

OSW00301

Open Frame

Made in Germany

30 Watts Power Supply -20...+70°C
85..265Vac Input Voltage

Short Specification:

- Screw terminal plugs & Molex-plugs
- High efficiency up to 86%
- Continuous short circuit protected
- Overload & low voltage protected
- Softstart & auto-recovery
- Minimum load = 0A
- Hold up time >40ms
- Galvanic isolation
- Sense mode for 3.3V and 5V
- Free air convection
- Series operation mode
- Parallel operation mode
- EMI/EMS EN61000-6-2,3, EN55022 class
- PFC : EN61000-3-2 class A
- Safety : cUL60950/16950 IEC(EN)60950-1
- Power LED
- Low ripple/noise, smart start-up with critical loads, 24 hours burn in test

Applications:

- critical loads like LED, thermal element & dc drive
- Audio applications, very low ripple & noise
- Sensitive test equipment
- Mini DC-UPS



Single-Output: 5V, 9V, 12V, 15V, 18V, 24V, 48V, 60V



In accordance with IEC60950-1

Powersolve Electronics Ltd. Unit 8A, Arnhem Road, Newbury, Berks. RG14 5RU

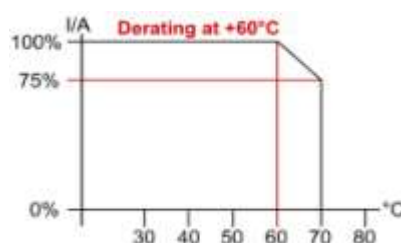
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Phone 0044 1635 521858 - Fax 0044 1635 523771 – www.powersolve.co.uk – sales@powersolve.co.uk

(Subject to alterations. This product is not designed to be used in applications such as life support systems wherein a failure or malfunction could result in injury or death)

| | | | | | | | |
|---------------------|--|----------|------------|------------|------------|----------|--------|
| AC-Input | 85...265Vac , 47...63Hz , 110...375Vdc | | | | | | |
| Input Rating | 100...240Vac , 115Vac <0.8A 230Vac <0.3A | | | | | | |
| Rated DC-Voltage | 5V | 9V | 12V | 15V | 24V | 48V | 60V |
| Rated DC-Current | 5A | 3.3A | 2.5A | 2A | 1.3A | 0.6A | 0.5A |
| Ripple 20MHz 230Vac | 15mV | 15mV | 10mV | 10mV | 50mV | 100mV | 100mV |
| DC adj. range | 4,9-5,25V | 8,5-9,9V | 11,4-13,6V | 14,2-22,5V | 23,5-28,5V | 45,6-53V | 57-66V |
| Order Code | OSW00301.(volt)W example: OSW00301.12W | | | | | | |

| | |
|--------------------------------|--|
| Factory Adjust. Tolerance Uout | ± 1% |
| Load regulation | < ± 0.5% 10-100%, 100-10% |
| Switching Frequency | 70KHz typical |
| Basic Load | 0 A |
| Efficiency | Up to 86% |
| Load Protection | 1,2x I _{rated} , auto recovery |
| Voltage Protection | 140% of U _{out} , auto recovery |
| Short Circuit Protection | Continuous |
| Temperature Control | Not available |
| Hold Up Time | > 40ms 230Vac with full load |
| Inrush Current | < 17A (230Vac) |
| Softstart | 30ms typ. |
| Cooling | Free air convection |
| Ambient Temperature | - 20°C ...+70°C |
| Storage Temperature | - 40°C ...+85°C |
| EMI | EN55022 class B / EN61000-3-2 |
| EMS | EN61000-6-2,3 |
| Safety | EN60950-1, EN60204-1 |
| Safety class 1(A) | VDE0805, VDE0100 |
| Air & Surface Leakage Paths | > 8mm |
| Input / Output Isolation | I/P-O/P:4KVac I/P-G:2KVac O/P-G:0.5KVac |
| MTBF EN61209 | 300000h |
| MTTF EN61209.SN29500 | 125433h @ 40°C 24/7 85% load |
| Dimensions (HxWxD) | 28.5x62x96.5mm |
| Weight | 145g |
| Connectors (AC & DC) | See options |



Terminal Connects:

SK1 1 = L
2 = N

only) 1 = Sense - (5V
Sk2 2 = DC -
3 = DC +

Options order code:
Weidmueller Terminals:
(each package = 10 pcs)

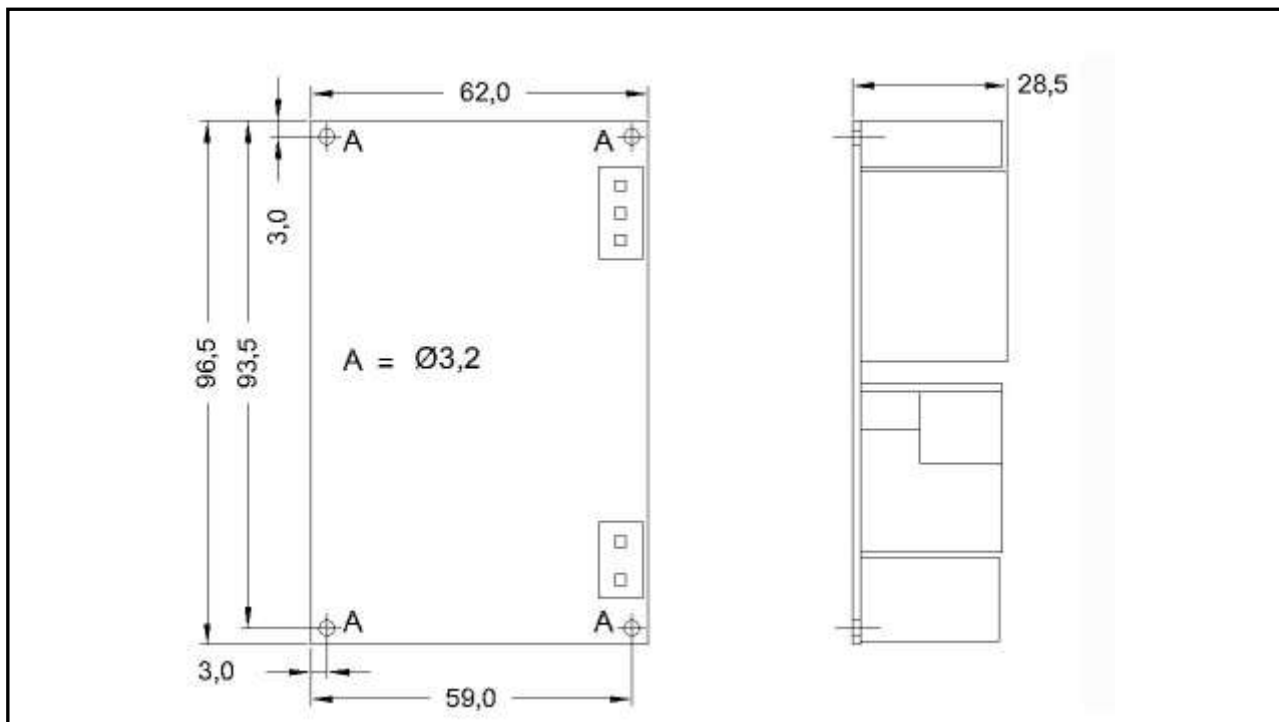
SK1 Art.No.: 3520054 2pole
SK2 Art.No.: 3520055 3pole

Conception:

The OSW power supply series realizes high power efficiency in a space-saving housing. This design enables Green Power applications and allows free air convection. Latest generation electrical devices relate to the high reliability of all products. The product philosophy is, to employ high-end low ESR ultra long life capacitors where expedient to achieve a superior lifetime of our products. The screw terminals used allow easy wiring and smooth service.

Parallel and serial operation:

Power supplies of the same model and the same output voltage can be either used in parallel or in series. The assembling of external parts is usually not recommended. Make sure that the output voltage of each connected unit is ±1% equal. We recommend connecting the DC-outputs to a neutral point or a power bar. Follow the safety norms of dangerous dc-voltages.



Safety Instructions: Please read all warnings and advices carefully before installing or operating the power supply. Retain this operation manual always ready to hand. The device must be installed by qualified engineer only.

Installation:

- 1.) The device is designed for systems fulfilling the safety norms of dangerous voltages/energy and fire prevention
- 2.) Installation is restricted to qualified engineer only, make sure that the AC wire system is free of voltage
- 3.) Opening the unit, making any modifications to it, dismantling any screws from it, operating the OSW out of specification and/or using it in appropriate area will inevitably result in losing manufacturer's guarantee; we decline taking any responsibility for risk of damages caused to someone's health or to any installed system.
- 4.) Attention: The power supply has an internal input fuse. It is necessary to wire an automatic circuit breaker (MCB) to the line. We suggest to use a 16A-type with B-characteristic. It is forbidden to operate the power supply without protective earth wired. It is essential to install a line switch before the device.

Warnings:

Disregard these warnings can cause fire, electric shock, serious accident or death.

1. Never operate the device without Protective Earth Conductor
2. Before connecting the unit to the AC wire system make all wires free of voltage and assure accidentally switch on
3. Allow neat and professional cabling
4. Never open nor try to repair the power supply by yourself. Inside are dangerous voltages that can cause electric shock hazard.
5. Avoid metal pieces or other conductive material to fall into the device
6. Do not operate the unit under damp or wet conditions
7. It is forbidden to operate the unit under Ex conditions or in Ex-Area



All parameters base on 15 minutes run-in @ full load / 25°C / 230Vac 50/60Hz, unless otherwise stated.