



APPLICATIONS

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

FEATURES

- Sine wave output voltage
- Suitable for motors control
- Adjustable output voltage
- High input-output isolation 3000Vrms
- Remote ON/OFF opto-coupled
- Remote control via RS232
- Designed for rolling applications according to EN50155
- Fire and smoke EN45545-2 approved
- Protection against overloads and short-circuits
- Protection against input undervoltage
- Output fail alarm by isolated relay contacts (Form B)

RSW1300 3-PHASE RAILWAY SINEWAVE INVERTER

SERIES RSW1300-3P

The RSW1300-3P consists of three phase sine-wave DC-AC inverters with galvanic isolation between input and output.

Start-up motors by means of a soft start. In the start-up, the output voltage and frequency rise linearly from 0V to set voltage and from 5Hz to set frequency.

The start-up ramp slope may be changed via RS-232 port

Set the rotation speed of a motor according to the appropriate Voltage/Frequency ratio.

Monitoring the status of the input and output.

Set and monitor parameters via RS-232.

The RSW1300-3P has a maximum output current protection. This protects the semiconductors even when an output short-circuit occurs.

It also features a disable function for input under-voltage.



Pure Sinewave



3-Phase Output



High frequency technology



Light weight, compact size



Full electronic protection



Extended temperature range



Remote inhibit (Standby)



Output fail alarm (Form B)

SPECIFICATIONS

| Model | Input voltage | | Max. input current | | Output voltage | | Output Power | Output current | Output peak current | | Efficiency | Size |
|---------------------|---------------|--------------|--------------------|-----------|----------------|------------|-----------------|----------------|---------------------|--------------------------|------------|------|
| | nominal | range | No load | Full load | nominal | range | | | Arms 10s | 10ms (I _{opk}) | | |
| RSW1300 3-P 24-250 | 24Vdc | 16.8 ... 30V | 1.05A | 66.0A | 250Vac | 150...250V | 1,1kW 1.3kVA | 3.0A | 4.5A | 6.4A | 89 % | 2 |
| RSW1300 3-P 72-250 | 72Vdc | 50 ... 90V | 0.33A | 24.4A | 250Vac | 150...250V | 1,1kW 1.3kVA | 3.0A | 4.5A | 6.4A | 90 % | 1 |
| RSW1300 3-P 110-250 | 110Vdc | 77 ... 140V | 0.20A | 16.0A | 250Vac | 150...250V | 1,1kW 1.3kVA | 3.0A | 4.5A | 6.4A | 90 % | 1 |
| RSW1300 3-P 24-400 | 24Vdc | 16.8 ... 30V | 1.28A | 66.0A | 400Vac | 200...400V | 1,1kW 1.3kVA | 1.88A | 2.8A | 4.0A | 89 % | 2 |
| RSW1300 3-P 72-400 | 72Vdc | 50 ... 90V | 0.39A | 24.4A | 400Vac | 200...400V | 1,1kW 1.3kVA | 1.88A | 2.8A | 4.0A | 90 % | 1 |
| RSW1300 3-P 110-400 | 110Vdc | 77 ... 140V | 0.25A | 16.0A | 400Vac | 200...400V | 1,1kW 1.3kVA | 1.88A | 2.8A | 4.0A | 91 % | 1 |

| Input | |
|--|--|
| Input voltage range | -30, +25% Vin nom |
| Maximum input ripple | 15% Vin nom (V _{rms} , 100Hz) |
| Output | |
| Output voltage | 250 / 400 Vac sinusoidal |
| Output voltage range | See table (adjust via RS-232) |
| Output frequency | 50Hz, 5...60Hz via RS-232 |
| Load regulation | < 4% |
| Line regulation | < 2 % Vin -25% ... +25% < 10% Vin -30% ... +30% |
| Output wave distortion THD | < 2% (average of 16 samples) |
| Output HF ripple | < 2.5% |
| Environmental | |
| Storage temperature | -40 ... 80°C |
| Operating temperature full load | -25 ... 55°C (EN50155 T1) |
| Operating temperature 50% load | -25 ... 70°C (EN50155 T3) |
| Relative humidity without condensation | 5 ... 95% |
| Cooling | Controlled internal fan |
| MTBF (MIL-HDBK-217-E; G _b , 25°C) | 100.000 h |
| EMC | |
| Immunity according | EN61000-6-2 (EN50121-3-2) |
| Emissions according | EN61000-6-4 (EN50121-3-2) |

| Safety | |
|--------------------------------------|--|
| Dielectric strength: Input / output | 3000 Vrms / 50Hz / 1min |
| Dielectric strength: Output / ground | 1500 Vrms / 50Hz / 1min |
| Dielectric strength: Input / ground | 500 Vrms / 50Hz / 1min |
| Safety according to | EN60950-1 |
| Fire and smoke | EN45545-2 |
| Mechanical | |
| Dimension | Size 1: 315x 180x 66.5 mm Size 2: 315x 200x 66.5 mm |
| Weight | 4000 g |
| Connections | Input wire 1.5mm ² to 16mm ² Output wire 0.75mm ² to 4mm ² |
| Protections | |
| Against overloads | Current limited |
| Against overtemperature | Shutdown with auto-recovery |
| Control | |
| Output failure alarm | Isolated contact relay open when alarm (0.16A at 160Vdc) |
| Remote ON/OFF | ON: Apply nominal voltage on pins 1 and 2 of J2 OFF: Remove the voltage from pins 1 and 2 of J2 Impedance >8kΩ |
| Monitoring and programming | RS232 port |

