

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Weidmueller Interface GmbH & Co. KG
Address	Klingenbergstr. 26, Detmold, 32758, Germany
Type	Power Distribution Systems & Power Supplies
Description	Power supply with coupler refer to the Appendix for details
Trade Name	PRO TOP1, PRO TOP3 and PRO TOPDC
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 (for direct mounting only, not applicable for rail mounting) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2019.
Specified Standard	Manufacturer's specification IACS unified requirements E10 (Rev.8 Feb 2021)
Ratings	refer to the Appendix for details
Additional Tests	Low temperature test (-25°C/16h)
Other Conditions	Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.



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Type Approval Certificate

Type PRO TOP3 is suitable for use in general power distribution zone only.
Field bus communication interface PRO COM CAN OPEN is approved for data monitoring only.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: This certificate supersedes certificate number LR2105125TA issued on 06 January 2021 which is hereby cancelled.

The Design Appraisal Document HTS/ETS 41423-21/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPES

Part No.	PRO TOP1 Device Name WM	Output voltage Nominal (range)	Nominal output current @ Unom	Hardware version number HVN	Software version number SVN
2466910000	PRO TOP1 120W 12V 10A	12 V DC (11...15 V DC)	10 A @ 60 °C 7.5 A @ 70 °C	02.x.00	02.00.x
2467020000	PRO TOP1 120W 12V 10A EX			02.x.00	02.00.x
2569000000	PRO TOP1 120W 12V 10A F			02.x.00	02.00.x
2466850000	PRO TOP1 72W 24V 3A	24 V DC (22.5...28.8 V DC)	3 A @ 60 °C 2.25 A @ 70 °C	02.x.00	02.00.x
2466970000	PRO TOP1 72W 24V 3A CO			02.x.00	02.00.x
2568970000	PRO TOP1 72W 24V 3A F			02.x.00	02.00.x
2466870000	PRO TOP1 120W 24V 5A		5 A @ 60 °C 3.75 A @ 70 °C	02.x.00	02.00.x
2466980000	PRO TOP1 120W 24V 5A EX			02.x.00	02.00.x
2568980000	PRO TOP1 120W 24V 5A F			02.x.00	02.00.x
2466880000	PRO TOP1 240W 24V 10A		10 A @ 60 °C 7.5 A @ 70 °C	02.x.00	02.00.x
2466990000	PRO TOP1 240W 24V 10A EX			02.x.00	02.00.x
2568990000	PRO TOP1 240W 24V 10A F			02.x.00	02.00.x
2466890000	PRO TOP1 480W 24V 20A		20 A @ 60 °C 15A @ 70 °C	02.x.00	02.00.x
2467000000	PRO TOP1 480W 24V 20A EX			02.x.00	02.00.x
2466900000	PRO TOP1 960W 24V 40A		40 A @ 60 °C 30 A @ 70 °C	02.x.00	02.00.x
2467010000	PRO TOP1 960W 24V 40A EX			03.x.00	02.00.x
2467030000	PRO TOP1 480W 48V 10A	48 V DC (45...56 V DC)	10 A @ 60 °C 7.5 A @ 70 °C	02.x.00	02.00.x
2467040000	PRO TOP1 480W 48V 10A EX			02.x.00	02.00.x
2466920000	PRO TOP1 960W 48V 20A		20 A @ 60 °C 15A @ 70 °C	02.x.00	02.00.x
2467050000	PRO TOP1 960W 48V 20A CO			03.x.00	02.00.x

Part No.	PRO TOP3 Device Name WM	Nominal output voltage (adjustable via potentiometer)	Nominal output current @ Unom	HVN	SVN
2467060000	PRO TOP3 120W 24V 5A	24 V DC (22.5...28.8 V DC)	5 A @ 60 °C	01.x.00	02.00.x
2467070000	PRO TOP3 120W 24V 5A CO		3.75 A @ 70°C	01.x.00	02.00.x
2467080000	PRO TOP3 240W 24V 10A		10 A @ 60 °C	01.x.00	02.00.x
2467090000	PRO TOP3 240W 24V 10A CO		7.5 A @ 70°C	01.x.00	02.00.x
2467100000	PRO TOP3 480W 24V 20A		20 A @ 60 °C	01.x.00	02.00.x
2467110000	PRO TOP3 480W 24V 20A CO		15 A @ 70 °C	01.x.00	02.00.x
2467120000	PRO TOP3 960W 24V 40A		40 A @ 60 °C	01.x.00	02.00.x
2467130000	PRO TOP3 960W 24V 40A CO		30 A @ 70 °C	01.x.00	02.00.x
2467140000	PRO TOP3 960W 36V 26.6A	36 V DC (33...44 V DC)	26,6 A @ 60 °C 20 A @ 70 °C	01.x.00	02.00.x
2467150000	PRO TOP3 480W 48V 10A	48 V DC (45...56 V DC)	10 A @ 60 °C	01.x.00	02.00.x
2467160000	PRO TOP3 480W 48V 10A CO		7.5 A @ 70°C	01.x.00	02.00.x
2467170000	PRO TOP3 960W 48V 20A		20 A @ 60 °C	01.x.00	02.00.x
2467180000	PRO TOP3 960W 48V 20A CO		15 A @ 70 °C	01.x.00	02.00.x

Part No.	PRO TOPDC Device Name WM	Output voltage Nominal (adjustable via potentiometer)	Nominal output current @ Unom	HVN	SVN
2627650000	PRO TOPDC 120W 24V 5A	24 V DC (22.5...28.8 V DC)	5 A @ 60 °C	01.x.00	01.00.x
2467290000	PRO TOPDC 120W 24V 5A EX		3.75 A @ 70°C	01.x.00	01.00.x
2627640000	PRO TOPDC 240W 24V 10A		10 A @ 60 °C	01.x.00	01.00.x
2467300000	PRO TOPDC 240W 24V 10A EX		7.5 A @ 70°C	01.x.00	01.00.x
2627630000	PRO TOPDC 480W 24V 20A		20 A @ 60 °C 15 A @ 70°C	01.x.00	01.00.x
2467310000	PRO TOPDC 480W 24V/24V 20 A EX		20 A @ 60°C 15 A @ 70°C	01.x.00	01.00.x
2627660000	PRO TOPDC 480W 24V/48V 10A	48 V DC (45...56 V DC)	10 A @ 60°C 7.5 A @ 70°C	01.x.00	01.00.x

Accessories:

PRO COM CAN OPEN (Ex): CANopen field bus communication interface; HVN 01.00.x / SVN 01.00.x (marine approved for data monitoring only; PRO TOP1 and PRO TOP3)

PRO TOP BRACKETS

RATINGS**PRO TOP1**

Nominal input voltage: 100...240 V AC / 50...60 Hz
Nominal voltage range: 85...277 V AC / 45...65 Hz
Status relay: 30 V AC/DC, 1 A
I/O connection: 0 V / 24 V
Nominal output voltage: 12 V DC, 24 V DC or 48 V DC (depending on model), adjustable
Nominal output current: 3A, 5A, 10A, 20A or 40A (depending on model)
Communication interface (optional): PRO COM CAN OPEN (Ex) device
Protection against internal short circuits due to integrated ORing-MOSFET technology
Direct parallel connection for redundancy or power increase (up to 10 power supply units)
DIP switches for selection of operating modes: S/P – single/parallel operation
C/S – continuous/shut-off operation
Mounting: DIN mounting rail
Fixed mounting by use of additional brackets (accessories)

PRO TOP3

Nominal input voltage: 400...500 V AC / 50...60 Hz
Nominal voltage range: 325...575 V AC / 45...65 Hz
Nominal output voltage: 24 V DC, 36 V DC or 48 V DC (depending on model), adjustable
Nominal output current: 5A, 10A, 20A, 26,6A or 40A (depending on model)
Status relay: 30 V AC/DC, 1 A
I/O connection: 0 V / 24 V
Communication interface (optional): PRO COM CAN OPEN (Ex) device
Protection against internal short circuits due to integrated ORing-MOSFET technology
Direct parallel connection for redundancy or power increase (up to 10 power supply units)
DIP switches for selection of operating modes: S/P – single/parallel operation
C/S – continuous/shut-off operation
Mounting: DIN mounting rail
Fixed mounting by use of additional brackets (accessories)

PRO TOPDC

Nominal input voltage: 24 V DC
Nominal voltage range: 18...31.2 V DC
14...31.2 V DC (Linear derating from 18V to 14 V: 10% / 1V)

Nominal output voltage: 24 V DC or 48 V DC, (depending on model), adjustable
 Nominal output current: 5A, 10A or 20A (depending on model)
 Status relay: 30 V AC/DC, 1A
 I/O connection: 0 V / 24 V
 Protection against internal short circuits due to integrated ORing-MOSFET technology
 Direct parallel connection for redundancy or power increase (up to 10 power supply units)
 All power supplies (PRO TOP1, PRO TOP3, PRO TOPDC) are able to operate parallel on output connection with any power supplies of the PRO TOP1, PRO TOP3, PRO TOPDC series.
 DIP switches for selection of operating modes: S/P – single/parallel operation,
 C/S – continuous/shut-off operation
 Mounting: DIN mounting rail
 Fixed mounting by use of additional brackets (accessories)

Model	Compass Safe Distance acc. to IEC 60945 (equipped with PRO COM CAN OPEN)	
	Standard compass	Steering compass
PRO TOP1 72W 24V 3A Standard, F, CO	0.7m	0.5m
PRO TOP1 120W 12V 10A Standard, F, Ex	0.75m	0.5m
PRO TOP1 120W 24V 5A Standard, F, Ex	0.7m	0.45m
PRO TOP1 240W 24V 10A Standard, F, Ex	0.7m	0.45m
PRO TOP1 480W 24V 20A Standard, F, Ex	0.7m	0.45m
PRO TOP1 480W 48V 10A Standard, F, Ex	0.9m	0.45m
PRO TOP1 960W 48V 20A Standard	0.8m	0.55m
PRO TOP1 960W 24V 40A Standard	0.9m	0.6m
PRO TOP1 960W 48V 20A CO	1.0m	0.6m
PRO TOP1 960W 24V 40A Ex	1.9m	0.9m
PRO TOPDC 120W 24V 5A Standard, EX	1.00m	0.6m
PRO TOPDC 240W 24V 10A Standard, EX	1.00m	0.6m
PRO TOPDC 480W 24V 20A	1.00m	0.7m
PRO TOPDC 480W 24V/24V 20 A EX	1.00m	0.7m
PRO TOPDC 480W 24V/48V 10A	1.15m	0.8m