

PRO TOP1 480W 24V 20A**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

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PROtop combines highest efficiency and compact housings with high durability and direct parallel connection without diode modules. This reduces costs and creates space in the cabinet. Due to the powerful DCL technology, even difficult loads - motors, for instance - are operated smoothly, while circuit breakers are triggered reliably. The good communication capability allows permanent condition monitoring and full integration with control systems.

General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	2466890000
Type	PRO TOP1 480W 24V 20A
GTIN (EAN)	4050118481471
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	68 mm	Width (inches)	2.677 inch
Net weight	1,520 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	SCIP	6d8cdf22-8230-4af8-86c8-3558c716
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Input

AC input voltage range	85...277 V AC	
Connection system	PUSH IN	
Current consumption in relation to the input voltage	Voltage type	AC
	Input voltage	100 V
	Input current	6 A
	Voltage type	DC
	Input voltage	120 V
	Input current	6 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	516.1 VA	
Rated input voltage	110...240 V AC / 120...340 V DC	
Recommended back-up fuse	8 A (DI) / 10 A (Char. B), 8 A (Char. C)	
Surge protection	Varistor	

Output

Connection system		PUSH IN
DCL - peak load reserve	Multiple of the rated current	150 %
	Boost duration	5 s
	Multiple of the rated current	500 %
	Boost duration	15 ms
Mains failure bridge-over time	> 20 ms @ 115V AC/ 230 VAC	
Nominal output current for U _{nom}	20 A @ 60 °C	
Output power	480 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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General data

AC failure bridging time @ I _{nom}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC	Conformal coating	www.weidmueller.com No
Degree of efficiency	93%	Derating	> 60°C (2.5% / 1°C)
Earth leakage current, max.	3.5 mA	Housing version	Metal, corrosion resistant
Mounting position, installation notice	Horizontal on DIN rail TS 35, top and bottom 50 mm clearance for free air flow, 10 mm clearance to neighbouring active subassemblies with full load, 5 mm with passive neighbouring subassemblies, direct row mounting with 90% rated load	Operating temperature	-25 °C...70 °C
Power factor (approx.)	> 0.9	Power loss, idling	10 W
Power loss, nominal load	36.1 W	Protection degree	IP20
Short-circuit protection	Yes, internal	Start-up	≥ -40 °C
Surge voltage category	III, II		

EMC / shock / vibration

Interference immunity test acc. to	EN 55032:2015, EN 55024:2010/A1:2015, EN 55035:2017, EN 61000-3-2:2014, EN 61000-6-1:2007, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011, EN 61000-6-4:2007/A1:2011	Noise emission in accordance with EN55032	
Shock resistance IEC 60068-2-27	30 g in all directions	Vibration resistance IEC 60068-2-6	Class B 2.3 g (on DIN rail), 4 g (with direct mounting)

Insulation coordination

Humidity at operating temperature	5...95 %, no condensation	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

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Technical data

Connection data (input)

Conductor cross-section, AWG/kcmil ,
max. 8Conductor cross-section, flexible , min. 0.2 mm²Conductor cross-section, rigid , min. 0.2 mm²Wire connection cross section, flexible
(input), max. 6 mm²Conductor cross-section, AWG/kcmil ,
min. 20Conductor cross-section, rigid , max. 10 mm²

Connection system PUSH IN

Connection data (output)

Conductor cross-section, AWG/kcmil ,
max. 8Conductor cross-section, flexible , max. 6 mm²Conductor cross-section, rigid , max. 10 mm²

Connection system PUSH IN

Conductor cross-section, AWG/kcmil ,
min. 20Conductor cross-section, flexible , min. 0.2 mm²Conductor cross-section, rigid , min. 0.2 mm²

Number of terminals 5 (+ + / - - -)

Connection data (signal)

Wire connection method PUSH IN

Wire cross-section, AWG/kcmil , min. 26

Wire cross-section, solid , min. 0.14 mm²

Wire cross-section, AWG/kcmil , max. 16

Wire cross-section, solid , max. 1.5 mm²

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

Yes

Status relay (max. load) Output voltage OK (30 V
DC / 1 A)

Approbations

Certificate no. (cULus) E258476

Institute (cULus) CULUS

Certificate no. (cULusEX) E470829

Institute (cULusEX) CULUSEX

Classifications

ETIM 6.0 EC002540

ETIM 8.0 EC002540

ECLASS 9.1 27-04-07-01

ECLASS 11.0 27-04-07-01

ETIM 7.0 EC002540

ECLASS 9.0 27-04-07-01

ECLASS 10.0 27-04-07-01

ECLASS 12.0 27-04-07-01

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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
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
User Documentation	Operating instruction
Catalogues	Catalogues in PDF-format
Brochures	Produkt Information PROTOP DE Produkt Information PROTOP EN

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Drawings

