# Modular inverter

# RDI 3000VA – 48VDC


Illustrative photo

## General Features

- High efficiency
- Full Digital Signal Processing control
- Input/Output Radio Frequency Interference compliant to FCC
- Complete Supervision possibility
- Parallel operation in True Redundant System
- Large DC input voltage range
- Patented technology

## Application

- Telecom, industrial, control and security technologies

## Description

The Telecom Series of design-improved modular inverters can be supplied from any DC source in voltage range from 40 up to 80 VDC, providing pure sine wave output.

Several inverters can be connected in parallel to achieve the requested total power, including redundancy for best availability. Thanks to the full DSP control, true redundancy is achieved, while all information is available both locally and remotely with SYS3000 controller and PSM2000 software or with system DVV RB-01.

The high frequency conversion and the topology used allow very high efficiency to be reached in a compact and user-friendly design. The environmentally friendly range complies with International, European and general Telecoms standards.

# Modular inverter

# RDI 3000VA – 48VDC

## Technical data

| Model | RDI 3000VA – 48VDC – 120 VAC | RDI 3000VA – 48VDC – 230 VAC |
|---|---|---|
| | | |
| **Input** | **120 VAC** | **230 VAC** |
| Operating voltage range | 40 ÷ 80 VDC | |
| Maximum input current | < 93 A | < 83 A |
| | | |
| **Output** | **120 VAC** | **230 VAC** |
| Nominal output voltage | 120 V, (108 ÷ 125 VAC) | 230 V, (200 ÷ 240 VAC) |
| Output voltage tolerance | ±3% of adjustable nominal voltage | |
| Output voltage frequency | 50 or 60 Hz (selectable) | |
| Total harmonic distortion (THDi) | ≤3% (on linear load at nominal power) | |
| Nominal value of output current | 25 A | 13 A |
| Crest factor at nominal power | 3:1 | |
| | | |
| **Output power** | **120 VAC** | **230 VAC** |
| Nominal value | 3000 VA | 3000 VA |
| Overload (±15%, max. 5s, self-protected) | 6000 VA | 6000 VA |
| Permanent overload | 120% | 120% |
| Power factor for 100% power | 0 Inductive to 0 capacitive<br>Full 2 quadrants operation | |
| | | |
| **EMC** | **120 VAC** | **230 VAC** |
| Standards applied for immunity | EN 61000- 4-2 / 4-3 / 4-4 / 4-5 / 4-6 | |
| Standards applied for emission | ETS300-132-2, CISPR 22 class B | |
| | | |
| **Efficiency** | **120 VAC** | **230 VAC** |
| Efficiency | 89% | 91% |
| | | |
| **Temperature** | **120 VAC** | **230 VAC** |
| Storage temperature | - 40℃ ÷ + 80℃ | |
| Permissible ambient temperature | - 20℃ ÷ + 50℃ | |
| | | |
| **Safety** | **120 VAC** | **230 VAC** |
| Safety | EN 60950 / UL 1950 | |
| Protection | Internal electronic + relays + fuses | |
| Dielectric strength | 4000 VDC input / output, 4000 VDC output / earth<br>2000 VDC input / earth | |
| | | |
| **Mechanics** | **120 VAC** | **230 VAC** |
| Cooling | Forced | |
| Dimensions (wdh) | 438 mm x 348 mm x 2U | |
| Weight (app.) | 14 kg | |