

Sinewave Inverter - Charger (Combi-Unit)



Benefits

- Powder coated, all aluminum diecast chassis
- Conformal coated circuit boards to resist corrosion
- Stainless steel screen to protect air intake and internal fan on Combo V unit
- Bug-proof construction, all openings on Combo V unit are $< \varnothing 0.8\text{mm}$ to keep out dirt
- Air inlet on Combo V unit comes with removable, washable foam filter

Applications

Combo V (Vented)

- Stationary MIL power
- Emergency Power Backup (UPS)

Combo S (Sealed)

- Marine & other rugged environments
- Coastal environments
- Dirty environments

Combo RS (Rugged. Sealed)

- All mobile MIL applications as tanks, trucks, building equipment
- Ruggedized to meet parts of MIL STD 810 Wheeled & Tracked Profiles

Sinewave Inverter

Series Combo V / S / RS

Description

The ComboV/S/RS series are modular „building block” sinewave inverter/chargers that can be used for both small and large power systems.

Each inverter/charger is a complete power conversion system - DC to AC inverter, battery charger and AC transfer switch. Additional inverter/chargers can be connected at any time in either parallel, series or three-phase configurations. This allows a system to be tailored to meet the specific power conversion requirements of the application, both at the time of the installation and in the future.

The sinewave inverter is designed to survive harsh environments anywhere in the world.

Combo RS Inverter/Charger is considered the most rugged design available on the market.

Conformal coated circuit boards, a powder coated die-cast aluminum chassis protects the unit's internal components from the environment, resisting water, dust and corrosion.

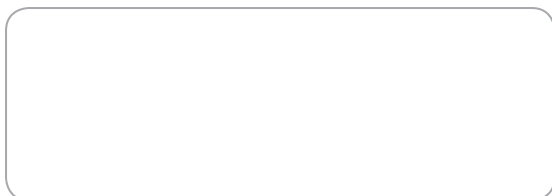
Features

- Ruggedized / Tropicalized
- S and RS -Version waterproof to IEC529, IP 64
- Bug-proof Construction
- Environmentally Tolerant
- High Temperature Tolerant
- Built-in intelligent Battery Charging System up to 120 A continuous charging current
- 5-Stage, intelligent charger (bulk, absorb, float, silent, manual EQ)
- Built-in 230VAC / 30A automatic AC-Transferswitch
- Networked communications
- Programmable AUX output
- Programmable generator start (Relaiscontact)
- Smooth, true sinewave AC output
- Inverter/chargers can be stacked from 3000VA up to 30000 VA of continuous AC power
- 3-Phase configuration possible
- Remote control optional available
- All relevant parameters programmable and stored in a non volatile memory

Specifications (Specifications Subject to Change Without Notice)

| Inverter/Charger Model | | ComboS 2012-230/50 MIL | ComboS 2024-230/50 MIL | ComboS 2348-230/50 MIL | ComboV 3024-230/50 MIL | ComboV 3048-230/50 MIL | ComboRS 2024-230/50 MIL |
|---|----------|--|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|
| Electrical Specifications Inverter | | | | | | | |
| Nominal DC-Input Voltage | VDC | 12 | 24 | 48 | 24 | 48 | 24 |
| DC-Input Range (adjustable low battery cut-out) | VDC | 10.5 - 17 | 21 - 34 | 42 - 68 | 21 - 34 | 42 - 68 | 21 - 34 |
| Nominal AC-Output | VAC / Hz | 230 / 50 (120 / 60 Version available) | | | | | |
| Output Voltage Regulation | % | +/- 2 | | | | | |
| Continuous Power Rating at 25° C | VA | 2000 | 2000 | 2300 | 3000 | 3000 | 2000 |
| Overload (from 25° C start) 30min | VA | 2500 | 3100 | 3100 | 3300 | 3300 | 3100 |
| Overload (from 25° C start) 5 sec | VA | 4000 | 4800 | 4800 | 4800 | 4800 | 4800 |
| Overload (from 25° C start) surge | VA | 4600 | 5750 | 5750 | 5750 | 5750 | 5750 |
| Continuous AC-Output | AAC RMS | 8.7 | 8.7 | 10 | 13 | 13 | 8.7 |
| Maximum Output Current | AAC Peak | 28 | 35 | 35 | 35 | 35 | 35 |
| Maximum Output Current | AAC RMS | 20 | 25 | 25 | 25 | 25 | 25 |
| Efficiency at 75% power & 25° C | % | > 90 | 92 | 93 | 92 | 93 | 92 |
| Total Harmonic Distortion (typ/max) | % | 2 / 5 | | | | | |
| Idle Power (Sleep-<6VA) | VA | 18 - 20 | 18 - 20 | 21 - 23 | 18 - 20 | 21 - 23 | 20 |
| Electrical Specifications Charger | | | | | | | |
| AC-Input Voltage Range | VAC | 160 - 300 | | | | | |
| AC-Input Frequency Range | Hz | 44 - 56 | | | | | |
| AC-Input Current max (adjustable limits) | AAC | 30 | | | | | |
| Continuous Battery Charge Current (adjustable) | ADC | 100 | 55 | 35 | 85 | 42 | 55 |
| Charge Characteristics | | 5-stage (bulk, absorb, float, silent, manual EQ) | | | | | |
| Battery temperature compensation | VDC | 0.1/°C | | | | | |
| Specifications Transferswitch | | | | | | | |
| Current capacity | AAC | 30 | | | | | |
| MIL Standards | | | | | | | |
| MIL STD 461E | | X | X | X | X | X | X |
| Meets portions of MIL STD 810, Wheeled & Tracked Profiles | | | | | | | X |
| Other Specifications | | | | | | | |
| Fan | | Load and temperature controlled (internal fan on Combo S and Combo RS) | | | | | |
| Operating temperature range | °C | - 40 to +60 derating -20VA for each degree C° above 25° C ambient temperature | | | | | |
| Sealed | | X | X | X | | | X |
| Conformal coating | | X | X | X | X | X | X |
| Basic ruggedizing | | X | X | X | X | X | |
| Full ruggedizing | | | | | | | X |
| Connecton DC | | DC Clamps | | | | | |
| Connecton AC | | Round connector output CA 3GD and input CA 3GS (custom version available on request) | | | | | |
| Dimensons (LxWxH) | cm | 44 x 21 x 34 | | | 44 x 21 x 34 | | 44 x 21 x 34 |
| Shipping weight | Kg | 34 | | | 33 | | 35 |

Available from:



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