

Freedom Combi – 24 V

Modified Sine Wave Inverter/Chargers



Freedom Combi 20 shown



UL and cUL listed

AC Power Inverter with High Surge Capability, 3-Stage Charger

Freedom Combi 10, 20 and 25 operate using a 24-volt input and supplies AC power for a variety of applications operated from your boat, RV, truck, or work vehicle. They each provide automatic transfer switching between inverter power and incoming AC power. For inverter/charger control and basic system monitoring, use the 24 Volt Freedom Remote. For advanced battery monitoring and remote control, systems can be paired with optional Link instrumentation.

Product Features

- ▶ 1000-watt continuous output with 3000-watt surge, 25 amp automatic charger (Freedom Combi 10)
- ▶ 2000-watt continuous output with 4500-watt surge, 50 amp automatic charger (Freedom Combi 20)
- ▶ 2500-watt continuous output with 5200-watt surge, 65 amp automatic charger (Freedom Combi 25)
- ▶ Three stage battery charger recharges batteries quickly and accurately
- ▶ Built-in transfer switch automatically transfers between inverter power and incoming AC power
- ▶ Power sharing prevents source AC input circuit breaker from tripping
- ▶ 30 month warranty

Protection Features

- ▶ Over voltage and under voltage protection
- ▶ Overload protection
- ▶ Over temperature protection
- ▶ Circuit breaker protection

Accessories

- ▶ Compatible with 24 V Freedom Remote and Link instrumentation

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Electrical Specifications - Inverter

Model	Freedom Combi 10	Freedom Combi 20	Freedom Combi 25
Output power (continuous)	1000 W	2000 W	2500 W
Surge rating	3000 W	4500 W	5200 W
Output frequency regulation	0.05% @ 60 Hz	0.05% @ 60 Hz	0.05% @ 60 Hz
Inverter voltage regulation	120 V +/-5% true RMS	120 V +/-5% true RMS	120 V +/-5% true RMS
Output wave form	Modified sine wave	Modified sine wave	Modified sine wave
Efficiency	85%	84%	86%
Peak efficiency	92%	93%	94%
No load current draw (idle mode)	0.06 A	0.06 A	0.06 A
AC output connections	Single	Single	Single
AC input connections	Single	Single	Dual
AC transfer switch	30 A	30 A	30 A

Electrical Specifications - Charger

Charge rate	25 A DC	50 A DC	65 A DC
AC input voltage range	90 – 130 VAC	90 – 130 VAC	90 – 130 VAC
Battery voltage (nominal)	24 VDC	24 VDC	24 VDC
Battery voltage range	20 – 31 VDC	20 – 31 VDC	20 – 31 VDC
Low battery cut-out	20.0 VDC	20.0 VDC	20.0 VDC
AC input (max. charge mode)	11 A AC	23 A AC	27 A AC
Bulk charge voltage	28.8 VDC	28.8 VDC	28.8 VDC
Float charge voltage	27.0 VDC	27.0 VDC	27.0 VDC
Equalize charge voltage	32.6 VDC	32.6 VDC	32.6 VDC
Charge control	3-stage	3-stage	3-stage
Battery type settings	Wet/gel	Wet/gel	Wet/gel
Equalization	Yes	Yes	Yes

General Specifications

Optional remotes	24 Volt Freedom Remote or Link instrumentation		
Dimensions (H x W x L)	7.0 x 9.75 x 12.0" (178 x 238 x 305 mm)	8.75 X 11.5 X 12.0" (222 x 292 x 305 mm)	8.75 X 11.5 X 12.0" (222 x 292 x 305 mm)
Weight	31 lb (14 kg)	52 lb (24 kg)	56 lb (25 kg)
Warranty	30 months	30 months	30 months
Part numbers	81-0110-24	81-0200-24	81-0250-24
	82-0101-04 (24 V remote panel)		
	31-6257-00 (25' cable)		
	31-6262-00 (50' cable)		
	82-0112-01 (TC 2+2 temperature sensor)		
	84-2019-02 (Link 1000)		
	84-2000-06 (Link 2000)		

Regulatory Approvals

UL and CUL listed

Note: Specifications subject to change without notice.