



RSW400 RAILWAY SINEWAVE INVERTER

SERIES RSW400

The RSW400 supplies a 230VAC / 50Hz output voltage from a 36VDC power source, input and output are galvanically isolated.

The shape of the output voltage is pure sinewave - as from the grid.

The RSW400 inverter features maximum average power protection as well as maximum output peak current protection.

This protects the semiconductors even when an output short-circuit occurs.

It also features a disable function for input undervoltage, which protects the batteries from harmful discharges.

Standby mode:

If the load is < 10W the inverter goes to standby state for half a minute. After this period it checks the output power again.

In standby state the inverter consumes an average current < 20mA.

APPLICATIONS

- Railway Applications
- Industrial Controls
- Telecom Power Plants
- Marine & other rugged environments
- Electric Utilities and Substations
- Base Station Power

FEATURES

- Sine wave output voltage
- High input-output isolation 3000Vrms
- Designed for rolling applications according to EN50155
- Output protected against overloads and shortcircuits
- Input protected against overcurrents by internal fuse.
- Over-temperature shutdown
- Input under-voltage lockout



Pure
Sinewave



High
frequency
technology



Light weight,
compact size



Full electronic
protection



Extended
temperature
range



Convection
Cooling
(no Fan)



Standby mode

SPECIFICATIONS

Input	
Input voltage	36Vdc
Input voltage range	25.2 ... 45V, transients according to EN50155 class S1
No load input current (standby state)	< 20mA
Maximum input current	18A
Efficiency (typical)	90% at load 100%, 87% at load 50%, 81% at load 25%, 76% at load 10%
Output	
Output voltage	230Vac sinusoidal
Frequency	50Hz
Harmonic distortion	<2%
Maximum continuous current (I _o)	1.74A
Overload protection	>2A
Line regulation	0.2%
Load regulation	3%
Total Harmonic Distortion (typ/max)	2% / 5%
Output power	400W
Environmental	
Storage temperature	-25 ... 80°C
Operating temperature full load	-25 ... 55°C (EN50155 T1)
Cooling	Natural convection
Relative humidity	5...95%
Vibration	EN61373 Category 1 class B body mounted
Shock	EN61373 Category 1 class B body mounted
MTBF	90.000h at 40°C
Environmental regulations	RoHS according to directive 2002/95/EC

EMC	
Immunity according to	IEC61000-4-3, IEC61000-4-6, IEC61000-4-2, IEC61000-4-4, IEC61000-4-5 / EN50121-3-2
Emissions according to	EN55011 / EN50121-3-2
Safety	
Safety according to	EN60950-1
Dielectric strength: Input / output	3000 Vrms / 50Hz / 1min
Dielectric strength: Output / ground	1500 Vrms / 50Hz / 1min
Dielectric strength: Input / ground	500 Vrms / 50Hz / 1min
Mechanical	
Weight	2400 g
Dimensions	286 x 130 x 68 mm
Connections	Input: Wago X-COM SYTEM item no. 769-662/004-000 Output: Wago MIDI SYSTEM item no. 232-233
Protections	
Input	Against over-currents by internal fuse
Input	Under-voltage lockout
Output	Against overloads and shortcircuits
Against over-temperature	Shutdown

