



## DC/AC INVERTER PWS-5.0W

In: 24/110/220V<sub>DC</sub>  
Out: 230V<sub>AC</sub> (5.0kVA)

### KEY FEATURES

- **Wall cabinet**
- **19"-compatible rack version available**
- **Very high overload ability**
- **Ability for parallel operation (optional)**
- **Internal input- and output-fuses**
- **Analogue measurement instruments (V<sub>out</sub>, I<sub>out</sub>)**
- **Temperature-controlled fan cooling**
- **Input over/under voltage shutdown, overload and short circuit-proof**

### PRODUCT DESCRIPTION

The PWS inverter family (1kVA–5kVA) is equipped with a 50Hz isolation transformer following a primary side pulse-width modulation stage and is available as 19"-compatible rack or wall mounted cabinet.

These inverters are especially suited for applications in power plants, industrial, railroad and shipping AC power supplies. The combination of rugged mechanical construction, high overload ability and electrical isolation between input and output offers a very high flexibility in system configuration.

The wall cabinet version includes all necessary input and output fuses and can be directly mounted beside the load distribution.

Optionally, versions with an included static bypass switch are available.

### APPLICATIONS

Inverter module for AC power supply facilities in all areas of industry, power generation and power distribution. Especially for heavy duty loads with high inrush currents.

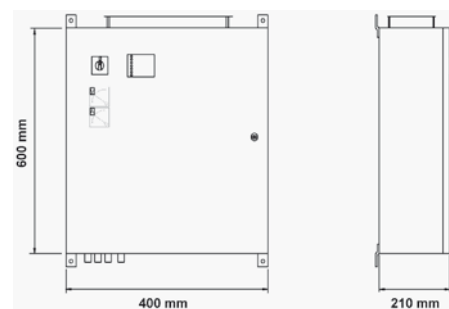
## TECHNICAL DATA

| Type                                 | PWS110-5.0W                                                                                                                                                    | PWS220-5.0W         |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Article code                         | 401-050-712.00                                                                                                                                                 | 401-050-812.00      |
| Nominal input voltage                | 108V <sub>DC</sub>                                                                                                                                             | 216V <sub>DC</sub>  |
| Nominal input current                | 39.9A <sub>DC</sub>                                                                                                                                            | 20.0A <sub>DC</sub> |
| Input frequency range                | DC                                                                                                                                                             | ←                   |
| Input voltage range                  | +20/-15%                                                                                                                                                       | ←                   |
| Inrush current                       | ≤ nominal current                                                                                                                                              | ←                   |
| Overall efficiency                   | 91%                                                                                                                                                            | 91%                 |
| Internal input fusing                | Yes (50A)                                                                                                                                                      | (25A)               |
| Nominal output voltage               | 230V <sub>AC</sub> ±0,5%, sinusoidal                                                                                                                           | ←                   |
| Nominal output current               | 21.8A                                                                                                                                                          | ←                   |
| Nominal output power                 | 5000VA (cos phi= 0,8)                                                                                                                                          | ←                   |
| Overload capability                  | 160% for 1 min., 130% for 10 min. without shut down                                                                                                            | ←                   |
| Output frequency                     | 50Hz ±0.05%                                                                                                                                                    | ←                   |
| Synchronization range                | 49.5– 50.5Hz                                                                                                                                                   | ←                   |
| Accuracy                             | ±0.5% static                                                                                                                                                   | ←                   |
| Recovery time                        | < 0.3 ms at load transients 10%- 90%- 10%                                                                                                                      | ←                   |
| Short circuit protection             | Continuous short circuit proof, 2– 2.5 x Inom for app. 2.5 sec.                                                                                                | ←                   |
| Parallel operation                   | Max. 12 pieces, load sharing app. 5% Inom; with external parallel operation choke                                                                              | ←                   |
| THD                                  | ≤ 3% at linear load                                                                                                                                            | ←                   |
| Crest factor                         | ≤ 2.5                                                                                                                                                          | ←                   |
| Power factor range                   | 0 ind. - 1 - 0 cap.                                                                                                                                            | ←                   |
| Internal output fuse                 | 25A                                                                                                                                                            | ←                   |
| LED signalling                       | Standby, Vout, Vin>, Vin<, overload, overtemperature, general fault                                                                                            | ←                   |
| Electronic protection                | Input undervoltage shut down, input overvoltage shut down, overtemperature shut down, output voltage okay, overload without shut down, short circuit shut down | ←                   |
| External synchronization             | yes                                                                                                                                                            | ←                   |
| Remote signals                       | Relay contact „General Fault“                                                                                                                                  | ←                   |
| Analogue measurement instruments     | Vout, Iout                                                                                                                                                     | ←                   |
| Ambient temperature                  | Operation: -20°C to +55°C, storage: -40°C to +85°C                                                                                                             | ←                   |
| Climatic conditions                  | IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2                                                                                                                      | ←                   |
| Max. installation altitude           | ≤1500m                                                                                                                                                         | ←                   |
| Audible noise                        | ≤45dB (A) at 1 m distance                                                                                                                                      | ←                   |
| Construction                         | Wall cabinet                                                                                                                                                   | ←                   |
| Dimensions (W/H/D)                   | 600/800/300mm                                                                                                                                                  | ←                   |
| Weight                               | approx. 64kg                                                                                                                                                   | approx. 64kg        |
| Cooling                              | Speed-controlled fan with overtemperature monitoring                                                                                                           | ←                   |
| Type of enclosure / Protection class | IP20 (mech.); 1 acc. to EN 60950 (electr.)                                                                                                                     | ←                   |
| Surfaces                             | Powder coating RAL 7035                                                                                                                                        | ←                   |
| CE conformity                        | yes                                                                                                                                                            | ←                   |
| Compliance to safety standards       | EN 60950-1, VDE 0100 part 410, VDE 0110, EN 50178, EN 60146                                                                                                    | ←                   |
| Compliance to EMC standards          | EN 55011, EN 55022 class „B“, EN 61000- 4 part 2– 5                                                                                                            | ←                   |

## OPTIONS

- Internal static bypass switch
- Extended AC distribution board

## DIMENSIONS



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