

PRO ECO3 480W 24V 20A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

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Germany

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www.weidmueller.com



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

With PROeco we can offer you affordable switched-mode power supply units with high efficiency and system capability. Let's connect. Particularly in the series production of machines, switched-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 switched-mode power supply units feature a compact design, high

efficiency and are extremely easy to service. Thanks to temperature protection,

short-circuit strength and overload resistance, they can be universally used in all applications

Wide-ranging safety functions and the combinability with our

diode and capacitance modules as well as UPS

components for setting up a redundant power supply, characterise solutions with PROeco.

General ordering data

Type	PRO ECO3 480W 24V 20A
Order No.	1469550000
Version	Power supply, switch-mode power supply unit, 24 V
GTIN (EAN)	4050118275742
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	100 mm	Height	125 mm
Depth	120 mm	Weight	1.6 kg
Net weight	1.35 g		

Temperatures

Operating temperature	Storage temperature	-40 °C...+85 °C
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Input

AC current consumption	1.2 A @ 3 x 500 V AC / 1.5 A @ 3 x 400 V AC	Connection system [Input]	Screw connection
DC current consumption	0.7 A @ 800 V DC / 1.2 A @ 450 V DC	DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)
Frequency range AC	47...63 Hz	Input frequency	47...63 Hz
Input fuse (internal)	Yes	Inrush current	max. 50 A
Recommended back-up fuse	4 A / DI, safety fuse 3...5 A, Char. C, circuit breaker	rated input voltage	3 x 400...3 x 500 V AC (wide-range input)

output

Connection system [Output]	Screw connection	Output voltage	24 V
Output voltage	22...28 V DC (einstellbar über Potentiometer in der Front)	Overload protection	Yes
Parallel connection option	yes, max. 3	Powerboost @ 24 V DC, 60 °C	24 A for 1 min, ED = 5 %
Protection against inverse voltage	Yes	Ramp-up time	≤ 100 ms
Rated (nominal) output current @ U _{Nom}	20 A @ 55 °C	continuous output current @ 24 V DC	20 A @ 55 °C
rated output voltage	24 V DC ± 1 %	residual ripple, breaking spikes	< 50 mV _{SS} @ 24 V DC, I _N

General data

AC failure bridging time @ I _{Nom}	> 40 ms @ 3 x 500 V AC / > 20 ms @ 3 x 400 V AC	Degree of efficiency	89%
Earth leakage current, max.	1 mA	Housing version	Metal, corrosion resistant
MTBF	> 500,000 h acc. to IEC 1709 (SN29500)	Max. perm. air humidity (operational)	5 %...95 % RH
Mounting position, installation notice	Horizontal on TS35 mounting rail, with 50 mm of clearance at top and bottom for air circulation. Can be mounted side by side with no space in between.	Operating temperature	
Protection against over-heating	Yes	Short-circuit protection	Yes
Weight	1.6 kg		

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Technical data

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		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)
	1 g according to EN50178		
Shock resistance IEC 60068-2-27	15 g In all directions		

Insulation coordination

Class of protection	I, with PE connection	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	Acc. to EN 61558-2-17

Connection data (input)

Conductor cross-section, AWGcmil , max.	12	Conductor cross-section, AWGcmil , 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 [Input]	Screw connection
Number of terminals [Input]	4 for L1/L2/L3/PE	Tightening torque, max.	0.6 Nm
Tightening torque, min.	0.5 Nm	Wire connection cross section, flexible (input), max.	2.5 mm ²

Connection data (output)

Conductor cross-section, AWGcmil , max.	10	Conductor cross-section, AWGcmil , 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 [Output]	Screw connection	Tightening torque, max.	0.6 Nm
Tightening torque, min.	0.5 Nm		

Signalling

Contact load (NO contact)	max. 30 V DC / 0,5 A	Floating contact	Yes
Relay on/off	Output voltage > 21.6 V / < 20.4 V		

Classifications

eClass 6.2	27-04-90-04
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Approvals

ROHS	Conform
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Drawings

Electric symbol

