

PRO ECO3 480W 24V 20A

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

www.weidmueller.com



The new PROeco 2nd generation power supplies maximise the availability of automation applications. The twelve-part series offers standard functions: with high performance, efficiency and suitability for many systems. The three-colour LED makes service activities and the integration of PROeco devices particularly easy. The series is compatible with DC UPS, electronic load monitoring and diode modules and is suitable for setting up power management systems. The compact design suits space-constrained applications, such as flat control cabinets in the field.

General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	1469550000
Type	PRO ECO3 480W 24V 20A
GTIN (EAN)	4050118275742
Qty.	1 items
Delivery status	This article will no longer be available in the future.
Available until	2026-12-30T00:00:00+01:00
Alternative product	PRO ECO3 480W 24V 20A II

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Technical data

Approvals

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ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E255651
Certificate no. (cULus)	E258476

Dimensions and weights

Depth	120 mm	Depth (inches)	4.7244 inch
Height	125 mm	Height (inches)	4.9212 inch
Width	100 mm	Width (inches)	3.937 inch
Net weight	1300 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cI
REACH SVHC	Lead 7439-92-1
SCIP	6d8cdf22-8230-4af8-86c8-3558c716666d

Rated data UL

Certificate No. (cURus)	E255651
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Input

Connection system	Screw connection	
AC input voltage range	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC	
Recommended back-up fuse	4 A / DI, safety fuse 3...5 A, Char. C, circuit breaker	
Frequency range AC	47...63 Hz	
Rated input voltage	3x 400...3x 500 V AC (wide-range input)	
Surge protection	Varistor	
Input fuse (internal)	Yes	
DC input voltage range	450...800 V DC	
Inrush current	max. 50 A	
Current consumption in relation to the input voltage	Voltage type	3-phase AC
	Input voltage	400 V
	Input current	1.5 A
	Voltage type	3-phase AC
	Input voltage	500 V
	Input current	1.2 A
	Voltage type	DC
	Input voltage	800 V
	Input current	0.7 A
	Voltage type	DC
	Input voltage	450 V
	Input current	1.2 A

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Nominal power consumption 539.3 VA

Output

Output power	480 W	Connection system	Screw connection
Rated output voltage	24 V DC \pm 1 %	Residual ripple, breaking spikes	<50 mVPP @ 24 V DC, IN
Parallel connection option	yes, max. 3	Overload protection	Yes
Output voltage, max.	28 V	Output voltage, min.	22 V
Output voltage, note	(adjustable via potentiometer)	Nominal output current for Unom	20 A @ 55 °C
Capacitive load	unrestricted	Protection against inverse voltage	Yes
Continuous output current @ UNominal	20 A @ 55 °C, 15 A @ 70 °C	Ramp-up time	\leq 100 ms

General data

Power factor (approx.)	> 0.55 @ 3 x 500 V AC / > 0.65 @ 3 x 400 V AC	AC failure bridging time @ Inom	> 30 ms @ 3 x 500 V AC / > 20 ms @ 3 x 400 V AC
Degree of efficiency	89%	Protection degree	IP20
Surge voltage category	II	Mounting position, installation notice	on terminal rail TS 35
Housing version	Metal, corrosion resistant	Protection against reverse voltages from the load	30...35 V DC
Indication	Green LED (Uoutput > 21.6 V DC), Yellow LED (Ioutput > 90 % IRated typ.), red LED (overload, overtemperature, short-circuit, Uoutput < 20.4 V DC)	Earth leakage current, max.	3.5 mA
Max. perm. air humidity (operational)	5 %...95 % RH	Power loss, idling	8 W
Short-circuit protection	Yes	Power loss, nominal load	48 W
Operating altitude	\leq 3000 m	Protection against over-heating	Yes

EMC / shock / vibration

Limiting of mains voltage harmonic currents	According to EN 61000-3-2	Shock resistance IEC 60068-2-27	15 g In all directions
Noise emission in accordance with EN55032	Class B	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)
Vibration resistance IEC 60068-2-6	1 g according to EN 50178		

Insulation coordination

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

Electrical safety (applied standards)

For use with electronic equipment	Acc. to EN50178 / VDE0160	Electrical machine equipment	Acc. to EN60204
Protection against dangerous shock currents	Acc. to VDE0106-101	Safety extra-low voltage	SELV acc. to IEC 60950-1, PELV according to EN 60204-1

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Protective separation / protection against electrical shock	VDE0100-410 / acc. to DIN57100-410	Safety transformers for switch-mode power supplies	According to EN 61558-2-16
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Connection data (input)

Connection system	Screw connection	Number of terminals	4 for L1/L2/L3/PE
Conductor cross-section, AWG/kcmil , max.	12 AWG	Conductor cross-section, AWG/kcmil , min.	26 AWG
Wire connection cross section, flexible (input), 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
Tightening torque, min.	0.5 Nm	Tightening torque, max.	0.6 Nm

Connection data (output)

Connection system	Screw connection	Number of terminals	7 (++,--,13,14)
Conductor cross-section, AWG/kcmil , max.	10 AWG	Conductor cross-section, AWG/kcmil , min.	26 AWG
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
Tightening torque, min.	0.5 Nm	Tightening torque, max.	0.6 Nm

Signalling

Floating contact	Yes	Contact load (NO contact)	max. 30 V DC / 1 A
Relay on/off	Output voltage >21.6 V DC/ <20.4 V DC, overload		

Classifications

ETIM 8.0	EC002540	ETIM 9.0	EC002540
ETIM 10.0	EC002540	ECLASS 14.0	27-04-07-01
ECLASS 15.0	27-04-07-01		

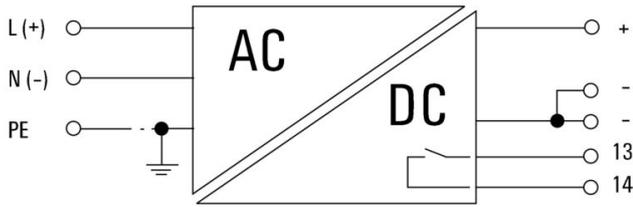
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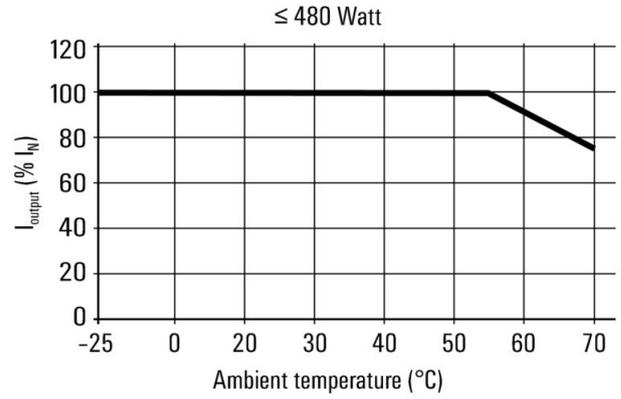
Drawings

Electric symbol

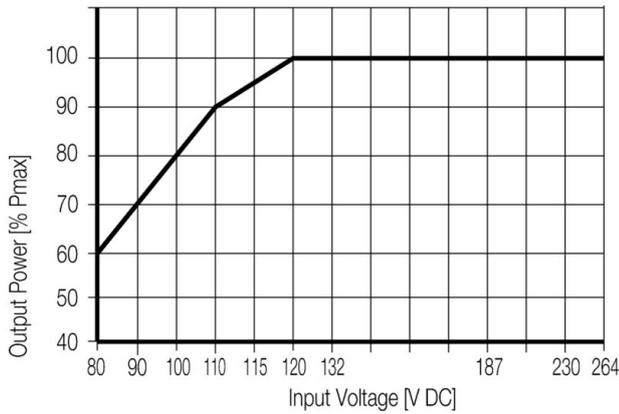


Pay attention to polarity of DC connection

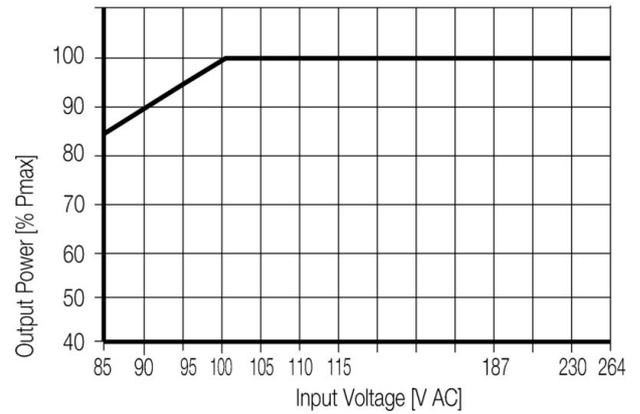
Derating curve



Derating curve



Derating curve



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Accessories

Slotted screwdriver

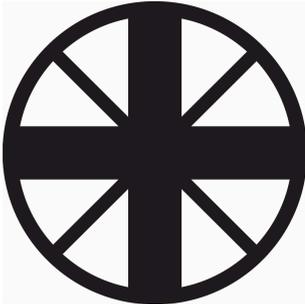


VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

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 thickness (A): 0.6 mm	
GTIN (EAN)	4050118896350		
Qty.	1 ST		

Crosshead screwdriver, Pozidrive

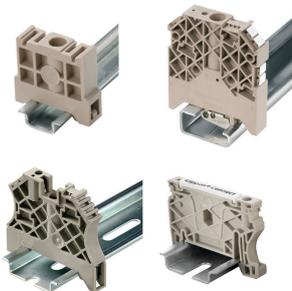


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General ordering data

Type	SDIK SLIM PZ1 X 80	Version	
Order No.	2749670000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1	
GTIN (EAN)	4050118896411		
Qty.	1 ST		

End bracket



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 35/1 V0 GF SW	Version	
Order No.	1478990000	End bracket, black, TS 35, V-0, Wemid, Width: 12 mm, 130 °C	
GTIN (EAN)	4050118286892		
Qty.	50 ST		

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Accessories

Type	WEW 35/2 V0 GF SW	Version	
Order No.	1479000000	End bracket, black, TS 35, V-0, Wemid, Width: 8 mm, 130 °C	
GTIN (EAN)	4050118286779		
Qty.	50 ST		
Type	WEW 35/1 SW	Version	
Order No.	1162600000	End bracket, black, TS 35, V-2, Wemid, Width: 12 mm, 100 °C	
GTIN (EAN)	4032248972630		
Qty.	50 ST		