

PRO TOP1 960W 24V 40A 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.	2467010000
Type	PRO TOP1 960W 24V 40A EX
GTIN (EAN)	4050118481914
Qty.	1 pc(s).

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	125 mm	Depth (inches)	4.921 inch
Height	130 mm	Height (inches)	5.118 inch
Width	139 mm	Width (inches)	5.472 inch
Net weight	3,382 g		

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
------------	----------------

Input

AC input voltage range	85...277 V AC	
Connection system	Clamping yoke	
Current consumption in relation to the input voltage	Voltage type	AC
	Input voltage	100 V
	Input current	12 A
	Voltage type	DC
	Input voltage	120 V
	Input current	12 A
DC input voltage range	80 ... 410 V DC	
Frequency range AC	45...65 Hz	
Input fuse (internal)	Yes	
Inrush current	max. 15 A	
Rated input voltage	100 - 240 V AC / 120 - 340 V DC	
Recommended back-up fuse	16 A, DI / 16 A, Char. B / 16 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	400 %	
	Boost duration	15 ms	
Mains failure bridge-over time	> 20 ms @ 115V AC/ 230 VAC		
Nominal output current for U _{nom}	40 A @ 60 °C		
Output power	960 W		
Output voltage	24 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		

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

General data

AC failure bridging time @ I_{nom}	> 20 ms @ 230 V AC / > 20 ms @ 115 V AC	Conformal coating	Yes
Degree of efficiency	94%	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	-40 °C...70 °C
Power factor (approx.)	> 0.9	Short-circuit protection	Yes, internal
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...100 % no condensation	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 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 ²	Conductor cross-section, rigid, max.	6 mm ²
Conductor cross-section, rigid, min.	0.18 mm ²	Connection system	Clamping yoke
Wire connection cross section, flexible (input), max.	4 mm ²		

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	6	Conductor cross-section, AWG/kcmil , min.	22
Conductor cross-section, flexible , max.	16 mm ²	Conductor cross-section, flexible , min.	6 mm ²
Conductor cross-section, rigid , max.	16 mm ²	Conductor cross-section, rigid , min.	0.2 mm ²
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 ²
Wire cross-section, solid , min.	0.2 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)	

Approvals

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

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		

Approvals

Approvals



ROHS	Conform
UL File Number Search	E258476

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	Produkt Information PROTOP DE Produkt Information PROTOP EN

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

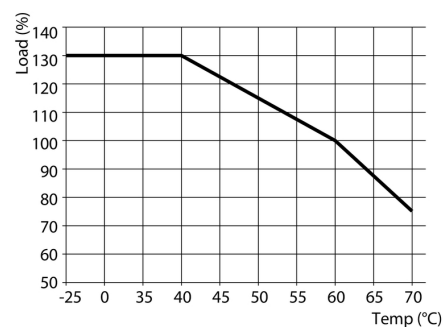
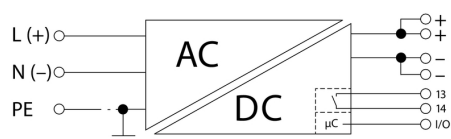
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Drawings



PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

W-Series



Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

Type	WEW 35/1 V0 GF SW	Version
Order No.	1478990000	W-Series, End bracket
GTIN (EAN)	4050118286892	
Qty.	50 pc(s).	
Type	WEW 35/2 V0 GF SW	Version
Order No.	1479000000	W-Series, End bracket
GTIN (EAN)	4050118286779	
Qty.	100 pc(s).	

Communication modules



The power supply products can also be used universally in conjunction with our Industrial Ethernet, lightning and surge protection, relays and semiconductor switches, and can be combined to form many complete solutions.

General ordering data

Type	PRO COM DISPLAY 7S	Version
Order No.	2466960000	Communication module
GTIN (EAN)	4050118481808	
Qty.	1 pc(s).	
Type	PRO COM CAN OPEN	Version
Order No.	2467320000	Communication module
GTIN (EAN)	4050118482225	
Qty.	1 pc(s).	
Type	PRO COM IO-LINK	Version
Order No.	2587360000	Communication module
GTIN (EAN)	4050118599152	
Qty.	1 pc(s).	
Type	PRO COM CAN OPEN EX	Version
Order No.	2467340000	Communication module
GTIN (EAN)	4050118481822	
Qty.	1 pc(s).	

PRO TOP1 960W 24V 40A EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Installation



Due to the wide range of variants with output voltages of 5, 12, 24, and 48 V and extensive international approvals, they are suitable for use in many applications. The power range extends from 35 W to 350 W. The individual adaptability makes PRO-PM the right choice for many standard machines.

General ordering data

Type	PRO TOP BRACKETS	Version
Order No.	2575900000	Mounting foot
GTIN (EAN)	4050118683059	
Qty.	1 pc(s).	
Type	CP A WALLADAPTER 45MM	
Order No.	1461850000	
GTIN (EAN)	4050118268010	
Qty.	1 pc(s).	
Type	MTA 45 MF	Version
Order No.	1251310000	Electronics housings, Mounting flange
GTIN (EAN)	4050118042719	
Qty.	1 pc(s).	

Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	SDIS SL 0.6X3.5X100	Version
Order No.	1274660000	Screwdriver, Mounting tool
GTIN (EAN)	4050118072631	
Qty.	1 pc(s).	