

Datasheet

connectPower PROmax

Single- and three-phase switched-mode power supply units

NEW



The new PROmax power supplies offer a wide range of robust solutions for demanding application requirements.

Designed for high performance and durability, PROmax switch-mode power supply units reliably provide continuous overload currents of up to 120%, or supply short-term peak loads up to 300% of nominal power.

Features include high output power boost capability and maximum power within a wide operating temperature range. PROmax switch-mode power supply units are suited for use in most global applications, and their compact size offers valuable space saving.

The PROmax power supplies, together with Weidmüller's uninterruptible DC UPSs, diode modules, and/or CAP modules, offer users the ability to tailor solutions for their unique and demanding power requirements.

Features:

- Small housing: 32 mm – 140 mm widths
- MTBF: >500,000 hours
- Wide temperature range: -25°C ...+70°C (Derating >60°C); startup at -40°C and above
- 16 variants offer application flexibility:
 - single-phase input: 24 V: 3...40 A, 5 V: 14 A, 12 V: 6...10 A, 48 V: 5...20 A
 - three-phase input : 24 V: 5...40 A
- Wide input ranges: 85...277 V AC/320 ...575 V AC, 80...370 V DC/450...800 V DC
- External monitoring with relay (Change over contact)
- Capable of parallel and series output connections
- Bi-color LED status indicator
- International approvals:
 - cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class 1 Div2, RCM, Gost
- Shock and vibration resistant
- Powerful output surge capability: 120% min.1 min (permanent < +45°C), 150% min 4s, 300% min 2ms
- Installation manual available via QR code

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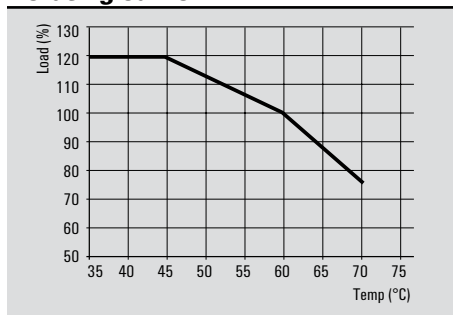
Weidmüller, United States

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Derating curve



Max. limiting average on state current [A]

Typ\Temp.	45°C	50°C	55°C	60°C	65°C	70°C
1ph 24 V / 3 A	3.6	3.3	3.2	3	2.6	2.2
1ph 24 V / 5 A	6	5.7	5.4	5	4.4	3.8
1ph 24 V / 7.5 A	9	8.5	8	7.5	6.6	5.6
1ph 24 V / 10 A	12	11.3	10.7	10	8.8	7.5
1ph 24 V / 20 A	24	22.6	21.4	20	17.6	15
1ph 24 V / 40 A	48	45.2	42.8	40	35.2	30
1ph 5 V / 14 A	16.8	15.8	15	14	12.3	10.5
1ph 12 V / 6 A	7.2	6.8	6.4	6	5.3	4.5
1ph 12 V / 10 A	12	11.3	10.7	10	8.8	7.5
1ph 48 V / 5 A	6	5.7	5.4	5	4.4	3.8
1ph 48 V / 10 A	12	11.3	10.7	10	8.8	7.5
1ph 48 V / 20 A	24	22.6	21.4	20	17.6	15
3ph 24 V / 5 A	6	5.7	5.4	5	4.4	3.8
3ph 24 V / 10 A	12	11.3	10.7	10	8.8	7.5
3ph 24 V / 20 A	24	22.6	21.4	20	17.6	15
3ph 24 V / 40 A	48	45.2	42.8	40	35.2	30

Technical data

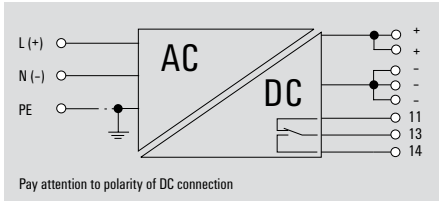
General technical data	
Current limiting	> 120% I _N
Insulation voltage input ground	3.5 kV
Insulation voltage output ground	0.5 kV
Insulation voltage input/output	4 kV
Earth leakage current	3.5 mA
Series switching capability	Yes
Ambient temp. operating / storage temperature / Start up	-25°C...+70°C / -40°C...+85°C / ≥ -40°C
Humidity at operating temperature	5...95%, no condensation
Class of protection / Pollution degree	I / 2
MTBF	>500,000h (25°C, IEC 61709)
Housing version	Metal, corrosion resistant
Status indication	LED red/green and relay (≥21.6 V DC LED green, relay on/ ≤20.6 LED red, relay off)
Mounting position, installation notice	Horizontal on TS35 mounting rail, with 50 mm of clearance at top and bottom for air circulation. Can be mounted side by side with no space in between.
EMC / shock / vibration	
Noise immunity tests acc. to	EN55024; EN55022; IEC61000-3-2,-3; IEC61000-4-2,-3,-4,-5,-6,-8,-11
Resistance against vibration and shock	2.3 g / 30 g in all directions
Electrical safety (applied standards)	
Electrical equipment of machines	Acc. to EN60204
Safety transformers for switched-mode power units	Acc. to EN61558-2-16
Machinery with electronic equipment	Acc. to EN50178 / VDE0160
Safety extra-low voltage	SELV acc. to EN60950, PELV acc. to EN60204, IEC61204
Protective separation / protection against electrical shock	VDE0100-410 / acc. to DIN57100-410
Protection against dangerous shock currents	Acc. to VDE0106-101
Additional Information on Major North American Approvals	
cULus Listed file E258476 according to UL508 and CSA C22.2 No. 107.1; cURus file E255651 according to UL60950-1 and CSA C22.2 No. 60950-1; cULus C1D2 file E470829 according to ISA12.12.01 and CSA C22.2 No. 213	

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PRO MAX 72W 24V 3A



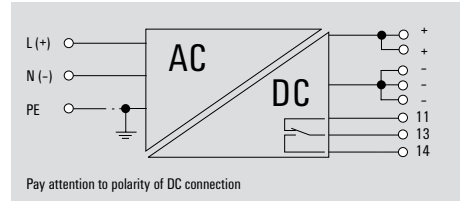
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PRO MAX 120W 24V 5A



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Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 1.5 A @ 115 V AC
DC current consumption	1 A @ 370 V DC / 1.5 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A
Recommended back-up fuse	6 A, Char. B, circuit breaker, 3 - 5 A Char. C, circuit breaker
Output	
Rated output voltage	24 V DC \pm 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{VSS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	3 A @ 60°C
Continuous output current @ U _{Rated}	3.6 A @ 45°C, 2.25 A @ 70°C
Power boost @ U _{Rated}	3.6 A (1 min), 4.5 A (4s)
Pulsed current capacity @ U _{Rated}	9 A (2ms)
General data	
Degree of efficiency	90%
Power factor (approx.)	> 0.90 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 32 / 130 mm
Weight	0.6 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Ordering data

Type	Qty.	Part No.
PRO MAX 72W 24V 3A	1	1478100000

Note: The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 2.5 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 2.5 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A
Recommended back-up fuse	6 A, Char. B, circuit breaker, 6 A, char. C circuit breaker
Output	
Rated output voltage	24 V DC \pm 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{VSS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	5 A @ 60°C
Continuous output current @ U _{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
Power boost @ U _{Rated}	6 A (1 min), 7.5 A (4s)
Pulsed current capacity @ U _{Rated}	15 A (2ms)
General data	
Degree of efficiency	90%
Power factor (approx.)	> 0.90 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm
Weight	0.8 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Type	Qty.	Part No.
PRO MAX 120W 24V 5A	1	1478110000

Note: The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Metal Din-Rail Mounting Foot

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 2.5 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 2.5 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A
Recommended back-up fuse	6 A, Char. B, circuit breaker, 6 A, char. C circuit breaker
Output	
Rated output voltage	24 V DC \pm 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{VSS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	5 A @ 60°C
Continuous output current @ U _{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
Power boost @ U _{Rated}	6 A (1 min), 7.5 A (4s)
Pulsed current capacity @ U _{Rated}	15 A (2ms)
General data	
Degree of efficiency	90%
Power factor (approx.)	> 0.90 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm
Weight	0.8 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Type	Qty.	Part No.
PRO MAX 120W 24V 5A	1	1478110000

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Metal Din-Rail Mounting Foot

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PRO MAX 180W 24V 7.5A

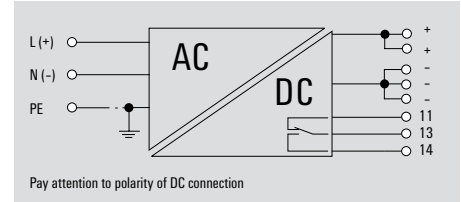
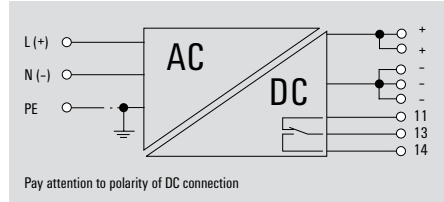
PRO MAX 240W 24V 10A



Similar to illustration



Similar to illustration



Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 2 A @ 115 V AC
DC current consumption	1 A @ 370 V DC / 2 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A
Recommended back-up fuse	10 A, char. B circuit breaker, 6...8 A, char. C circuit breaker
Output	
Rated output voltage	24 V DC ± 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	7.5 A @ 60°C
Continuous output current @ U _{Rated}	9 A @ 45°C, 5.6 A @ 70°C
Power boost @ U _{Rated}	9 A (1 min), 11.25 A (4s)
Pulsed current capacity @ U _{Rated}	22.5 A (2ms)
General data	
Degree of efficiency	91%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 50 / 130 mm
Weight	0.9 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	7.5 A @ 60°C
AC current consumption	1 A @ 230 V AC / 2 A @ 115 V AC	Continuous output current @ U _{Rated}	9 A @ 45°C, 5.6 A @ 70°C
DC current consumption	1 A @ 370 V DC / 2 A @ 120 V DC	Power boost @ U _{Rated}	9 A (1 min), 11.25 A (4s)
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	22.5 A (2ms)
Recommended back-up fuse	10 A, char. B circuit breaker, 6...8 A, char. C circuit breaker	Degree of efficiency	91%
Output voltage	22.5...29.5 V (adjustable via potentiometer)	Power factor (approx.)	> 0.95 @ 230 V AC
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load	AC failure bridging time @ I _{Nom}	min. 20 ms
Rated (nominal) output current @ U _{Nom}	7.5 A @ 60°C	Protection against reverse voltages from the load	30...35 V DC
Continuous output current @ U _{Rated}	9 A @ 45°C, 5.6 A @ 70°C	Parallel connection option	yes, max. 5
Power boost @ U _{Rated}	9 A (1 min), 11.25 A (4s)	Depth x width x height	125 / 50 / 130 mm
Pulsed current capacity @ U _{Rated}	22.5 A (2ms)	Weight	0.9 kg
Degree of efficiency	91%	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Power factor (approx.)	> 0.95 @ 230 V AC	Connection system	Screw connection
AC failure bridging time @ I _{Nom}	min. 20 ms	Number of terminals	3 for L/N/PE
Protection against reverse voltages from the load	30...35 V DC	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Parallel connection option	yes, max. 5	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Depth x width x height	125 / 50 / 130 mm	Wire cross-section, AWG/kcmil min/max	26 / 10
Weight	0.9 kg	Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	10 A @ 60°C
AC current consumption	1.5 A @ 230 V AC / 3 A @ 115 V AC	Continuous output current @ U _{Rated}	12 A @ 45°C, 7.5 A @ 70°C
DC current consumption	1.5 A @ 370 V DC / 3 A @ 120 V DC	Power boost @ U _{Rated}	12 A (1 min), 15 A (4s)
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	30 A (2ms)
Recommended back-up fuse	10 A, char. B circuit breaker, 6...8 A, char. C circuit breaker	Degree of efficiency	91%
Output voltage	22.5...29.5 V (adjustable via potentiometer)	Power factor (approx.)	> 0.95 @ 230 V AC
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load	AC failure bridging time @ I _{Nom}	min. 20 ms
Rated (nominal) output current @ U _{Nom}	10 A @ 60°C	Protection against reverse voltages from the load	30...35 V DC
Continuous output current @ U _{Rated}	12 A @ 45°C, 7.5 A @ 70°C	Parallel connection option	yes, max. 5
Power boost @ U _{Rated}	12 A (1 min), 15 A (4s)	Depth x width x height	125 / 60 / 130 mm
Pulsed current capacity @ U _{Rated}	30 A (2ms)	Weight	1 kg
Degree of efficiency	91%	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Power factor (approx.)	> 0.95 @ 230 V AC	Connection system	Screw connection
AC failure bridging time @ I _{Nom}	min. 20 ms	Number of terminals	3 for L/N/PE
Protection against reverse voltages from the load	30...35 V DC	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Parallel connection option	yes, max. 5	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Depth x width x height	125 / 60 / 130 mm	Wire cross-section, AWG/kcmil min/max	26 / 10
Weight	1 kg	Screwdriver blade	0.8 x 4.0, PZ 1

Ordering data

Type	Qty.	Part No.
PRO MAX 180W 24V 7.5A	1	1478120000

Type	Qty.	Part No.
PRO MAX 180W 24V 7.5A	1	1478120000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Type	Qty.	Part No.
PRO MAX 240W 24V 10A	1	1478130000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

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PRO MAX 480W 24V 20A

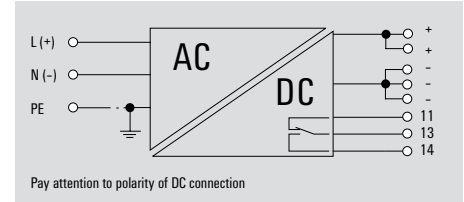
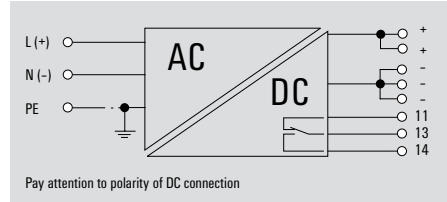
PRO MAX 960W 24V 40A



Similar to illustration



Similar to illustration



Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	2.3 A @ 230 V AC / 4.8 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 4.8 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A
Recommended back-up fuse	16 A, Char. B circuit breaker, 10 A, char. C circuit breaker
Output	
Rated output voltage	24 V DC ± 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	20 A @ 60°C
Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C
Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)
Pulsed current capacity @ U _{Rated}	60 A (2ms)
General data	
Degree of efficiency	91.5%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 3
Depth x width x height	150 / 90 / 130 mm
Weight	1.95 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	20 A @ 60°C
AC current consumption	2.3 A @ 230 V AC / 4.8 A @ 115 V AC	Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C
DC current consumption	1.5 A @ 370 V DC / 4.8 A @ 120 V DC	Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)
Input fuse (internal) / Inrush current	T3.15 A/250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	60 A (2ms)
Recommended back-up fuse	16 A, Char. B circuit breaker, 10 A, char. C circuit breaker	Degree of efficiency	91.5%
		Power factor (approx.)	> 0.95 @ 230 V AC
		AC failure bridging time @ I _{Nom}	min. 20 ms
		Protection against reverse voltages from the load	30...35 V DC
		Parallel connection option	yes, max. 3
		Depth x width x height	150 / 90 / 130 mm
		Weight	1.95 kg
		Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
		Connection system	Screw connection
		Number of terminals	3 for L/N/PE
		Wire cross-section, rigid min/max	0.18 / 6 mm ²
		Wire cross-section, flexible min/max	0.22 / 4 mm ²
		Wire cross-section, AWG/kcmil min/max	26 / 10
		Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	40 A @ 60°C
AC current consumption	4.52 A @ 230 V AC / 10 A @ 115 V AC	Continuous output current @ U _{Rated}	48 A @ 45°C, 30 A @ 70°C
DC current consumption	2.8 A @ 370 V DC / 10 A @ 120 V DC	Power boost @ U _{Rated}	48 A (1 min), 60 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	120 A (2ms)
Recommended back-up fuse	20 A, char. B circuit breaker, 16 A, Char. C circuit breaker	Degree of efficiency	92.5%
		Power factor (approx.)	> 0.95 @ 230 V AC
		AC failure bridging time @ I _{Nom}	min. 20 ms
		Protection against reverse voltages from the load	30...35 V DC
		Parallel connection option	yes, max. 3
		Depth x width x height	150 / 140 / 130 mm
		Weight	3.4 kg
		Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
		Connection system	Screw connection
		Number of terminals	3 for L/N/PE
		Wire cross-section, rigid min/max	0.18 / 6 mm ²
		Wire cross-section, flexible min/max	0.22 / 4 mm ²
		Wire cross-section, AWG/kcmil min/max	26 / 10
		Screwdriver blade	0.8 x 4.0, PZ 1

Ordering data

Type	Qty.	Part No.
PRO MAX 480W 24V 20A	1	1478140000

Type	Qty.	Part No.
PRO MAX 480W 24V 20A	1	1478140000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Type	Qty.	Part No.
PRO MAX 960W 24V 40A	1	1478150000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

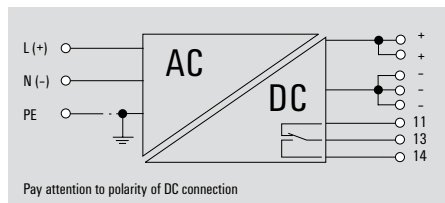
Accessories

connectPower PROmax

PRO MAX 70W 5V 14A



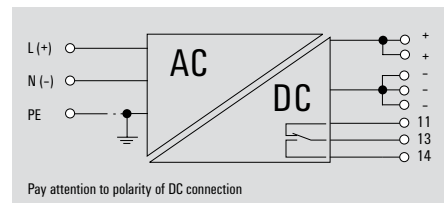
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PRO MAX 72W 12V 6A



Similar
to illustration



Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 1.5 A @ 115 V AC
DC current consumption	1 A @ 370 V DC / 1.5 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	6 A, Char. B, circuit breaker, 3 - 5 A Char. C, circuit breaker
Output	
Rated output voltage	5 V DC
Output voltage	4.5...7 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	14 A @ 60°C
Continuous output current @ U _{Rated}	16.8 A @ 45°C, 10.5 A @ 70°C
Power boost @ U _{Rated}	16.8 A (1 min), 21 A (4s)
Pulsed current capacity @ U _{Rated}	42 A (2ms)
General data	
Degree of efficiency	86%
Power factor (approx.)	> 0.90 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	> 7.5 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 32 / 130 mm
Weight	0.6 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	12 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	10...15 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	6 A @ 60°C
AC current consumption	1 A @ 230 V AC / 1.5 A @ 115 V AC	Continuous output current @ U _{Rated}	7.2 A @ 45°C, 4.5 A @ 70°C
DC current consumption	1 A @ 370 V DC / 1.5 A @ 120 V DC	Power boost @ U _{Rated}	7.2 A (1 min), 9 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	18 A (2ms)
Recommended back-up fuse	6 A, Char. B, circuit breaker, 3 - 5 A Char. C, circuit breaker	Degree of efficiency	89%
Output voltage	5 V DC	Power factor (approx.)	> 0.90 @ 230 V AC
Output voltage	4.5...7 V (adjustable via potentiometer)	AC failure bridging time @ I _{Nom}	min. 20 ms
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load	Protection against reverse voltages from the load	> 18 V DC
Rated (nominal) output current @ U _{Nom}	14 A @ 60°C	Parallel connection option	yes, max. 5
Continuous output current @ U _{Rated}	16.8 A @ 45°C, 10.5 A @ 70°C	Depth x width x height	125 / 32 / 130 mm
Power boost @ U _{Rated}	16.8 A (1 min), 21 A (4s)	Weight	0.6 kg
Pulsed current capacity @ U _{Rated}	42 A (2ms)	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Degree of efficiency	86%	Connection system	Screw connection
Power factor (approx.)	> 0.90 @ 230 V AC	Number of terminals	3 for L/N/PE
AC failure bridging time @ I _{Nom}	min. 20 ms	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Protection against reverse voltages from the load	> 7.5 V DC	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Parallel connection option	yes, max. 5	Wire cross-section, AWG/kcmil min/max	26 / 10
Depth x width x height	125 / 32 / 130 mm	Screwdriver blade	0.8 x 4.0, PZ 1
Weight	0.6 kg		

Input		Output	
Rated input voltage	100...240 V AC (wide-range input)	Rated output voltage	12 V DC ± 1%
Input voltage range AC	85...277 V AC	Output voltage	10...15 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
DC input voltage range	80...370 V DC	Rated (nominal) output current @ U _{Nom}	6 A @ 60°C
AC current consumption	1 A @ 230 V AC / 1.5 A @ 115 V AC	Continuous output current @ U _{Rated}	7.2 A @ 45°C, 4.5 A @ 70°C
DC current consumption	1 A @ 370 V DC / 1.5 A @ 120 V DC	Power boost @ U _{Rated}	7.2 A (1 min), 9 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	18 A (2ms)
Recommended back-up fuse	6 A, Char. B, circuit breaker, 3 - 5 A Char. C, circuit breaker	Degree of efficiency	89%
Output voltage	5 V DC	Power factor (approx.)	> 0.90 @ 230 V AC
Output voltage	4.5...7 V (adjustable via potentiometer)	AC failure bridging time @ I _{Nom}	min. 20 ms
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load	Protection against reverse voltages from the load	> 18 V DC
Rated (nominal) output current @ U _{Nom}	14 A @ 60°C	Parallel connection option	yes, max. 5
Continuous output current @ U _{Rated}	16.8 A @ 45°C, 10.5 A @ 70°C	Depth x width x height	125 / 32 / 130 mm
Power boost @ U _{Rated}	16.8 A (1 min), 21 A (4s)	Weight	0.6 kg
Pulsed current capacity @ U _{Rated}	42 A (2ms)	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Degree of efficiency	86%	Connection system	Screw connection
Power factor (approx.)	> 0.90 @ 230 V AC	Number of terminals	3 for L/N/PE
AC failure bridging time @ I _{Nom}	min. 20 ms	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Protection against reverse voltages from the load	> 7.5 V DC	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Parallel connection option	yes, max. 5	Wire cross-section, AWG/kcmil min/max	26 / 10
Depth x width x height	125 / 32 / 130 mm	Screwdriver blade	0.8 x 4.0, PZ 1
Weight	0.6 kg		

Ordering data

Type	Qty.	Part No.
PRO MAX 70W 5V 14A	1	1478210000

Note:

Type	Qty.	Part No.
PRO MAX 70W 5V 14A	1	1478210000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Type	Qty.	Part No.
PRO MAX 72W 12V 6A	1	1478220000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Metal Din-Rail Mounting Foot

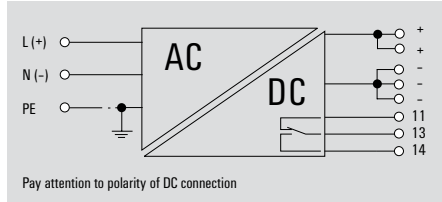
Metal Din-Rail Mounting Foot

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PRO MAX 120W 12V 10A



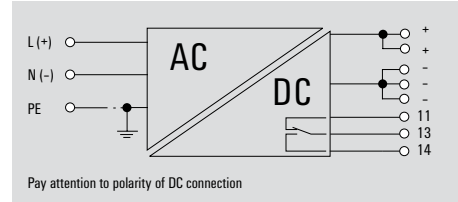
Similar
to illustration



PRO MAX 240W 48V 5A



Similar
to illustration



Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1 A @ 230 V AC / 2.5 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 2.5 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	6 A, Char. B, circuit breaker, 6 A, char. C circuit breaker
Output	
Rated output voltage	12 V DC \pm 1%
Output voltage	10...15 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U_{Nennr} , Full Load
Rated (nominal) output current @ U_{Nom}	10 A @ 60°C
Continuous output current @ U_{Rated}	12 A @ 45°C, 7.5 A @ 70°C
Power boost @ U_{Rated}	12 A (1 min), 15 A (4s)
Pulsed current capacity @ U_{Rated}	30 A (2ms)
General data	
Degree of efficiency	89%
Power factor (approx.)	> 0.90 @ 230 V AC
AC failure bridging time @ I_{Nom}	min. 20 ms
Protection against reverse voltages from the load	> 18 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm
Weight	0.8 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Ordering data

Type	Qty.	Part No.
PRO MAX 120W 12V 10A	1	1478230000

Note: The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1.5 A @ 230 V AC / 3 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 3 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	10 A, char. B circuit breaker, 6...8 A, char. C circuit breaker
Output	
Rated output voltage	48 V DC \pm 1%
Output voltage	30...56 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U_{Nennr} , Full Load
Rated (nominal) output current @ U_{Nom}	5 A @ 60°C
Continuous output current @ U_{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
Power boost @ U_{Rated}	5 A (1 min), 7.5 A (4s)
Pulsed current capacity @ U_{Rated}	15 A (2ms)
General data	
Degree of efficiency	91%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I_{Nom}	min. 20 ms
Protection against reverse voltages from the load	58 ... 65 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 60 / 130 mm
Weight	1 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Type	Qty.	Part No.
PRO MAX 240W 48V 5A	1	1478240000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Metal Din-Rail Mounting Foot

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	1.5 A @ 230 V AC / 3 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 3 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	10 A, char. B circuit breaker, 6...8 A, char. C circuit breaker
Output	
Rated output voltage	48 V DC \pm 1%
Output voltage	30...56 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U_{Nennr} , Full Load
Rated (nominal) output current @ U_{Nom}	5 A @ 60°C
Continuous output current @ U_{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
Power boost @ U_{Rated}	5 A (1 min), 7.5 A (4s)
Pulsed current capacity @ U_{Rated}	15 A (2ms)
General data	
Degree of efficiency	91%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I_{Nom}	min. 20 ms
Protection against reverse voltages from the load	58 ... 65 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 60 / 130 mm
Weight	1 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6
Wire cross-section, flexible min/max	0.22 / 4
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Type	Qty.	Part No.
PRO MAX 240W 48V 5A	1	1478240000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Metal Din-Rail Mounting Foot

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PRO MAX 480W 48V 10A

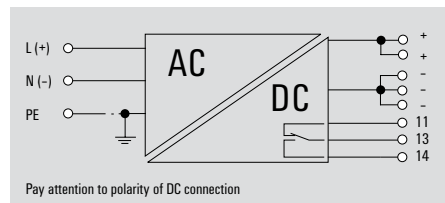
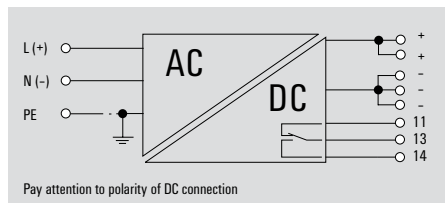
PRO MAX 960W 48V 20A



Similar to illustration



Similar to illustration



Technical data

Input	
Rated input voltage	100...240 V AC (wide-range input)
Input voltage range AC	85...277 V AC
Frequency range AC	45...65 Hz
DC input voltage range	80...370 V DC
AC current consumption	2.3 A @ 230 V AC / 4.8 A @ 115 V AC
DC current consumption	1.5 A @ 370 V DC / 4.8 A @ 120 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	16 A, Char. B circuit breaker, 10 A, char. C circuit breaker

Rated output voltage	48 V DC ± 1%
Output voltage	30...56 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	10 A @ 60°C
Continuous output current @ U _{Rated}	12 A @ 45°C, 7.5 A @ 70°C
Power boost @ U _{Rated}	12 A (1 min), 15 A (4s)
Pulsed current capacity @ U _{Rated}	60 A (2ms)

Rated output voltage	48 V DC ± 1%
Output voltage	30...56 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	20 A @ 60°C
Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C
Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)
Pulsed current capacity @ U _{Rated}	60 A (2ms)

Output	
Rated output voltage	48 V DC ± 1%
Output voltage	30...56 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mV _{SS} @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	10 A @ 60°C
Continuous output current @ U _{Rated}	12 A @ 45°C, 7.5 A @ 70°C
Power boost @ U _{Rated}	12 A (1 min), 15 A (4s)
Pulsed current capacity @ U _{Rated}	60 A (2ms)

General data	
Degree of efficiency	91.5%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	58 ... 65 V DC
Parallel connection option	yes, max. 5
Depth x width x height	150 / 90 / 130 mm
Weight	1.95 kg

General data	
Degree of efficiency	92.5%
Power factor (approx.)	> 0.95 @ 230 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	58 ... 65 V DC
Parallel connection option	yes, max. 5
Depth x width x height	150 / 140 / 130 mm
Weight	3.4 kg

Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost

Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost

Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost

Connection data	
Connection system	Screw connection
Number of terminals	3 for L/N/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Input	Output
Screw connection	Screw connection
3 for L/N/PE	8 (++,--,11,13,14)
0.18 / 6	0.18 / 6
0.22 / 4	0.22 / 4
26 / 10	26 / 10
0.8 x 4.0, PZ 1	0.8 x 4.0, PZ 1

Input	Output
Screw connection	Screw connection
3 for L/N/PE	8 (++,--,11,13,14)
0.18 / 6	0.5 / 16
0.22 / 4	0.5 / 16
26 / 10	22 / 8
0.8 x 4.0, PZ 1	1.0 x 5.5

Ordering data

Type	Qty.	Part No.
PRO MAX 480W 48V 10A	1	1478250000

Type	Qty.	Part No.
PRO MAX 480W 48V 10A	1	1478250000

Type	Qty.	Part No.
PRO MAX 960W 48V 20A	1	1478270000

Note:

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Metal Din-Rail Mounting Foot

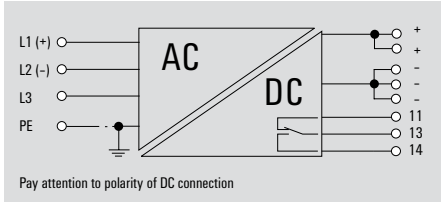
Metal Din-Rail Mounting Foot

**connectPower
PROmax**

PRO MAX3 120W 24V 5A



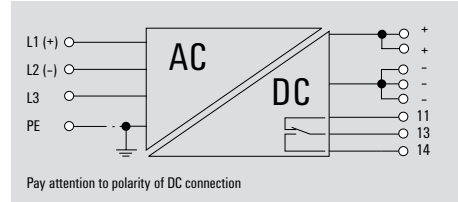
Similar to illustration



PRO MAX3 240W 24V 10A



Similar to illustration



Technical data

Input	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC
Frequency range AC	45...65 Hz
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)
AC current consumption	0.28 A @ 3*500 V AC / 0.3 A @ 3*400 V AC
DC current consumption	0.18 A @ 800 V DC / 0.3 A @ 450 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	2...3 A, char. C circuit breaker
Output	
Rated output voltage	24 V DC ± 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	5 A @ 60°C
Continuous output current @ U _{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
Power boost @ U _{Rated}	6 A (1 min), 7.5 A (4s)
Pulsed current capacity @ U _{Rated}	15 A (2ms)
General data	
Degree of efficiency	90%
Power factor (approx.)	> 0.50 @ 3*400 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm
Weight	0.65 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	4 for L1/L2/L3/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Ordering data

Type	Qty.	Part No.
PRO MAX3 120W 24V 5A	1	1478170000

Note:
The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Input		Output	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)	Rated (nominal) output current @ U _{Nom}	5 A @ 60°C
AC current consumption	0.28 A @ 3*500 V AC / 0.3 A @ 3*400 V AC	Continuous output current @ U _{Rated}	6.0 A @ 45°C, 3.75 A @ 70°C
DC current consumption	0.18 A @ 800 V DC / 0.3 A @ 450 V DC	Power boost @ U _{Rated}	6 A (1 min), 7.5 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	15 A (2ms)
Recommended back-up fuse	2...3 A, char. C circuit breaker		
General data		General data	
Degree of efficiency	90%	Degree of efficiency	91%
Power factor (approx.)	> 0.50 @ 3*400 V AC	Power factor (approx.)	> 0.75 @ 3*400 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms	AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC	Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5	Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm	Depth x width x height	125 / 60 / 130 mm
Weight	0.65 kg	Weight	1.3 kg
Approvals		Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost

Type	Qty.	Part No.
PRO MAX3 240W 24V 10A	1	1478180000

Note:
The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Input		Output	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)	Rated (nominal) output current @ U _{Nom}	10 A @ 60°C
AC current consumption	0.35 A @ 3*500 V AC / 0.4 A @ 3*400 V AC	Continuous output current @ U _{Rated}	12 A @ 45°C, 7.5 A @ 70°C
DC current consumption	0.35 A @ 800 V DC / 0.6 A @ 450 V DC	Power boost @ U _{Rated}	12 A (1 min), 15 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	30 A (2ms)
Recommended back-up fuse	3 - 5 A Char. C, circuit breaker		
General data		General data	
Degree of efficiency	90%	Degree of efficiency	91%
Power factor (approx.)	> 0.50 @ 3*400 V AC	Power factor (approx.)	> 0.75 @ 3*400 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms	AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC	Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 5	Parallel connection option	yes, max. 5
Depth x width x height	125 / 40 / 130 mm	Depth x width x height	125 / 60 / 130 mm
Weight	0.65 kg	Weight	1.3 kg
Approvals		Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost

Type	Qty.	Part No.
PRO MAX3 240W 24V 10A	1	1478180000

Note:
The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Metal Din-Rail Mounting Foot

**connectPower
PROmax**

PRO MAX3 480W 24V 20A

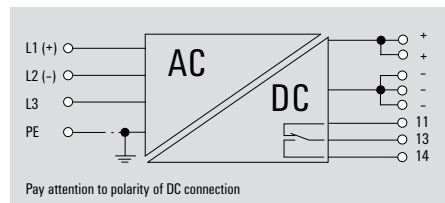
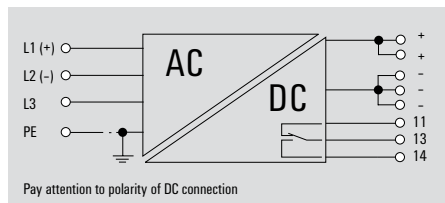
PRO MAX3 960W 24V 40A



Similar to illustration



Similar to illustration



Technical data

Input	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC
Frequency range AC	45...65 Hz
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)
AC current consumption	0.7 A @ 3*500 V AC / 0.85 A @ 3*400 V AC
DC current consumption	0.7 A @ 800 V DC / 1.2 A @ 450 V DC
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A
Recommended back-up fuse	3 - 5 A Char. C, circuit breaker
Output	
Rated output voltage	24 V DC ± 1%
Output voltage	22.5...29.5 V (adjustable via potentiometer)
Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
Rated (nominal) output current @ U _{Nom}	20 A @ 60°C
Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C
Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)
Pulsed current capacity @ U _{Rated}	60 A (2ms)
General data	
Degree of efficiency	91.5%
Power factor (approx.)	> 0.75 @ 3*400 V AC
AC failure bridging time @ I _{Nom}	min. 20 ms
Protection against reverse voltages from the load	30...35 V DC
Parallel connection option	yes, max. 3
Depth x width x height	150 / 70 / 130 mm
Weight	1.3 kg
Approvals	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Connection data	
Connection system	Screw connection
Number of terminals	4 for L1/L2/L3/PE
Wire cross-section, rigid min/max	0.18 / 6 mm ²
Wire cross-section, flexible min/max	0.22 / 4 mm ²
Wire cross-section, AWG/kcmil min/max	26 / 10
Screwdriver blade	0.8 x 4.0, PZ 1

Input		Output	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)	Rated (nominal) output current @ U _{Nom}	20 A @ 60°C
AC current consumption	0.7 A @ 3*500 V AC / 0.85 A @ 3*400 V AC	Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C
DC current consumption	0.7 A @ 800 V DC / 1.2 A @ 450 V DC	Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	60 A (2ms)
Recommended back-up fuse	3 - 5 A Char. C, circuit breaker	Degree of efficiency	91.5%
Output		Power factor (approx.)	> 0.75 @ 3*400 V AC
Rated output voltage	24 V DC ± 1%	AC failure bridging time @ I _{Nom}	min. 20 ms
Output voltage	22.5...29.5 V (adjustable via potentiometer)	Protection against reverse voltages from the load	30...35 V DC
Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load	Parallel connection option	yes, max. 3
Rated (nominal) output current @ U _{Nom}	20 A @ 60°C	Depth x width x height	150 / 70 / 130 mm
Continuous output current @ U _{Rated}	24 A @ 45°C, 15 A @ 70°C	Weight	1.3 kg
Power boost @ U _{Rated}	24 A (1 min), 30 A (4s)	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Pulsed current capacity @ U _{Rated}	60 A (2ms)	Connection data	
Degree of efficiency	91.5%	Connection system	Screw connection
Power factor (approx.)	> 0.75 @ 3*400 V AC	Number of terminals	4 for L1/L2/L3/PE
AC failure bridging time @ I _{Nom}	min. 20 ms	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Protection against reverse voltages from the load	30...35 V DC	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Parallel connection option	yes, max. 3	Wire cross-section, AWG/kcmil min/max	26 / 10
Depth x width x height	150 / 70 / 130 mm	Screwdriver blade	0.8 x 4.0, PZ 1
Weight	1.3 kg	Input	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost	Output	

Input		Output	
Rated input voltage	3 x 400...3 x 500 V AC (wide-range input)	Rated output voltage	24 V DC ± 1%
Input voltage range AC	3 x 320...3 x 575 V AC / 2 x 360...2 x 575 V AC	Output voltage	22.5...29.5 V (adjustable via potentiometer)
Frequency range AC	45...65 Hz	Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load
DC input voltage range	450...800 V DC (max. 500 V DC acc. to UL508)	Rated (nominal) output current @ U _{Nom}	40 A @ 60°C
AC current consumption	1.3 A @ 3*500 V AC / 1.6 A @ 3*400 V AC	Continuous output current @ U _{Rated}	48 A @ 45°C, 30 A @ 70°C
DC current consumption	1.4 A @ 800 V DC / 2.4 A @ 450 V DC	Power boost @ U _{Rated}	48 A (1 min), 60 A (4s)
Input fuse (internal) / Inrush current	T3.15 A / 250 V AC / max. 15 A	Pulsed current capacity @ U _{Rated}	120 A (2ms)
Recommended back-up fuse	6...8 A, char. C circuit breaker	Degree of efficiency	92.5%
Output		Power factor (approx.)	> 0.75 @ 3*400 V AC
Rated output voltage	24 V DC ± 1%	AC failure bridging time @ I _{Nom}	min. 20 ms
Output voltage	22.5...29.5 V (adjustable via potentiometer)	Protection against reverse voltages from the load	30...35 V DC
Residual ripple, breaking spikes	< 50 mVss @ U _{Nennr} , Full Load	Parallel connection option	yes, max. 3
Rated (nominal) output current @ U _{Nom}	40 A @ 60°C	Depth x width x height	150 / 140 / 130 mm
Continuous output current @ U _{Rated}	48 A @ 45°C, 30 A @ 70°C	Weight	3.1 kg
Power boost @ U _{Rated}	48 A (1 min), 60 A (4s)	Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost
Pulsed current capacity @ U _{Rated}	120 A (2ms)	Connection data	
Degree of efficiency	92.5%	Connection system	Screw connection
Power factor (approx.)	> 0.75 @ 3*400 V AC	Number of terminals	4 for L1/L2/L3/PE
AC failure bridging time @ I _{Nom}	min. 20 ms	Wire cross-section, rigid min/max	0.18 / 6 mm ²
Protection against reverse voltages from the load	30...35 V DC	Wire cross-section, flexible min/max	0.22 / 4 mm ²
Parallel connection option	yes, max. 3	Wire cross-section, AWG/kcmil min/max	26 / 10
Depth x width x height	150 / 140 / 130 mm	Screwdriver blade	0.8 x 4.0, PZ 1
Weight	3.1 kg	Input	
Approvals	cULus, cURus, TÜV, CE, CCC, SEMI F47, GL (EMC1), Class1 Div2, RCM, Gost	Output	

Ordering data

Type	Qty.	Part No.
PRO MAX3 480W 24V 20A	1	1478190000

Note: The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Type	Qty.	Part No.
PRO MAX3 480W 24V 20A	1	1478190000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Type	Qty.	Part No.
PRO MAX3 960W 24V 40A	1	1478200000

The internal varistor found in a switch-mode power supply does not replace the need for surge protection within a system.

Accessories

Metal Din-Rail Mounting Foot

Metal Din-Rail Mounting Foot

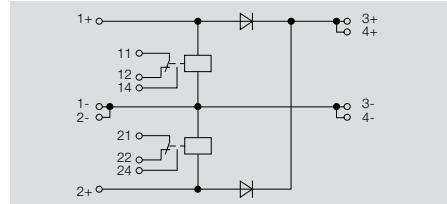
Metal Din-Rail Mounting Foot

PRO-M: diode, capacity and relay modules

CP M DM20



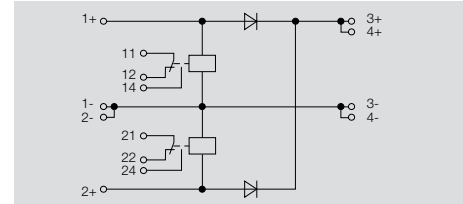
Similar to illustration



CP M DM40



Similar to illustration



Technical data

Input		
Rated input voltage / DC input voltage range	24 V DC / 18...30 V DC	
Input current	2 x 10 A or 1 x 20 A	
Output		
Rated output voltage / Output voltage	24 V DC \pm 1% / Input voltage - 0.7 V	
Rated (nominal) output current @ U _{Nom}	20 A @ 60°C	
Continuous output current @ 24 V DC	24 A @ 45°C, 22.5 A @ 55°C, 15 A @ 70°C	
Voltage monitoring / Floating contact	Yes, In both inputs / Yes	
Switching thresholds	21.6 V DC, relay is on for Power Good, 20.4 V DC, relay is off for Power Fail	
General data		
Degree of efficiency	> 97% @ 24 V input voltage	
Depth x width x height / Weight	150 / 34 / 130 mm / 0.3 kg	
Ambient temperature (operational) / Storage temperature	-25°C...+70°C / -40°C...+85°C	
Humidity	5...95%, no condensation	
Protection degree / Class of protection / Pollution severity	IP 20 / III, with no ground connection, for SELV / 2	
Insulation voltage	0.5 kV <small>Input/output housing</small>	
MTBF	> 500,000 h acc. to IEC 1709 (SN29500)	
Mounting position, installation notice	Horizontal on TS35 DIN-rail. 50 mm clearance top & bottom for air circ. Can mount side by side with no space in between.	
EMC / shock / vibration		
Noise emission acc. to EN55022	Class B	
Interference immunity test acc. to	EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted)	
Resistance to vibration / Shock	1 g according to EN50178 / 15 g In all directions	
Electrical safety (applied standards)		
Electrical machine equipment	Acc. to EN60204	
For use with electronic equipment	Acc. to EN50178 / VDE0160	
Safety extra-low voltage	SELV acc. to EN60950, PELV acc. to EN60204	
Approvals		
Approvals	cCSAus; CE; cULus; GL; GOSTME25	
Connection data		
Wire connection method	Screw connection	
Number of terminals	4 (1+, 2+, 1-, 2-)	
Wire cross-section, rigid min/max	0.5 / 6 mm ²	
Wire cross-section, flexible min/max	0.5 / 2.5 mm ²	
Wire cross-section, AWG/kcmil min/max	26 / 12	
Note:		
Plastic clip-on foot		
Ordering data		
Type	Qty.	Part No.
CP M DM20	1	1222210000

Input		
Rated input voltage / DC input voltage range	24 V DC / 18...30 V DC	
Input current	2 x 10 A or 1 x 20 A	
Output		
Rated output voltage / Output voltage	24 V DC \pm 1% / Input voltage - 0.7 V	
Rated (nominal) output current @ U _{Nom}	40 A @ 60°C	
Continuous output current @ 24 V DC	48 A @ 45°C, 45 A @ 55°C, 30 A @ 70°C	
Voltage monitoring / Floating contact	Yes, In both inputs / Yes	
Switching thresholds	21.6 V DC, relay is on for Power Good, 20.4 V DC, relay is off for Power Fail	
General data		
Degree of efficiency	> 97% @ 24 V input voltage	
Depth x width x height / Weight	150 / 60 / 130 mm / 0.6 kg	
Ambient temperature (operational) / Storage temperature	-25°C...+70°C / -40°C...+85°C	
Humidity	5...95%, no condensation	
Protection degree / Class of protection / Pollution severity	IP 20 / III, with no ground connection, for SELV / 2	
Insulation voltage	0.5 kV <small>Input/output housing</small>	
MTBF	> 500,000 h acc. to IEC 1709 (SN29500)	
Mounting position, installation notice	Horizontal on TS35 DIN-rail. 50 mm clearance top & bottom for air circ. Can mount side by side with no space in between.	
EMC / shock / vibration		
Noise emission acc. to EN55022	Class B	
Interference immunity test acc. to	EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted)	
Resistance to vibration / Shock	1 g according to EN50178 / 15 g In all directions	
Electrical safety (applied standards)		
Electrical machine equipment	Acc. to EN60204	
For use with electronic equipment	Acc. to EN50178 / VDE0160	
Safety extra-low voltage	SELV acc. to EN60950, PELV acc. to EN60204	
Approvals		
Approvals	cCSAus; CE; cULus; GL; GOSTME25	
Connection data		
Wire connection method	Screw connection	
Number of terminals	4 (3+, 4+, 3-, 4-)	
Wire cross-section, rigid min/max	0.5 / 6 mm ²	
Wire cross-section, flexible min/max	0.5 / 2.5 mm ²	
Wire cross-section, AWG/kcmil min/max	26 / 12	
Note:		
Plastic clip-on foot		
Ordering data		
Type	Qty.	Part No.
CP M DM40	1	1222220000

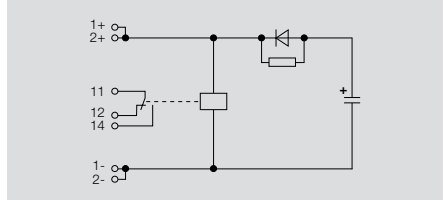
Input		
Rated input voltage / DC input voltage range	24 V DC / 18...30 V DC	
Input current	2 x 20 A or 1 x 40 A	
Output		
Rated output voltage / Output voltage	24 V DC \pm 1% / Input voltage - 0.7 V	
Rated (nominal) output current @ U _{Nom}	40 A @ 60°C	
Continuous output current @ 24 V DC	48 A @ 45°C, 45 A @ 55°C, 30 A @ 70°C	
Voltage monitoring / Floating contact	Yes, In both inputs / Yes	
Switching thresholds	21.6 V DC, relay is on for Power Good, 20.4 V DC, relay is off for Power Fail	
General data		
Degree of efficiency	> 97% @ 24 V input voltage	
Depth x width x height / Weight	150 / 60 / 130 mm / 0.6 kg	
Ambient temperature (operational) / Storage temperature	-25°C...+70°C / -40°C...+85°C	
Humidity	5...95%, no condensation	
Protection degree / Class of protection / Pollution severity	IP 20 / III, with no ground connection, for SELV / 2	
Insulation voltage	0.5 kV <small>Input/output housing</small>	
MTBF	> 500,000 h acc. to IEC 1709 (SN29500)	
Mounting position, installation notice	Horizontal on TS35 DIN-rail. 50 mm clearance top & bottom for air circ. Can mount side by side with no space in between.	
EMC / shock / vibration		
Noise emission acc. to EN55022	Class B	
Interference immunity test acc. to	EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted)	
Resistance to vibration / Shock	1 g according to EN50178 / 15 g In all directions	
Electrical safety (applied standards)		
Electrical machine equipment	Acc. to EN60204	
For use with electronic equipment	Acc. to EN50178 / VDE0160	
Safety extra-low voltage	SELV acc. to EN60950, PELV acc. to EN60204	
Approvals		
Approvals	cCSAus; CE; cULus; GL; GOSTME25	
Connection data		
Wire connection method	Screw connection	
Number of terminals	4 (1+, 2+, 1-, 2-)	
Wire cross-section, rigid min/max	0.5 / 16 mm ²	
Wire cross-section, flexible min/max	2.5 / 10 mm ²	
Wire cross-section, AWG/kcmil min/max	22 / 6	
Note:		
Plastic clip-on foot		
Ordering data		
Type	Qty.	Part No.
CP M DM40	1	1222220000

PRO-M: diode, capacity and relay modules

CP M CAP

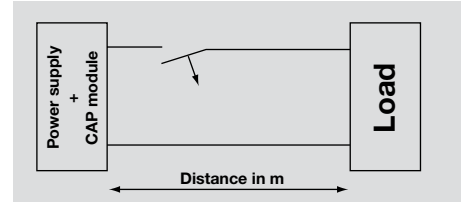


Similar to illustration



Pulse triggering for circuit breakers: with the Weidmüller capacitance module. The following conditions apply to the table entries:

- Ambient temperature of 20°C
- Inner resistance of the circuit breakers is taken into account
- Half of the rated current flows to a neighbouring circuit before the short circuit is formed
- DC-compatible circuit breakers: Siemens 5SY series



Technical data

Input	
Rated input voltage / DC input voltage range	
Output	
Peak current output / Recovery time for the capacitor	
Switching thresholds	
Floating contact	
General data	
Depth x width x height / Weight	
Ambient temperature (operational) / Storage temperature	
Humidity	
Protection degree	
Class of protection	
Pollution severity	
Insulation voltage	
MTBF	
Mounting position, installation notice	

Rated input voltage / DC input voltage range	24 V DC / 18...30 V DC
Peak current output / Recovery time for the capacitor	Depending on the load (typically 40 A for 1 ms) / Approx. 1 sec.
Switching thresholds	21.6 V DC, relay is on for Power Good, 20.4 V DC, relay is off for Power Fail
Floating contact	Yes
Depth x width x height / Weight	150 / 34 / 130 mm / 0.4 kg
Ambient temperature (operational) / Storage temperature	-25°C...+70°C / -40°C...+85°C
Humidity	5...95%, no condensation
Protection degree	IP 20
Class of protection	III, with no ground connection, for SELV
Pollution severity	2
Insulation voltage	0.5 kV Input/output housing
MTBF	> 500,000 h acc. to IEC 1709 (SN29500)
Mounting position, installation notice	Horizontal on TS35 DIN-rail. 50 mm clearance top & bottom for air circ. Can mount side by side with no space in between.

Fuse tripping

Conductor cross section	B6	B10
0.75 mm ²	10 m	
1.0 mm ²	14 m	6 m
1.5 mm ²	20 m	9 m
2.5 mm ²	30 m	15 m
4 mm ²	50 m	24 m
6 mm ²		
B16		
0.75 mm ²		
1.0 mm ²		
1.5 mm ²	4 m	
2.5 mm ²	6 m	
4 mm ²	10 m	
6 mm ²	16 m	
C2 C4		
0.75 mm ²	11 m	6 m
1.0 mm ²	14 m	8 m
1.5 mm ²	21 m	12 m
2.5 mm ²	34 m	19 m
4 mm ²		32 m
6 mm ²		
C6 C10		
0.75 mm ²	3 m	
1.0 mm ²	3.5 m	2 m
1.5 mm ²	5.5 m	3 m
2.5 mm ²	9 m	5 m
4 mm ²	14 m	8 m
6 mm ²		12 m

EMC / shock / vibration

Noise emission acc. to EN55022	
Interference immunity test acc. to	

Resistance to vibration / Shock

Electrical safety (applied standards)

Electrical machine equipment	Acc. to EN60204
For use with electronic equipment	Acc. to EN50178 / VDE0160
Safety extra-low voltage	SELV acc. to EN60950, PELV acc. to EN60204

Approvals

Approvals	CE; cULus; GL
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Connection data

Wire connection method	
Number of terminals	
Wire cross-section, rigid min/max	mm ²
Wire cross-section, flexible min/max	mm ²
Wire cross-section, AWG/kcmil min/max	

Note:

Class B	
EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted) EN 61000-4-11 (dips)	
1 g according to EN50178 / 15 g In all directions	

Input	Output
Screw connection	Screw connection
4 (+-)	3 (CO contacts)
0.5 / 6	0.5 / 6
0.5 / 4	0.5 / 2.5
26 / 12	26 / 12

For low-impedance connections, we recommend 2.5 mm².

Ordering data

Plastic clip-on foot	
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Note:

Type	Qty.	Part No.
CP M CAP	1	1222240000