PRO ECO 72W 24V 3A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

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.	1469470000
Type	PRO ECO 72W 24V 3A
GTIN (EAN)	4050118275711
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	34 mm	Width (inches)	1.339 inch
Net weight	557 g		

Temperatures

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

Input

AC current consumption	0,55 A @ 230 V AC / 1,04 A @ 110 V AC	AC input voltage range	85...264 V AC (derating at 100 V AC)
Connection system	Screw connection	DC current consumption	0,22 A @ 370 V DC / 0,68 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	82.8 VA
Rated input voltage	100...240 V AC	Recommended back-up fuse	2 A / DI, safety fuse 6 A, Char. B, circuit breaker 2...4 A, Char. C circuit breaker
Surge protection	Varistor		

Output

Capacitive load	unrestricted	Connection system	Screw connection
Continous output current @ $U_{Nominal}$	3 A @ 55 °C, 2,25 A @ 70 °C	Nominal output current for U_{nom}	3 A at 55 °C
Output power	72 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}	> 100 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	Power factor (approx.)	> 0.5...230 V AC / > 0.53... 115 V AC
Power loss, idling	4 W	Power loss, nominal load	9.5 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		

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Technical data

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 / 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 mm²	Conductor cross-section, rigid , max.	6 mm²
Conductor cross-section, rigid , min.	0.5 mm²	Connection system	Screw connection
Wire connection cross section, flexible (input), max.	2.5 mm²		

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	12	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , max.	2.5 mm²	Conductor cross-section, flexible , min.	0.5 mm²
Conductor cross-section, rigid , max.	6 mm²	Conductor cross-section, rigid , min.	0.5 mm²
Connection system	Screw connection	Number of terminals	5 (+,–,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

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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	27-04-90-02

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	6d8cdf22-8230-4af8-86c8-3558c716666d

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E258476

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity UK Conformity Assessed
Engineering Data	CAD data – STEP
Engineering Data	Zuken E3.S
User Documentation	Operating instructions
Catalogues	Catalogues in PDF-format

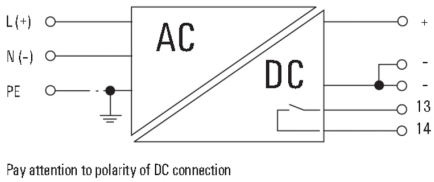
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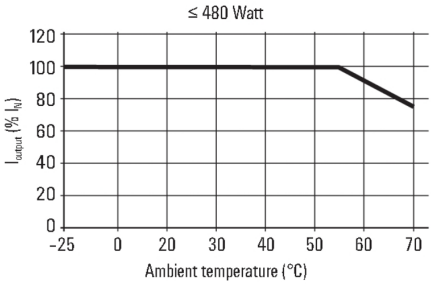
Drawings

Electric symbol

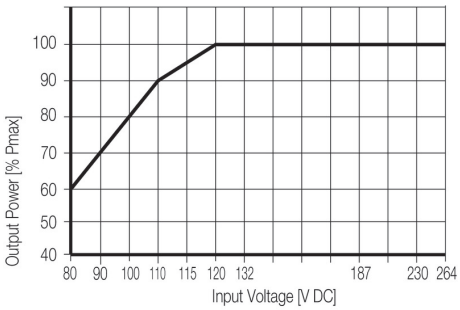


Pay attention to polarity of DC connection

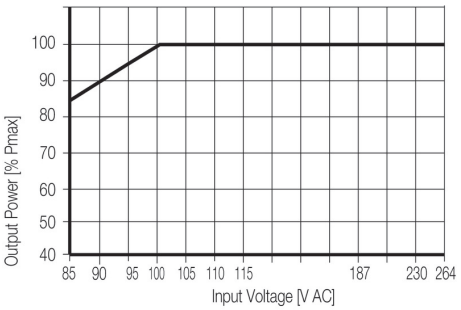
Derating curve



Derating curve



Derating curve



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Accessories

W-Series



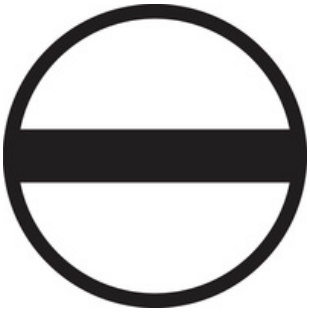
Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

Type	WEW 35/2 V0 GF SW	Version
Order No.	1479000000	W-Series, End bracket
GTIN (EAN)	4050118286779	
Qty.	50 pc(s).	

Type	WEW 35/1 V0 GF SW	Version
Order No.	1478990000	W-Series, End bracket
GTIN (EAN)	4050118286892	
Qty.	50 pc(s).	

Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	SDIS SLIM 0.6X3.5X100	Version
Order No.	2749610000	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118896350	thickness (A): 0.6 mm
Qty.	1 pc(s).	