

PROeco PRO ECO 480W 24V 20A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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

Type	PRO ECO 480W 24V 20A
Order No.	1469510000
Version	Power supply, switch-mode power supply unit, 24 V
GTIN (EAN)	4050118275483
Qty.	1 Stück

PROeco PRO ECO 480W 24V 20A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technische Daten

Dimensions and weights

Width	100 mm	Width (inches)	3.937 inch
Height	125 mm	Height (inches)	4.921 inch
Depth	120 mm	Depth (inches)	4.724 inch
Net weight	1,557 g		

Temperatures

Operating temperature, max.	70 °C	Operating temperature, min.	-25 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-40 °C
Operating temperature	-25 °C...70 °C	Storage temperature	-40 °C...85 °C

Input

AC current consumption	2,37 A @ 230 V AC / 5,2 A @ 110 V AC	AC input voltage range	85...264 V AC (Derating @ 100 V AC)
Connection system	Screw connection	DC current consumption	1,55 A @ 370 V DC / 4,65 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. 5 A	Rated input voltage	100...240 V AC (wide-range input)
Recommended back-up fuse	6 A / DI, safety fuse 16 A, Char. B, circuit breaker 6...8 A, Char. C, circuit breaker	Surge protection	Varistor

output

Capacitive load	unrestricted	Connection system	Screw connection
Continuous output current @ U _{Rated}	20 A @ 55 °C, 15 A @ 70 °C	Output power	480 W
Output voltage	24 V	Output voltage	22...28 V (adjustable via potentiometer)
Overload protection	Yes	Parallel connection option	yes, max. 3
Protection against inverse voltage	Yes	Ramp-up time	≤ 100 ms
Rated (nominal) output current @ U _{Nom}	20 A @ 55 °C	Rated output voltage	24 V DC ± 1 %
Residual ripple, breaking spikes	< 50 mV _{SS} @ 24 V DC, I _N		

PROeco PRO ECO 480W 24V 20A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technische Daten

General data

AC failure bridging time @ I _{Nom}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC	Degree of efficiency	91%
Earth leakage current, max.	3.5 mA	Housing version	Metal, corrosion resistant
Indication	LED green (U _{output} > 21.6 V DC), LED yellow (I _{output} > 90% I _{Rated} typ.), LED red (overload, overtemperature, short-circuit, U _{output} < 20.4 V DC)	MTBF	> 500,000 h acc. to IEC 1709 (SN29500)
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.)	> 0.98 @ 230 V AC / > 0.98 @ 115 V AC
Power loss, idling	5 W	Power loss, nominal load	43 W
Protection against over-heating	Yes	Protection against reverse voltages from the load	30...35 V DC
Protection degree	IP20	Short-circuit protection	Yes

EMC / shock / vibration

Limiting of mains voltage harmonic currents	in accordance with EN 61000-3-2	Noise emission acc. to EN55022	Class B
Vibration resistance IEC 60068-2-6	1 g according to EN50178	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)
Shock resistance IEC 60068-2-27	15 g In all directions		

Insulation coordination

Class of protection	I, with PE connection	Insulation voltage input / earth	2 kV
Insulation voltage output / earth	0.5 kV	Insulation voltage, input/output	3 kV
Pollution severity	2		

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 EN60950, PELV acc. to EN60204	Safety transformers for switch-mode power supplies	nach EN61558-2-16

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
Number of terminals	3 for L/N/PE	Tightening torque, max.	0.6 Nm
Tightening torque, min.	0.5 Nm	Wire connection cross section, flexible (input), max.	2.5 mm ²

PROeco PRO ECO 480W 24V 20A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technische Daten

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	10	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	7 (+,-,13,14)
Tightening torque, max.	0.6 Nm	Tightening torque, min.	0.5 Nm

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

Institute (cULus)



Certificate no. (cULus)

E258476

Classifications

ETIM 5.0	EC002541	ETIM 6.0	EC002540
eClass 6.2	27-04-90-04	eClass 7.1	27-04-90-04
eClass 8.1	27-04-90-04	eClass 9.0	27-04-07-03
eClass 9.1	27-04-07-01		

Product information

Descriptive text ordering data	The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.
--------------------------------	---

Approvals

Approvals



ROHS	Conform
------	---------

Downloads

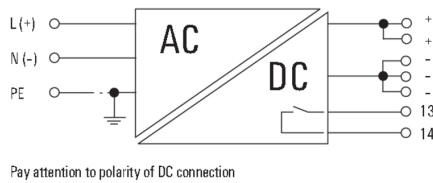
Approval/Certificate/Document of Conformity	DE_PA5200_160202_001.pdf
Brochure/Catalogue	CAT 4.3 ELECTR 15/16 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Operating instructions Operating instructions

PROeco PRO ECO 480W 24V 20A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Zeichnungen

Electric symbol



Derating curve

