

PRO TOP1 72W 24V 3A F**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Production processes constantly need to be made more efficient. As well as performance, energy efficiency and sustainability are also playing an increasingly important role in cutting-edge industry. PROtop power supplies combine excellent performance data with exemplary sustainability, which has a positive impact on the productivity of the entire production facility.

PROtop offers a number of advantages that give you a real competitive edge. These include the permanent reduction of energy costs thanks to high efficiencies as well as the increase in plant availability due to long service life and high MTBF values. In addition, there is a high functional density due to the extremely spacesaving designs. PROtop can achieve significant savings compared to conventional power supply units. Its increased efficiency saves an average of 50 kWh per day in a medium-sized production facility with approx. 100 PROtop power supplies working in three-shift operation. This adds up to over 15,000 kWh a year and also improves the facility's carbon footprint. The service life, which is twice as long as that of standard power supplies, also sustainably reduces the costs of repurchase and exchange.

General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	2568970000
Type	PRO TOP1 72W 24V 3A F
GTIN (EAN)	4050118579550
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	35 mm	Width (inches)	1.378 inch
Net weight	650 g		

Temperatures

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

Input

AC input voltage range	85...277 V AC	
Connection system	PUSH IN with actuator	
Current consumption in relation to the input voltage	Voltage type	AC
	Input voltage	100 V
	Input current	2 A
	Voltage type	DC
	Input voltage	120 V
	Input current	2 A
DC input voltage range	80 ... 410 V DC	
Frequency range AC	45...65 Hz	
Input fuse (internal)	Yes	
Inrush current	max. 5 A	
Nominal power consumption	80.9 VA	
Rated input voltage	110...240 V AC / 120...340 V DC	
Recommended back-up fuse	5 A, DI / 6 A, Char. B / 6 A, Char C	
Surge protection	Varistor	

Output

Connection system	PUSH IN with actuator	
DCL - peak load reserve	Boost duration	5 s
	Multiple of the rated current	150 %
	Boost duration	15 ms
	Multiple of the rated current	400 %
Nominal output current for U _{nom}	3 A @ 60 °C	
Output power	72 W	
Output voltage, max.	28.8 V	
Output voltage, min.	22.5 V	
Output voltage, note	adjustable with potentiometer or comunication module	
Parallel connection option	yes, max 10	
Protection against inverse voltage	Yes	
Ramp-up time	≤ 100 ms	
Rated output voltage	24 V DC ± 1 %	
Residual ripple, breaking spikes	<50 mVss @ U _{Nenn} , Full Load	

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Technical data**General data**

AC failure bridging time @ I _{nom}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC	Conformal coating	No
Degree of efficiency	89%	Derating	> 60°C (2.5% / 1°C)
Earth leakage current, max.	3.5 mA	Housing version	Metal, corrosion resistant
Power factor (approx.)	> 0.5	Power loss, idling	5 W
Power loss, nominal load	8.9 W	Protection degree	IP20
Short-circuit protection	Yes, internal	Start-up	≥ -40 °C
Surge voltage category	III, II		

EMC / shock / vibration

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 (on DIN rail), 4 g (with direct mounting)		

Insulation coordination

Insulation voltage input / earth	3.2 kV	Insulation voltage output / earth	0.5 kV
Insulation voltage, input/output	3.5 kV	Pollution severity	2
Protection class	I, with PE connection	Surge voltage category	III, 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 AWG	Conductor cross-section, AWG/kcmil , min.	20 AWG
Conductor cross-section, flexible , min.	0.5 mm ²	Conductor cross-section, rigid , max.	1.5 mm ²
Conductor cross-section, rigid , min.	0.5 mm ²	Connection system	PUSH IN with actuator
Number of terminals	3 for L/N/PE	Screwdriver blade	0.6 x 3.5
Wire connection cross section, flexible (input), max.	2.5 mm ²		

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	12 AWG	Conductor cross-section, AWG/kcmil , min.	26 AWG
Conductor cross-section, flexible , max.	2.5 mm ²	Conductor cross-section, flexible , min.	0.2 mm ²
Conductor cross-section, rigid , max.	2.5 mm ²	Conductor cross-section, rigid , min.	0.2 mm ²
Connection system	PUSH IN with actuator	Number of terminals	4 (++ / -)
Screwdriver blade	0.6 x 3.5		

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Technical data

Connection data (signal)

Wire connection cross-section, flexible (signal), max.	1.5 mm ²	Wire connection cross-section, flexible (signal), min.	0.14 mm ²
Wire connection method	PUSH IN	Wire cross-section, AWG/kcmil, max.	16
Wire cross-section, AWG/kcmil, min.	26 mm ²	Wire cross-section, solid, max.	1.5 mm ²
Wire cross-section, solid, min.	0.14 mm ²		

Signalling

Floating contact	LED green/red	Green: Operation (failure-free), Flashing green: advance warning I>90%, Green/red flashing: output switched off (switch-off mode), Flashing red: overload/error
Status relay (max. load)	Yes Output voltage OK (30 V DC / 1 A)	

Approbations

Certificate no. (cULus)	E255651	Certificate no. (cULusEX)	E470829
Institute (cULus)	CULUS	Institute (cULusEX)	CULUSEX

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	27-04-07-01

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
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www.weidmueller.com**Technical data****Downloads**

Approval/Certificate/Document of Conformity	Lloyds Register Certificate
	ABS Certificate
	BV Certificate.pdf
	DNV Certificate.pdf
	RINA Certificate.pdf
	UL 508 CSA C22.2 Certificate.pdf
	UL 62368-1 Certificate.pdf
	UL 121201 CSA C22.2 Certificate.pdf
Engineering Data	declaration of conformity
	CAD data – STEP
User Documentation	Operating instruction
	IO-Link Register Description PROtop
Catalogues	Catalogues in PDF-format
Brochures	Produkt Information PROTOP DE
	Produkt Information PROTOP EN

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Drawings

