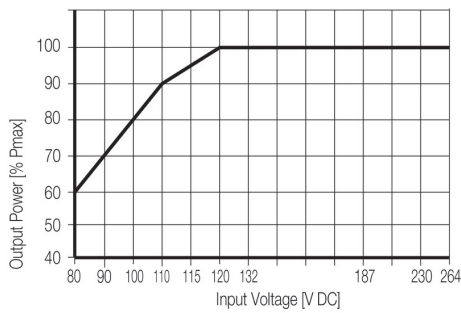
**Electric symbol**



**Derating curve**



**Derating curve**



**Derating curve**

