

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



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.	<a href="#">2467000000</a>
Type	PRO TOP1 480W 24V 20A EX
GTIN (EAN)	4050118481907
Qty.	1 pc(s).

Creation date December 17, 2020 2:08:42 PM CET

Catalogue status 08.12.2020 / We reserve the right to make technical changes.

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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
Net weight	1,520 g	Width	68 mm
Width (inches)	2.677 inch		

**Temperatures**

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...70 °C
Humidity at operating temperature	5...100 % no condensation		

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**Input**

AC input voltage range	85...277 V AC	Connection system	Clamping yoke
DC input voltage range	80 ... 410 V DC	Frequency range AC	45...65 Hz
Input fuse (internal)	Yes	Inrush current	max. 5 A
Rated input voltage	100 - 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	Clamping yoke connection		
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	24 V		
Output voltage	22.5...28.8 V		
Output voltage, max.	28.8 V		
Output voltage, min.	22.5 V		
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	Degree of efficiency	93%
Derating	> 60°C (2.5% / 1°C)	Earth leakage current, max.	3.5 mA
Housing version	Metal, corrosion resistant	MTBF	> 1.000.000 h according IEC 1709 (SN29500)
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	-40 °C...70 °C
Power factor (approx.)	> 0.9	Short-circuit protection	Yes, internal
Surge voltage category	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	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**

Humidity at operating temperature	5...100 % no condensation	Insulation voltage, input/output	3.5 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 according to EN 62368-1, 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 mm <sup>2</sup>	Conductor cross-section, rigid, max.	6 mm <sup>2</sup>
Conductor cross-section, rigid, min.	0.18 mm <sup>2</sup>	Connection system	Clamping yoke
Wire connection cross section, flexible (input), max.	4 mm <sup>2</sup>		

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## Technical data

### Connection data (output)

Conductor cross-section, AWG/kcmil , max.	8	Conductor cross-section, AWG/kcmil , min.	24
Conductor cross-section, flexible , max.	6 mm <sup>2</sup>	Conductor cross-section, flexible , min.	0.5 mm <sup>2</sup>
Conductor cross-section, rigid , max.	6 mm <sup>2</sup>	Conductor cross-section, rigid , min.	0.2 mm <sup>2</sup>
Connection system	Clamping yoke connection	Number of terminals	5 (+ + / - -)

### Connection data (signal)

Wire connection method	Screw connection	Wire cross-section, AWG/kcmil , max.	16
Wire cross-section, AWG/kcmil , min.	28	Wire cross-section, solid , max.	1.5 mm <sup>2</sup>
Wire cross-section, solid , min.	0.2 mm <sup>2</sup>		

### 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)	

### Approvals

Certificate no. (cULus)	E258476	Certificate no. (cULusEX)	E470829
Institute (cULus)	CULUS	Institute (cULusEX)	CULUSEX

### 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	ECLASS 11.0	27-04-07-01

### Approvals

Approvals



ROHS	Conform
UL File Number Search	E258476

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**Technical data****Downloads**

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Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">Produkt Information PROTOP DE</a> <a href="#">Produkt Information PROTOP EN</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Operating instruction</a>

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**Data sheet**

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**Drawings**

