

PRO ECO3 120W 24V 5A

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.	1469530000
Type	PRO ECO3 120W 24V 5A
GTIN (EAN)	4050118275735
Qty.	1 pc(s).

PRO ECO3 120W 24V 5A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	100 mm	Depth (inches)	3.937 inch
Height	125 mm	Height (inches)	4.921 inch
Width	40 mm	Width (inches)	1.575 inch
Net weight	677 g		

Temperatures

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

Input

AC input voltage range 3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC

Connection system Screw connection

Current consumption in relation to the input voltage

Voltage type	3-phase AC
Input voltage	400 V
Input current	0.4 A
Voltage type	3-phase AC
Input voltage	500 V
Input current	0.3 A
Voltage type	DC
Input voltage	800 V
Input current	0.2 A
Voltage type	DC
Input voltage	450 V
Input current	0.4 A

DC input voltage range 450...800 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 137.9 VA

Rated input voltage 3x 400...3x 500 V AC (wide-range input)

Recommended back-up fuse 2 A / DI, safety fuse

2...3 A, Char. C, circuit breaker

Surge protection Varistor

Output

Capacitive load	unrestricted	Connection system	Screw connection
Continuous output current @ $U_{Nominal}$	5 A @ 55 °C, 3,75 A @ 70 °C	Nominal output current for U_{nom}	5 A at 55 °C
Output power	120 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

PRO ECO3 120W 24V 5A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

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	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.)	> 0.55 @ 3 x 500 V AC / > 0.65 @ 3 x 400 V AC
Power loss, idling	6 W	Power loss, nominal load	17 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		

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 mm ²	Conductor cross-section, rigid, max.	6 mm ²
Conductor cross-section, rigid, min.	0.5 mm ²	Connection system	Screw connection
Wire connection cross section, flexible (input), max.	2.5 mm ²		

Creation date November 1, 2023 7:55:29 AM CET

Catalogue status 28.10.2023 / We reserve the right to make technical changes.

3

PRO ECO3 120W 24V 5A

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

www.weidmueller.com

Technical data

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	12	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	6 (+,+,-,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
-------------------------	---------	-------------------	-------

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	27049002

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	UL508 CSA C22.2 Certificate.pdf Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Operating instructions
Catalogues	Catalogues in PDF-format

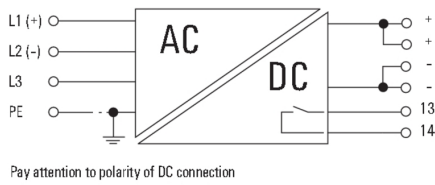
PRO ECO3 120W 24V 5A

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

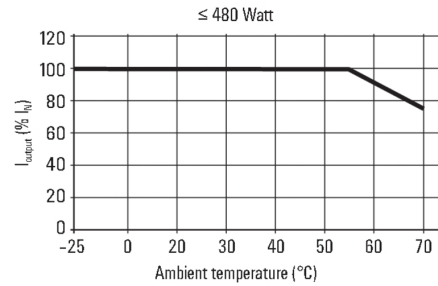
www.weidmueller.com

Drawings

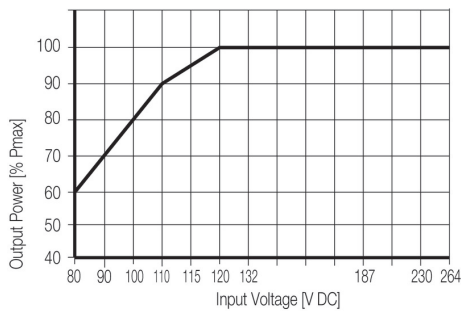
Electric symbol



Derating curve



Derating curve



Derating curve

