

PRO INSTA 96W 48V 2A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com



The single-phase INSTA-POWER switching power supplies are characterised by a wide power spectrum, compact design and good value for money. They are suitable for temperature ranges from -25°C to $+70^{\circ}\text{C}$, have international approvals and a wide voltage input range. This makes them suitable for a wide range of applications. This also includes signal and telecommunications systems as well as automation systems with a low power requirement up to 96 Watt.

General ordering data

| | |
|------------|---|
| Version | Power supply, switch-mode power supply unit, 48 V |
| Order No. | 2580270000 |
| Type | PRO INSTA 96W 48V 2A |
| GTIN (EAN) | 4050118591002 |
| Qty. | 1 items |

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E258476

Dimensions and weights

| | | | |
|------------|-------|-----------------|-------------|
| Depth | 60 mm | Depth (inches) | 2.3622 inch |
| Height | 90 mm | Height (inches) | 3.5433 inch |
| Width | 90 mm | Width (inches) | 3.5433 inch |
| Net weight | 361 g | | |

Temperatures

| | | | |
|---------------------|----------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
| Start-up | ≥ -40 °C | | |

Environmental Product Compliance

| | |
|--------------------------------------|---|
| RoHS Compliance Status | Compliant with exemption |
| RoHS Exemption (if applicable/known) | 6c, 7a, 7cl |
| REACH SVHC | Lead 7439-92-1, Lead monoxide 1317-36-8 |
| SCIP | d62541f7-8058-4336-b693-7303c8b40800 |

Input

| | | | |
|--------------------------|--|---------------------------|--------------------------------------|
| Connection system | PUSH IN with actuator | AC input voltage range | 85...264 V AC (derating at 100 V AC) |
| Recommended back-up fuse | 2 A / DI, safety fuse 6 A, Char. B, circuit breaker 2...4 A, Char. C circuit breaker | Frequency range AC | 45...65 Hz |
| Rated input voltage | 110...240 V AC / 120...340 V DC | Wire connection method | PUSH IN with actuator |
| Input fuse (internal) | Yes | AC current consumption | 1.2 A @ 230 V AC / 2.5 A @ 100 V AC |
| DC current consumption | 0.4 A @ 370 V DC / 1.35 A @ 120 V DC | DC input voltage range | 95...370 V DC |
| Inrush current | max. 40 A | Nominal power consumption | 107.9 VA |

Output

| | | | |
|----------------------|---|---|-----------------------------|
| Output power | 96 W | Connection system | PUSH IN |
| Rated output voltage | 48 V DC ± 1 % | Residual ripple, breaking spikes | <50 mVss @ UNenn, Full Load |
| Output voltage, max. | 56 V | Output voltage, min. | 35 V |
| Output current, max. | 2 A | Wire connection method | PUSH IN with actuator |
| Output voltage, note | (adjustable via potentiometer on front) | Nominal output current for Unom | 2 A @ 55 °C |
| Capacitive load | unrestricted | Continuous output current @ UNominal °C | 2 A @ 55 °C, 1.25 A @ 70 °C |
| Ramp-up time | ≤ 100 ms | | |

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General data

| | | | |
|---|--|--------------------------|--------------------------------|
| Degree of efficiency | 89% | Protection degree | IP20 |
| 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 | Housing version | Plastic, protective insulation |
| Protection against reverse voltages from the load | 58...62 V DC | Power loss, idling | 0.45 W |
| Short-circuit protection | Yes, internal | Power loss, nominal load | 10.56 W |

EMC / shock / vibration

| | | | |
|---|---|------------------------------------|---|
| Limiting of mains voltage harmonic currents | 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), EN 61000-4-11 (Dips) | Shock resistance IEC 60068-2-27 | 15 g In all directions |
| Noise emission in accordance with EN55032 | 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)/EN 61000-4-11 (dips), EN 61000-4-11 (Dips) |
| Vibration resistance IEC 60068-2-6 | 2.3 g | | |

Insulation coordination

| | | | |
|-----------------------------------|--------|----------------------------------|--------|
| Pollution severity | 2 | Protection class | II |
| Insulation voltage, input/output | 4 kV | Insulation voltage input / earth | 3.5 kV |
| Insulation voltage output / earth | 0.5 kV | | |

Electrical safety (applied standards)

| | | | |
|--|----------------------------|--------------------------|--|
| Electrical machine equipment | Acc. to EN60204 | Safety extra-low voltage | SELV acc. to IEC 61010-1, PELV acc. to IEC 61010-2-201 |
| Safety transformers for switch-mode power supplies | According to EN 61558-2-16 | | |

Connection data (input)

| | | | |
|---|-----------------------|--|----------------------|
| Connection system | PUSH IN with actuator | Number of terminals | 2 (L,N) |
| Conductor cross-section, AWG/kcmil, max. | 12 AWG | Conductor cross-section, AWG/kcmil, min. | 24 AWG |
| Wire connection cross section, flexible (input), max. | 2.5 mm ² | Conductor cross-section, flexible, min. | 0.25 mm ² |
| Conductor cross-section, rigid, max. | 2.5 mm ² | Conductor cross-section, rigid, min. | 0.25 mm ² |

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Technical data

Connection data (output)

| | | | |
|---|---------------------|---|----------------------|
| Connection system | PUSH IN | Number of terminals | 4 (++ / -) |
| Conductor cross-section, AWG/kcmil , max. | 12 AWG | Conductor cross-section, AWG/kcmil , min. | 24 AWG |
| Conductor cross-section, flexible , max. | 2.5 mm ² | Conductor cross-section, flexible , min. | 0.25 mm ² |
| Conductor cross-section, rigid , max. | 2.5 mm ² | Conductor cross-section, rigid , min. | 0.25 mm ² |

Signalling

| | |
|-----------|----------------------|
| LED green | Operating voltage OK |
|-----------|----------------------|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002540 | ETIM 9.0 | EC002540 |
| ETIM 10.0 | EC002540 | ECLASS 14.0 | 27-04-07-01 |
| ECLASS 15.0 | 27-04-07-01 | | |

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Drawings



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Accessories

End bracket



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 | End bracket, black, TS 35, V-0, Wemid, Width: 12 mm, 130 °C | |
| GTIN (EAN) | 4050118286892 | | |
| Qty. | 50 ST | | |
| Type | WEW 35/2 V0 GF SW | Version | |
| Order No. | 1479000000 | End bracket, black, TS 35, V-0, Wemid, Width: 8 mm, 130 °C | |
| GTIN (EAN) | 4050118286779 | | |
| Qty. | 50 ST | | |

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 ST | | |