

# Sinewave Inverter - Charger Combo 230Y400



Pure sinewave



Charger



Transfer switch



Stand-by mode



Remote control port



Extended temperature range



Multiple electronic protection



Waterproof (S / RS-Version)



Programmable (optional)



Digital display (optional)

## Applications

### Combo V (Vented)

- Stationary MIL power
- Emergency Power Backup (UPS)

### Combo S (Sealed)

- Marine & other rugged environments

- Demanding environments

### Combo RS (Rugged. Sealed)

- All mobile MIL applications as tanks, trucks, building equipment
- Ruggedized to meet parts of MIL STD 810 and MIL STD 1275D Wheeled & Tracked Profiles



## Description

The ComboV/S/RS series are modular „building block” sinewave inverter/chargers that can be used in 3-phase configuration by adding a MIL-Hub.

Each inverter/charger is a complete power conversion system - DC to AC inverter, battery charger and includes an AC transfer switch.

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.

Several hundreds of Combo units are in daily operation and proved the reliability in demanding environmental conditions.

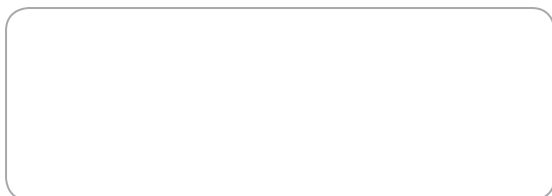
## Features

- Ruggedized / Tropicalized
- S and RS -Version waterproof IP62
- Bug-proof construction, all openings on Combo V unit are  $< \varnothing 0.8\text{mm}$  to keep out dirt
- Environmentally 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 automatic AC-Transferswitch (max. switch capacity 30A)
- 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
- 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 2012-400/50 MIL	ComboS 2024-400/50 MIL	ComboS 2348-400/50 MIL	ComboV 3024-400/50 MIL	ComboV 3048-400/50 MIL	ComboRS 2024-400/50 MIL
<b>Electrical Specifications Inverter</b>							
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	L-N 230 / 50, Y400 / 50					
Output Voltage Regulation	%	+/- 2					
Continuous Power Rating at 25° C	VA	6000	6000	6900	9000	9000	6000
Overload (from 25° C start) 30min	VA	7500	9300	9300	9900	9900	9300
Overload (from 25° C start) 5 sec	VA	12000	14400	14400	14400	14400	14400
Overload (from 25° C start) surge	VA	13800	17250	17250	17250	17250	17250
Efficiency at 75% power & 25° C	%	> 90	92	93	92	93	92
Total Harmonic Distortion (typ/max)	%	2 / 5					
Idle Power (Sleep-<18VA)	VA	54 - 60	54 - 60	63 - 69	54 - 60	54 - 60	60
<b>Electrical Specifications Charger</b>							
AC-Input Voltage Range	VAC	L-N 160-300, Y 277-519					
AC-Input Frequency Range	Hz	44 - 56					
AC-Input Current max (adjustable limits)	AAC	18 per Phase					
Continuous Battery Charge Current (adjustable)	ADC	300	165	105	255	126	165
Charge Characteristics		5-stage (bulk, absorb, float, silent, manual EQ)					
Battery temperature compensation	VDC	0.1°C					
<b>Specifications Transferswitch</b>							
Current capacity	AAC	30 per Phase					
<b>MIL Standards</b>							
MIL STD 461E		X	X	X	X	X	X
Meets portions of MIL STD 810 and MIL STD 1275 D Wheeled & Tracked Profiles							X
<b>Other Specifications</b>							
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 per unit (LxWxH)	cm	44 x 21 x 34			44 x 21 x 34		44 x 21 x 34
Shipping weight per unit	Kg	34			33		35
4 Port MIL-Hub							
Dimensons (LxWxH)	cm	28 x 17 x 6					
Shipping weight	Kg	1.9					

Available from:



## RIPEnergy®

The power conversion company

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