PRO MAX3 120W 24V 5A

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

www.weidmueller.com



PROmax offers diverse solutions for demanding automation.
Our high performance and durable PROmax switch-mode power supply units are designed for especially demanding requirements. PROmax reliably copes with continuous overload of up to 20% or short-term peak loads of 300% occurring with high control cabinet temperatures.
High boost capability and full power are also made possible in a wide temperature range. Our switch-mode power supply units can be used around the world and are also suitable for confined spaces thanks to their low width.
Together with our uninterruptible DC USPs, the diode modules or CAP modules, you can create a power supply solution that is tailored to your requirements.

General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	1478170000
Type	PRO MAX3 120W 24V 5A
GTIN (EAN)	4050118285963
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	125 mm	Depth (inches)	4.921 inch
Height	130 mm	Height (inches)	5.118 inch
Width	40 mm	Width (inches)	1.575 inch
Net weight	783 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
Humidity at operating temperature	5...95 %, no condensation		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Rated data UL

Certificate No. (cURus)	E255651

Input

AC current consumption	0,28A @ 3*500 VAC / 0,3A @ 3*400 VAC	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	0.18 A @ 800 V DC / 0.3 A @ 450 V DC
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)	Frequency range AC	45...65 Hz
Input fuse (internal)	Yes	Inrush current	max. 15 A
Nominal power consumption	133.3 VA	Recommended back-up fuse	2...3 A, char. C circuit breaker
Surge protection	Varistor		

Output

Connection system	Screw connection	Continous output current @ $U_{Nominal}$	6.0 A @ 45 °C, 3,75 A @ 70 °C
Nominal output current for U_{nom}	5 A @ 60 °C	Output power	120 W
Output voltage, max.	29.5 V	Output voltage, min.	22.5 V
Output voltage, note	(adjustable via potentiometer)	Parallel connection option	yes, max. 5
Protection against inverse voltage	Yes	Rated output voltage	24 V DC ± 1 %
Residual ripple, breaking spikes	< 50 mVss @ U_{Nenn}, Full Load		

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General data

AC failure bridging time @ I_{nom}	min. 20 ms	Current limiting	> 120% I_N
Degree of efficiency	90%	Derating	> 60°C / 75% @ 70°C
Earth leakage current, max.	3.5 mA	Housing version	Metal, corrosion resistant
Mounting position, installation notice	Horizontal on TS35 mounting rail. 50 mm of clearance at top & bottom for air circ. Can mount side by side with no space in between.	Operating temperature	-25 °C...70 °C
Power factor (approx.)	> 0.50 @ 3x400 V AC	Power loss, idling	1.2 W
Power loss, nominal load	13.3 W	Protection against reverse voltages from the load	30...35 V DC
Short-circuit protection	Yes	Start-up	≥ -40 °C
Status indication	LED red/green and relay (≥21.6 V DC LED green, relay on/ ≤20.6 LED red, relay off)	Surge voltage category	III

EMC / shock / vibration

Interference immunity test acc. to	EN 55024, EN 55032, IEC61000-3-2,-3, IEC61000-4-2,-3,-4,-5,-6,-8,-11	Noise emission in accordance with EN55032	Class B
Shock resistance IEC 60068-2-27	30 g in all directions	Vibration resistance IEC 60068-2-6	2.3 g

Insulation coordination

Humidity at operating temperature	5...95 %, no condensation	Insulation voltage input / earth	3.5 kV
Insulation voltage output / earth	0.5 kV	Insulation voltage, input/output	4 kV
Pollution severity	2	Protection class	I, with PE connection
Surge voltage category	III		

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.	10	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , min.	0.22 mm²	Conductor cross-section, rigid , max.	6 mm²
Conductor cross-section, rigid , min.	0.18 mm²	Connection system	Screw connection
Wire connection cross section, flexible (input), max.	4 mm²		

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Connection data (output)

Conductor cross-section, AWG/kcmil , max.	12	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , max.	4 mm²	Conductor cross-section, flexible , min.	0.5 mm²
Conductor cross-section, rigid , max.	6 mm²	Conductor cross-section, rigid , min.	0.5 mm²
Connection system	Screw connection	Number of terminals	8 (++,—,11,13,14)

Signalling

Contact load (NO contact)	max. 30 V DC / 1 A	Floating contact	Yes
Status indication	LED red/green and relay (≥21.6 V DC LED green, relay on/ ≤20.6 LED red, relay off)		

Approvals

Certificate No. (GERMLLOYD)	TAA00000TT	Certificate No. (cURus)	E255651
Certificate no. (cULus)	E258476	Certificate no. (cULusEX)	E470829
Institute (GERMLLOYD)	GERMLLOYD	Institute (cULus)	CULUS
Institute (cULusEX)	CULUSEX	Institute (cURus)	CURUS

Classifications

ETIM 6.0	EC002540	ETIM 7.0	EC002540
ETIM 8.0	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

Approvals

Approvals

ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E255651
Certificate no. (cULus)	E258476
Certificate no. (cULusEX)	E470829

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Operating instructions
Catalogues	Catalogues in PDF-format

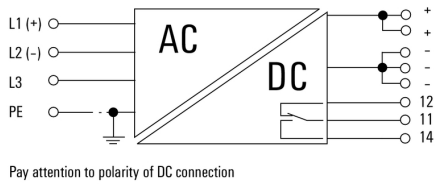
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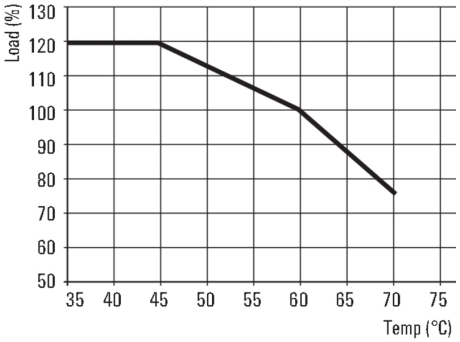
Drawings

Electric symbol



Pay attention to polarity of DC connection

Derating curve



Derating curve

