

Description

The PSC1600-12-60 and PSC1800-24-35 Powersine Combi products are based on the latest generation Powersine inverter engine, which guarantees very reliable operation and huge output power reserves. The Powersine Combi also features a powerful intelligent battery charger and an ultra fast AC transfer switch. All this is combined in a very compact, yet installer friendly unit.

The Powersine Combi offers many innovative features like AC Input Power Boost, which temporarily assists weak AC input sources when more power is needed than available. Another feature is AC Input Current Limit, which limits the maximum current consumed from the AC input source by the Powersine Combi in charger mode.

Furthermore, the Powersine Combi is equipped with a TBSLink port to connect to a remote control or to a Windows device running TBS Dashboard, for easy step by step configuration and readout.

Also available are a fully configurable alarm relay output and a unique trigger

input, that can convert external trigger commands into a number of Powersine Combi status changes.

Each Powersine Combi comes standard with DC cables, a temperature sensor and a very clear installation and operating instruction manual.



Features

- True sinewave AC output
- Robust industrial design
- High surge power output
- Powerful 4-stage battery charger
- Power factor corrected AC input
- Fast AC transfer switch
- AC Input Power Boost
- AC Input Current Limit
- Protected against high/low battery voltage, high temperature, overload, short circuit, high ripple voltage and low AC input voltage
- Automatic Standby function to reduce no-load power consumption
- Variable speed fan for silent operation
- Remote on/off capability
- Configurable alarm relay
- Versatile trigger input
- Remote control capability via TBSLink
- Easy to access connection bay for installing AC-, DC and control wiring
- 1.5 meters DC connection cable included
- CE certified
- 24 month warranty

Applications

- Recreational vehicles
- Marine applications
- Solar power systems
- Industrial systems
- Mobile entertainment systems
- Service vehicles
- Remote homes

Technical specifications

Parameter		PSC1600-12-60 art # 5016300	PSC1800-24-35 art # 5016320
Inverter stage			
Output power¹⁾	P _{nom}	1300W	1400W
	P _{10minutes}	1600W	1800W
	P _{surge}	2500W	3000W
Output voltage		230Vac ± 2%	
Output frequency		50Hz or 60Hz ± 0.05% (selectable)	
Output waveform		True sinewave (THD < 5% ¹⁾ @ P _{nom})	
Input voltage (±3% tolerance)	Nominal	12Vdc	24Vdc
	Range	10.0 ²⁾ – 16.5Vdc	20.0 ²⁾ – 33.0Vdc
Maximum efficiency		92%	94%
No load power consumption³⁾ [ASB]		<10W [2.0W]	<12W [2.0W]
Charger stage			
AC input voltage		185 - 270Vac / 45 - 65Hz / PF > 0.95	
Maximum continuous charging current⁴⁾ (Secondary output)		60A	35A
Standard charge voltage (bulk / float @ 25°C)		14.3Vdc / 13.3Vdc (programmable)	28.6Vdc / 26.6Vdc (programmable)
Charge algorithm		IUoUoP, intelligent 4-stage, temperature compensated (programmable)	
AC Transfer switch			
Maximum continuous current		16Arms	
Transfer time (typical)		0ms (inverter → mains) / < 5ms (mains → inverter)	
General			
Communication port		TBSLink	
Protected against		high/low battery voltage, high temperature, overload, short circuit, high ripple voltage and low AC input voltage	
Indications		Power on, output power bar, error and ASB mode	
DC input connections		Two wires, length 1.5 meters, 35 mm ²	
AC output connections		Screw terminals	
Enclosure body size (height x width x depth)		351 x 210 x 114 mm	
Total weight		10.7 kg	
Protection class / operating temp. / storage temp.		IP21 / -20°C to + 50°C / -40°C to + 80°C (humidity max. 95% non condensing)	
Standards		CE marked meeting EMC directive 2014/30/EU and LVD 2014/35/EU complying with EN60335-1, EN60335-2-29 and RoHS 2011/65/EU	

Note: the given specifications are subject to change without notice.

¹⁾ Measured with resistive load at 25°C ambient. Power ratings are subject to a tolerance of 10% and are decreasing as temperature rises with a rate of approx. 1.2%/°C starting from 25°C

²⁾ Undervoltage limit is dynamic. This limit decreases with increasing load to compensate the voltage drop across cables and connections

³⁾ Measured at nominal input voltage and 25°C

⁴⁾ At high ambient temperatures, maximum output current shall be reduced automatically

Accessories

- Universal Remote Control with LCD
- Basic Remote Control with LEDs
- TBSLink communication kit including software
- Alarm output expander



Basic Combi Remote Control, art # 5095210

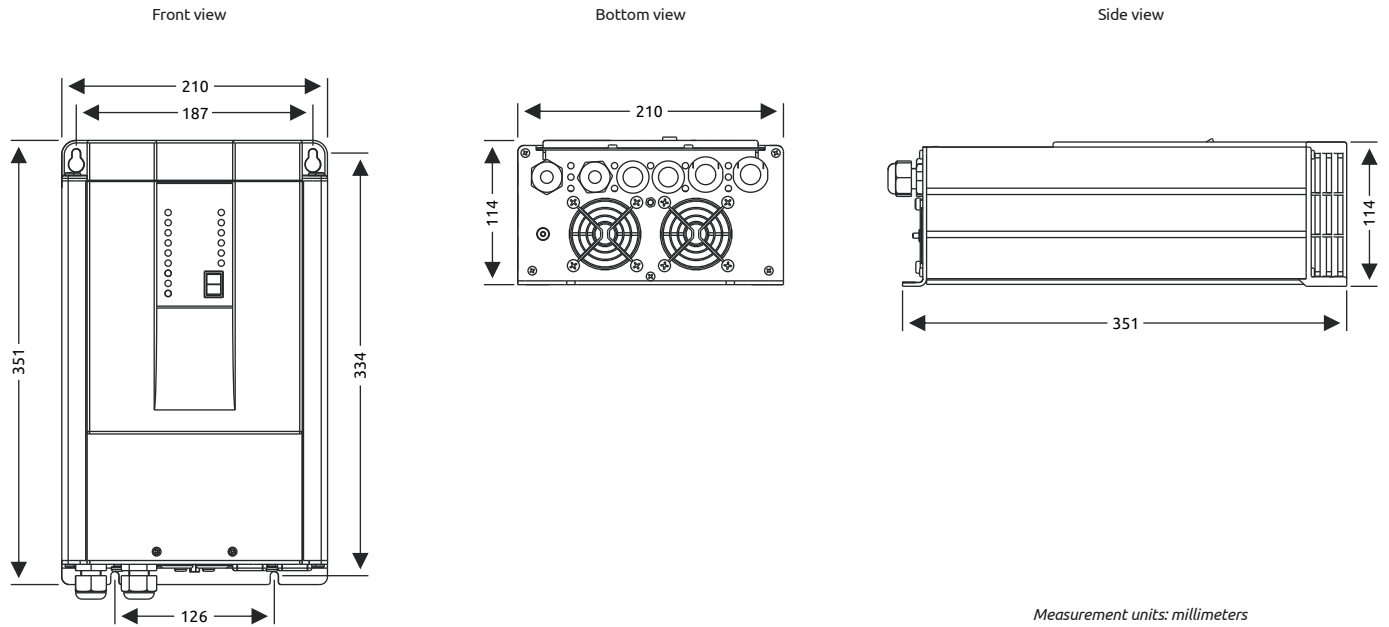


Universal Remote Control (Powersine Combi), art # 5095500



TBSLink to USB Interface Kit, art # 5092120
(Includes TBS Dashboard for monitoring and configuring the Powersine Combi inverter/chargers)

Dimensions



Basic application diagram

