



Operating principle

Developed for professional use, in harsh environments, KERSINE inverters offer up to 3,6kVA power. Thanks to their High Frequency technology they are lightweight and they offer compact dimensions which are suitable for the widest range of applications. Optional built-in relay board allows to switch automatically to AC shore-power or genset.



High power

They are powerful enough to sustain high-power AC devices consumption (microwaves oven, coffee machine, hair dryer, etc.).



No derating

They deliver up to 3.6kVA, regardless of the type of device connected.



Pure sine wave

Thanks to their sinusoidal signal without harmonic distortion, your devices are protected and energy loss is reduced.



30A built-in relays (option)

KERSINE+ inverters have built-in alarms and protections, as well as relays (30A) which ensure, in particular, the transfer of AC inputs, as well as the automatic earth relay (mobile applications). Planned availability 2025.



Easy and robust installation

Installation is simple thanks to the supplied AC output cable. Because of its HF technology Kersine+ is very light (3 or 4 times lighter than low frequency technology).



CAN-Bus interface

A serial CAN-Bus interface allows control and configuration of KERSINE+ inverters in real time.



Parallel mounting

The inverters can be parallel-mounted to increase the output power to a maximum of 14kVA (4 units). Three-phase operation is also possible (with 3 units). Planned availability 2025.



Bluetooth interface

KERSINE+ is equipped with a Bluetooth Low Energy (BLE), variant of "classic" Bluetooth. The major advantage of BLE is its low power consumption as it consumes half the power of a classic Bluetooth. Planned availability 2025.

Part Number	KERS12-230/3600	KERS12-230/2400	KERS24-230/3600	KERS24-230/2400	KERS48-230/3600	KERS48-230/2400
Model*	12VDC 3600VA	12VDC 2400VA*	24VDC 3600VA	24VDC 2400VA*	48VDC 3600VA*	48VDC 2400VA*
DC Input						
Voltage	10.5V - 16V		21V - 32V		42V - 64V	
Maximum current	300A		150A		75A	
On Mode @ No load Mode	12W					
Efficiency	92%					
Input fuse	400A		200A		100A	
AC Output						
Voltage range	230VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power	3000W	2000W	3000W	2000W	3000W	2000W
Peak power 3s	4500W	3600W	4500W	3600W	4500W	3600W
Earth relay	1 x 30A					
Waveform	Sinusoidal THD < 3%					
Parallel mounting	Up to 4 units in parallel mode / 3 for three-phase					
AC fuses (phase and neutral)	25A					
AC Input						
Voltage range	230VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power at 50°C (122°F)	3 x 30A (1 double and 1 single)					
Environment						
Cooling	Electric fans controlled in T° and current					
Operating temperature	From -20°C to +50°C (-4°F to 122°F), derating from 50°C (122°F)					
Storage temperature	From -40°C to +70°C (-40°F to 158°F)					
Relative humidity	up to 70% (95% without condensation)					
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)					
Casing						
Length, height, depth / Weight	270 x 360 x 130mm (10.6 x 14.2 x 5.1 in) / 6.8kg (13.2 lb)					
Protection factor	IP23					
Electronic card protection	Water-repellent varnish (marine environment)					
Communication port	CAN-Bus / Bluetooth*					
Standards						
CE declaration of conformity	Available on request					
CE / EMC	EN61204-3					
CE / Security - Others	EN60335-2-29 - E marking (pending)					
Protections						
Input	Reverse Polarity (fuses) / Under voltage / Over voltage					
Output	Short-circuitry / Overload / Over Temperature					
Options						
	Relay board : P/N: KERS-RELAY					

* Planned availability 2025

Part Number	KERS12-115/3600	KERS12-115/2400	KERS24-115/3600	KERS24-115/2400	KERS48-115/3600	KERS48-115/2400
Model*	12VDC 3600VA*	12VDC 2400VA*	24VDC 3600VA*	24VDC 2400VA*	48VDC 3600VA*	48VDC 2400VA*
DC Input						
Voltage	10.5V - 16V		21V - 32V		42V - 64V	
Maximum current	300A		150A		75A	
On Mode @ No load Mode	12W					
Efficiency	92%					
Input fuse	400A		200A		100A	
AC Output						
Voltage range	120VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power	3000W	2000W	3000W	2000W	3000W	2000W
Peak power 3s	4500W	3600W	4500W	3600W	4500W	3600W
Earth relay	1 x 30A					
Waveform	Sinusoidal THD < 3%					
Parallel mounting	Up to 4 units in parallel mode / 3 for three-phase					
AC fuses (phase and neutral)	25A					
AC Input						
Voltage range	120VAC +/- 5%					
Frequency selectable	5					
Rated Power at 50°C (122°F)	3 x 30A(1 double and 1 single)					
Environment						
Cooling	Electric fans controlled in T° and current					
Operating temperature	From -20°C to +50°C (-4°F to 122°F), derating from 50°C (122°F)					
Storage temperature	From -40°C to +70°C (-40°F to 158°F)					
Relative humidity	up to 70% (95% without condensation)					
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)					
Casing						
Length, height, depth / Weight	270 x 360 x 130mm (10.6 x 14.2 x 5.1 in) / 6.8kg (13.2 lb)					
Protection factor	IP23					
Electronic card protection	Water-repellent varnish (marine environment)					
Communication port	CAN-Bus / Bluetooth					
Standards						
CE declaration of conformity	Available on request					
CE / EMC	EN61204-3					
CE / Security - Others	EN60335-2-29 - E marking (pending)					
Protections						
Input	Reverse Polarity (fuses) / Under voltage / Over voltage					
Output	Short-circuitry / Overload / Over Temperature					
Options						
	Relay board : TBA					

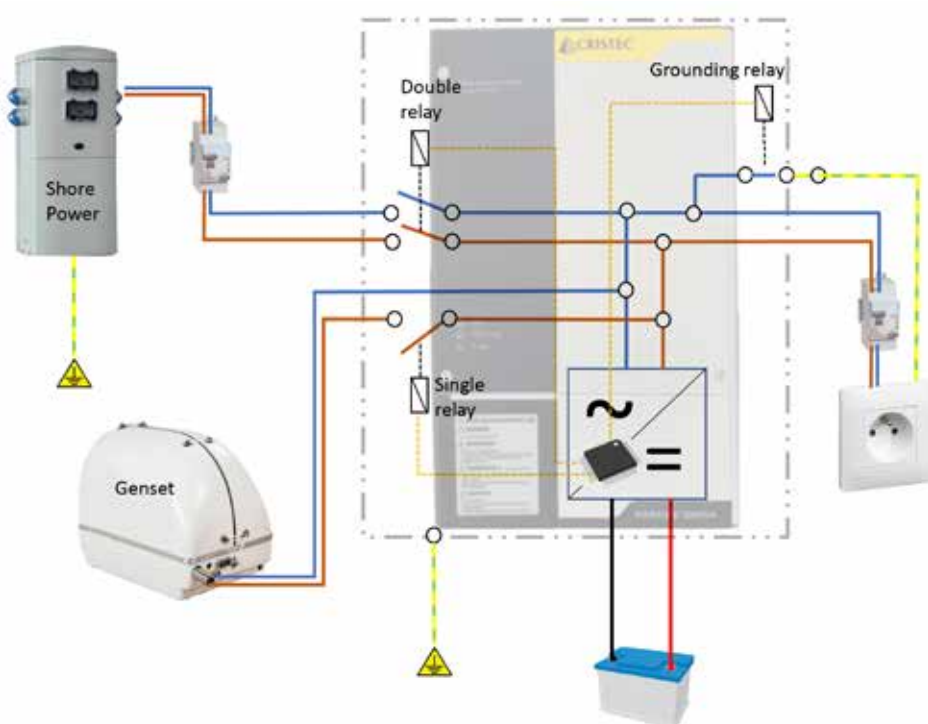
* Planned availability 2025

Principle schematic

Kersine stand alone



Kersine with relay board option



AC output is powered directly by shore power input. In case of grid power shortage, Kersine switches to genset AC input as main supply. If no input is available from shore and genset, Kersine switches to DC input. Grounding relay is switched off when input comes from shore power.

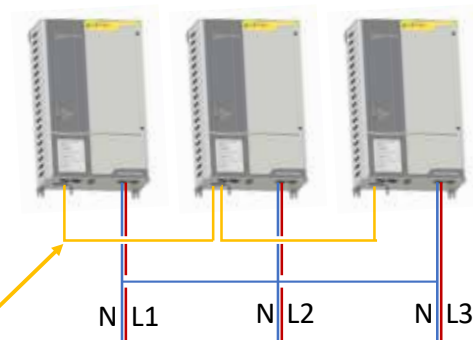
Parallel mode and 3-phase voltage mode, CAN address

Kersine can handle up to 4 units for parallel mode. The goal is to provide up to 14kVA of power. You can also connect 3 units to provide a 3-phase voltage architecture. In case of parallel mode or 3-line voltage mode, it is mandatory to connect all pure sine wave inverters together with RJ45 standard network cables and CAN-Bus cables.

Parallel mode



3 phase power mode



Sync-BUS

Installation example

