

PROeco
PRO ECO3 960W 24V 40A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

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 ECO3 960W 24V 40A
Order No.	1469560000
Version	Power supply, switch-mode power supply unit, 24 V
GTIN (EAN)	4050118275728
Qty.	1 pc(s).

PROeco
PRO ECO3 960W 24V 40A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data
Dimensions and weights

Width	160 mm	Width (inches)	6.299 inch
Height	125 mm	Height (inches)	4.921 inch
Depth	120 mm	Depth (inches)	4.724 inch
Net weight	2,899 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

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Rated data UL

Certificate No. (cURus)	E255651	Altitude	≤ 3000 m
-------------------------	---------	----------	----------

Input

AC current consumption	2,15 A @ 3 x 500 V AC / 2,68 A @ 3 x 400 V AC	AC input voltage range	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC
Connection system	Screw connection	DC current consumption	1,37 A @ 800 V DC / 2,37 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. 40 A	Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)
Recommended back-up fuse	6 A / DI, safety fuse 10 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 _{Nominal}	40 A @ 50 °C, 24 A @ 70 °C	Nominal output current for U _{nom}	40 A @ 50 °C
Output power	960 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 output voltage	24 V DC ± 1 %
Residual ripple, breaking spikes	< 50 mV _{pp} @ 24 V DC, I _N		

PROeco
PRO ECO3 960W 24V 40A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data
General data

AC failure bridging time @ I_{nom}	> 25 ms at 3 x 500 V AC / > 20 ms at 3 x 400 V AC	Degree of efficiency	90%
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)	MTBF	> 500,000 h in accordance with IEC 61709 (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.)	> 0.55 @ 3 x 500 V AC / > 0.65 @ 3 x 400 V AC
Power loss, idling	5 W	Power loss, nominal load	95 W
Protection against over-heating	Yes	Protection degree	IP20
Short-circuit protection	Yes		

EMC / shock / vibration

Limiting of mains voltage harmonic currents	According to EN 61000-3-2	Noise emission in accordance with EN55032	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), EN 61000-4-8 (Fields), EN 61000-4-11 (Dips)
	1 g according to EN 50178		
Shock resistance IEC 60068-2-27	15 g In all directions		

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		

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 according to EN 60950, PELV according to EN 60204	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 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	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

PROeco
PRO ECO3 960W 24V 40A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Connection data (output)**

Conductor cross-section, AWG/kcmil , max.	8	Conductor cross-section, AWG/kcmil , min.	22
Conductor cross-section, flexible , max.	10 mm ²	Conductor cross-section, flexible , min.	2.5 mm ²
Conductor cross-section, rigid , max.	16 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)	
Institute (cURus)		Certificate No. (cURus)	E258476
			E255651

Classifications

ETIM 6.0	EC002540	ETIM 7.0	EC002540
eClass 9.0	27-04-07-01	eClass 9.1	27-04-07-01
eClass 10.0	27-04-07-01		

Approvals

Approvals	    
ROHS	Conform

Downloads

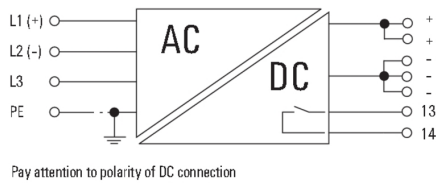
Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Operating instructions

PROeco PRO ECO3 960W 24V 40A

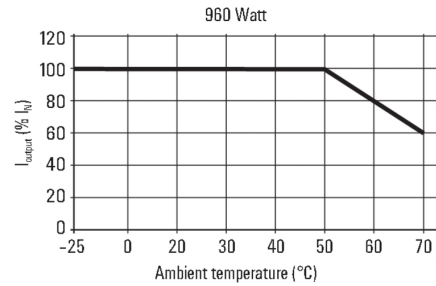
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

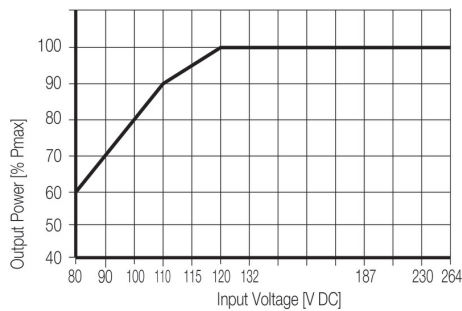
Electric symbol



Derating curve



Derating curve



Derating curve

