

**PRO TOPDC 24V/48V 10A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

PROtop DCDC converters are used for safe electrical isolation to avoid ground loops that can occur when supplying field devices in production or process plants. DCDC converters can be used on long supply lines to refresh the supply voltage. The integrated ORing MOSFET reliably decouples possible internal short circuits. It allows direct parallel connection of ACDC and DCDC converters of the PROtop series for redundancy purposes or to increase power. This makes the use of the otherwise common diode or redundancy modules obsolete. Furthermore, PROtop DCDC converters feature the powerful DCL technology – and their communication module allows full data transparency and remote control.

**General ordering data**

Version	DC/DC converter
Order No.	<a href="#">2627660000</a>
Type	PRO TOPDC 24V/48V 10A
GTIN (EAN)	4050118662306
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	75 mm	Width (inches)	2.953 inch
Net weight	1,746 g		

### Temperatures

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

### Input

Connection system	PUSH IN with actuator	
Current consumption in relation to the input voltage	Voltage type	DC
	Input voltage	24 V
	Input current	22 A
	Voltage type	DC
	Input voltage	18 V
	Input current	30 A
DC input voltage range	14 V...31.2 V (linear Derating from 18 V... 14 V, 60% rated load @ Uin 14 V)	
Input fuse (internal)	Yes	
Input voltage, max.	31.2 V	
Input voltage, min.	14 V	
Inrush Current Limitation	Yes	
Inrush current	max. 15 A	
Nominal power consumption	527.5 VA	
Rated input voltage	24 V DC	

### Output

Connection system	PUSH IN with actuator	
DCL - peak load reserve	Boost duration	15 ms
	Multiple of the rated current	500 %
	Boost duration	5 s
	Multiple of the rated current	200 %
Mains failure bridge-over time	Mains failure bridge-over time, min.	10 ms
	Input voltage type	DC
	Input voltage	24 V
	Output current	10 A
	Output voltage	48 V
Nominal output current for U <sub>nom</sub>	10 A @ 60 °C	
Output power	480 W	
Output voltage, max.	56 V	
Output voltage, min.	45 V	
Output voltage, note	adjustable with potentiometer or communication module	
Parallel connection option	yes, max 10	
Protection against inverse voltage	Yes	
Ramp-up time	≤ 100 ms	
Rated output voltage	48 V DC ± 1 %	

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### General data

Adjacent	No	Conformal coating	No
Degree of efficiency	91%	Derating	> 60°C (2.5% / 1°C)
Housing version	Metal, corrosion resistant	Power loss, idling	5 W
Protection degree	IP20	Short-circuit protection	Yes
Start-up	≥ -40 °C	Surge voltage category	I, II, III

### EMC / shock / vibration

Interference immunity test acc. to	EN 55032:2015, EN 55035:2017, EN 61000-6-1:2007, EN 61000-6-2:2005, EN 61000-6-3:2007/ A1:2011, EN 61000-6-4:2007/ A1:2011, IEC 61000-4-2, IEC 61000-4-3, DIN EN 61000-4-4, EN 61000-4-5:2005, EN 61000-4-6:2008, IEC 61000-4-8	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

Insulation voltage input / earth	1.41 kV	Insulation voltage output / earth	0.7 kV
Insulation voltage, input/output	1.41 kV	Protection class	III, with no ground connection, for SELV
Surge voltage category	I, II, 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 61558-2-17

### Connection data (input)

Conductor cross-section, AWG/kcmil , max.	8 AWG	Conductor cross-section, AWG/kcmil , min.	20 AWG
Conductor cross-section, flexible , min.	0.2 mm <sup>2</sup>	Conductor cross-section, rigid , max.	10 mm <sup>2</sup>
Conductor cross-section, rigid , min.	0.2 mm <sup>2</sup>	Connection system	PUSH IN with actuator
Number of terminals	2 for (+, -)	Screwdriver blade	0.6 x 3.5
Wire connection cross section, flexible (input), max.	6 mm <sup>2</sup>		

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## Connection data (output)

Conductor cross-section, AWG/kcmil ,  
max.

8 AWG

Conductor cross-section, flexible , max.

6 mm<sup>2</sup>

Conductor cross-section, rigid , max.

10 mm<sup>2</sup>

Connection system

PUSH IN with actuator

Screwdriver blade

0.6 x 3.5

Conductor cross-section, AWG/kcmil ,  
min.

20 AWG

Conductor cross-section, flexible , min.

0.2 mm<sup>2</sup>

Conductor cross-section, rigid , min.

0.2 mm<sup>2</sup>

Number of terminals

5 (+ + / - -)

## Connection data (signal)

Wire connection cross-section, flexible  
(signal), max.1.5 mm<sup>2</sup>

Wire connection method

PUSH IN

Wire cross-section, AWG/kcmil , min.

26 mm<sup>2</sup>

Wire cross-section, solid , min.

0.14 mm<sup>2</sup>Wire connection cross-section, flexible  
(signal), min.0.14 mm<sup>2</sup>

Wire cross-section, AWG/kcmil , max.

16

Wire cross-section, solid , max.

1.5 mm<sup>2</sup>

## Signalling

Floating contact

LED green/red

Green: Operation (fail-  
ure-free), Flashing green:  
advance warning I>90%,  
Green/red flashing: output  
switched off (switch-off  
mode), Flashing red: over-  
load/error

Status relay (max. load)

Yes

Output voltage OK (30 V  
DC / 1 A)

## Approbations

Certificate No. (CSA)

80043367

Institute (CSA)

CSA

## Classifications

ETIM 6.0

EC002540

ETIM 8.0

EC002540

ECLASS 9.0

27-04-07-01

ECLASS 10.0

27-04-07-01

ECLASS 12.0

27-04-07-01

ETIM 7.0

EC002540

ETIM 9.0

EC002540

ECLASS 9.1

27-04-07-01

ECLASS 11.0

27-04-07-01

ECLASS 13.0

27-04-90-02

## Environmental Product Compliance

REACH SVHC

Lead 7439-92-1

SCIP

6d8cdf22-8230-4af8-86c8-3558c716666d

RoHS Compliance Status

Compliant with exemption

RoHS Exemption (if applicable/known)

6c, 7a, 7cl

## Approvals

Approvals



CSAEX



ROHS

Conform

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### Downloads

Approval/Certificate/Document of Conformity	<a href="#">Lloyds Register Certificate</a> <a href="#">DNV Certificate.pdf</a> <a href="#">RINA Certificate.pdf</a> <a href="#">CSA 61010-1 Certificate.pdf</a> <a href="#">C1D2 Certificate.pdf</a> <a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
User Documentation	<a href="#">IO-Link Register Description PROtop</a> <a href="#">Instruction Sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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## Drawings

