01

TL inverters

Quality power supply
The Sirio EVO range implements innovative technologies and high quality components, sized with a wide margin compared to normal operation, able to compensate for routine machine maintenance without sacrificing operating flexibility. The innovative digital control of all stages of power ensures a low susceptibility network disconnections, preventing unwanted disconnections in the presence variations or micro-breaks. Sirio EVO inverters integrate protections against voltage surges in input and output and are equipped with control devices and redundancy protection, particularly on the output stage, a further guarantee of operational effectiveness and continuity.

MPPT Devices
Sirio EVOs are equipped with two innovative MPPT devices (models ranging from 5000 to 12500kW) which ensure that the inverter makes maximum use of photovoltaic generator power. Thanks to fast response times, the inverters make the maximum power generated by photovoltaic panels available at all times and in all in all weather conditions.
Its multistring technology also allows the management of strings with different orientations and inclinations to best work with many models and types of panels, even in partial shade. This makes the inverters even more flexible and facilitates the installer in various configurations.

High conversion efficiency
Sirio EVO series inverters have been constructed without moving parts (*) and without galvanic separation, optimising minimal dimensions and weight and thereby increasing reliability on the entire system. Thanks to its use of “transformerless” technology and its state-of-the-art components, Sirio EVO inverters ensure a conversion efficiency up to 98%.

Reduced noise
Sirio EVO photovoltaic inverters have been constructed with static electronic devices without the use of rotating components and without cooling fans, significantly reducing device noise and eliminating a component often subject to maintenance or breakdowns.

Ease of installation and use
The wide input range, thanks to the use of NPC topology, combined with an IP65 degree of protection that allows outside placement of the inverter near the generator, simplify wiring on the DC side, reducing losses and limiting installation costs. The LCD display positioned on the front panel offers simple and intuitive viewing of all the essential information: power, energy produced and any faults, recalling other parameters such as mains voltage, photovoltaic module voltage and mains frequency.

(*) Except for the models Sirio EVO 10000 and 12500 which are provided with fans.

Simple communication
All models in the series have a standard serial RS485 and USB (ModBUS and Ethernet optional) connection, thus making all information locally accessible with the display remotely available. The inverter also has a built-in datalogger that stores instantaneous data with a settable frequency between 5 and 10 minutes, in addition to saving production data on a daily basis for a period of about two years. In addition, by means of a simple setting, a night-time consultation function can be set to allow inverter interrogation through the RS485/422 bus, USB or slot cards during the night when the device is off by default.

Internal GFCI
(Ground Fault Circuit Interrupter)
According to CEI 64-8/7, art. 712.413.1.1.1.2, section 712, Sirio EVO photovoltaic inverters are equipped with an advanced protection circuit that continuously monitors the leakage current to the ground. This protection is in fact a Class B differential. In the case of an earth fault, the converter is deactivated and the fault is indicated with a red LED and a relative error code on the front control panel.

Certificate of Factory Inspection
Sirio EVO Inverters meet “Made in EU” criteria as they are designed, manufactured and tested in Italy.

01

Sirio EVO 1500

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G83/1
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 1500
Approximate power of the photovoltaic field	1700 Wp max ; 1200 Wp min
Rated AC power	1500 W
Maximum AC power	1500 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	100÷720 Vdc
MPPT at full rating range	170÷720 Vdc
Working range	100÷800 Vdc
Maximum input current	10 Adc
Voltage during system startup	90 Vdc
Initial feeding voltage	130 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	2
MPPT number	1
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	6,5 Aac
Maximum current	7,5 Aac
Fault level contribution	7,5 Aac
DC current injection	<32 mA
Current Harmonic Distorsion (THDi)	<4%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	96,65%
European efficiency	>93,3%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 325x168,5x590 mm

Weight: 24 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

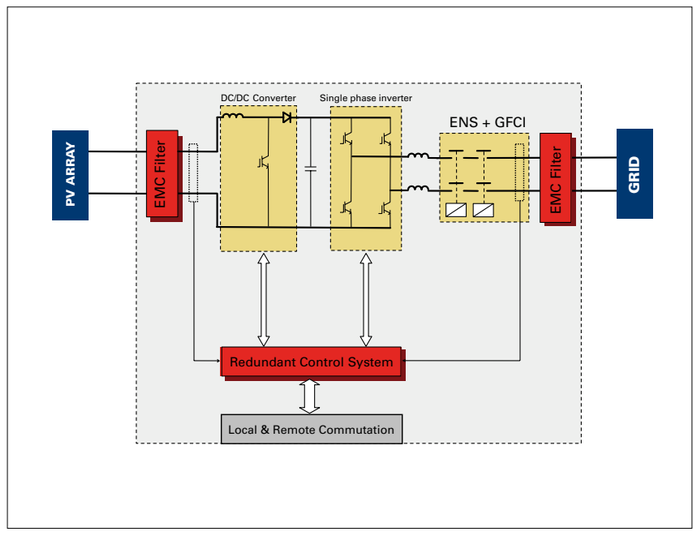
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

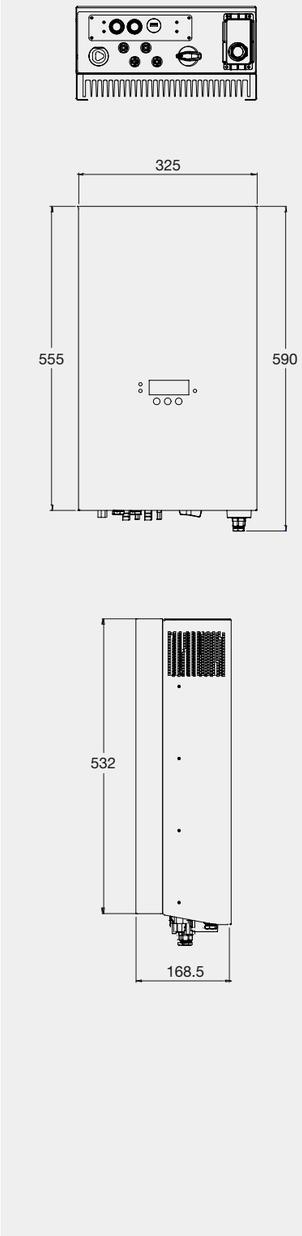
STANDARDS

EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G83/1, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109





01

Sirio EVO 2000

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G83/1
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 2000
Approximate power of the photovoltaic field	2300 Wp max ; 1600 Wp min
Rated AC power	2000 W
Maximum AC power	2000 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	100÷720 Vdc
MPPT at full rating range	220÷720 Vdc
Working range	100÷800 Vdc
Maximum input current	10 Adc
Voltage during system startup	90 Vdc
Initial feeding voltage	150 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	2
MPPT number	1
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	8,7 Aac
Maximum current	10 Aac
Fault level contribution	10 Aac
DC current injection	<43 mA
Current Harmonic Distorsion (THDi)	<4%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	97%
European efficiency	>94,75%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 325x168,5x590 mm

Weight: 24 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

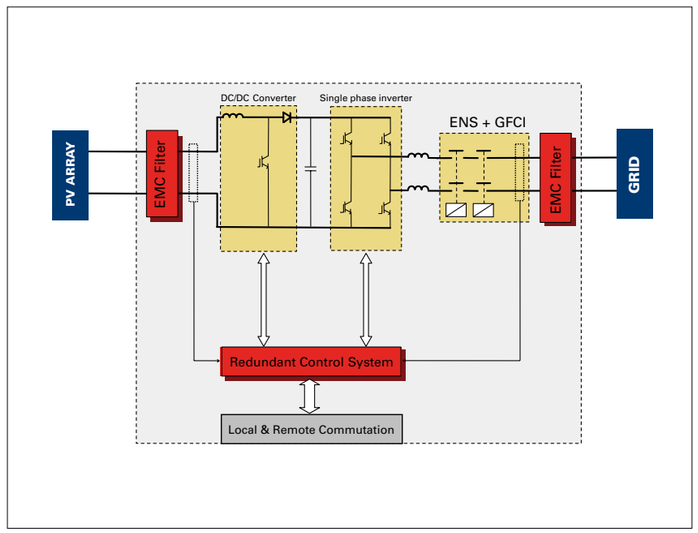
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

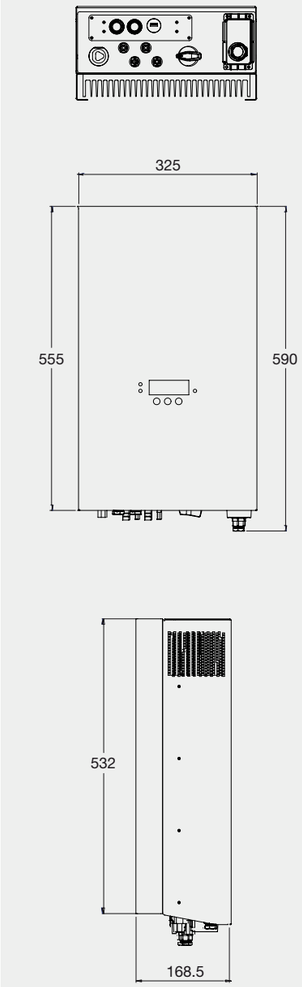
STANDARDS

EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G83/1, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109





01

Sirio EVO 3000

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G83/1
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 3000
Approximate power of the photovoltaic field	3450 Wp max ; 2400 Wp min
Rated AC power	3000 W
Maximum AC power	3000 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	150÷720 Vdc
MPPT at full rating range	240÷720 Vdc
Working range	150÷800 Vdc
Maximum input current	13 Adc
Voltage during system startup	90 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	2
MPPT number	1
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	13 Aac
Maximum current	15 Aac
Fault level contribution	15 Aac
DC current injection	<65 mA
Current Harmonic Distorsion (THDi)	<3,5%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	97,10%
European efficiency	>95,65%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 325x168,5x590 mm

Weight: 24 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

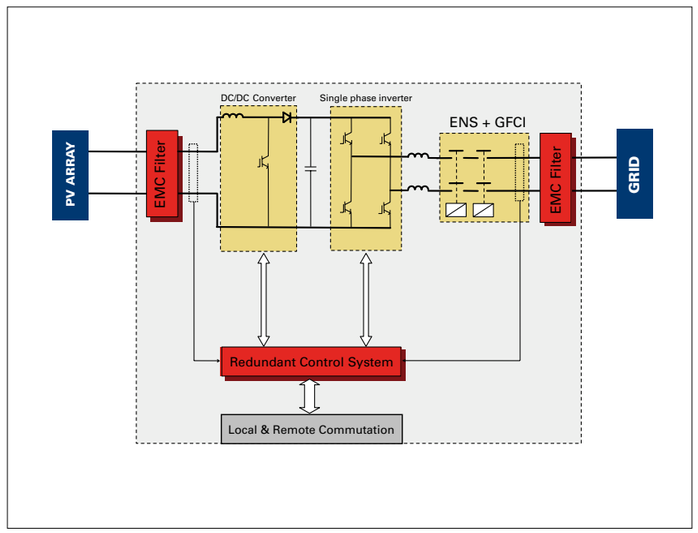
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

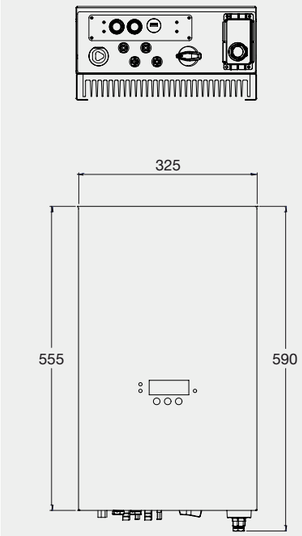
STANDARDS

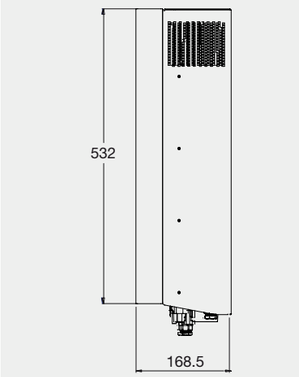
EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G83/1, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109







01

Sirio EVO 4000

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G59/2
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 4000
Approximate power of the photovoltaic field	4600 Wp max ; 3200 Wp min
Rated AC power	4000 W
Maximum AC power	4000 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	150÷720 Vdc
MPPT at full rating range	270÷720 Vdc
Working range	150÷800 Vdc
Maximum input current	16 Adc
Voltage during system startup	90 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	2
MPPT number	1
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	17,4 Aac
Maximum current	20 Aac
Fault level contribution	20 Aac
DC current injection	<87 mA
Current Harmonic Distorsion (THDi)	<3,5%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	97,10%
European efficiency	96,15%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 325x168,5x590 mm

Weight: 24 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

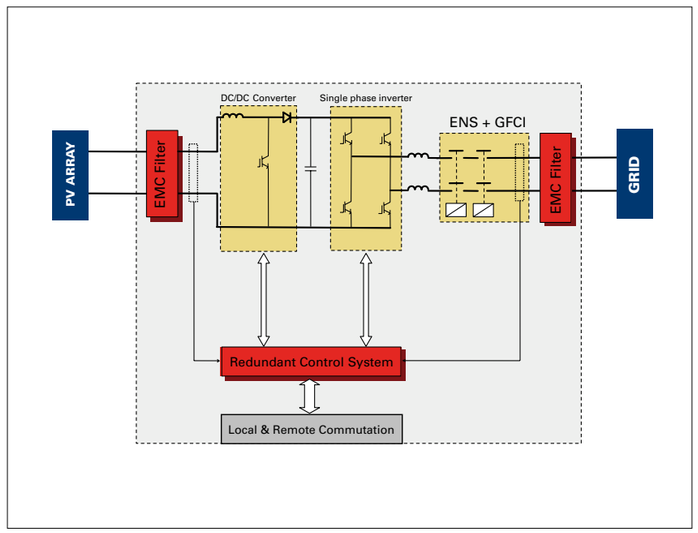
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

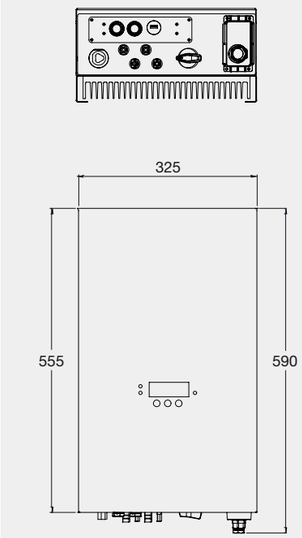
STANDARDS

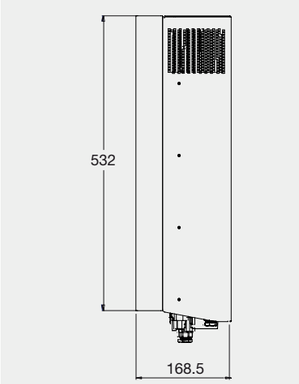
EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G59/2, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109







01

Sirio EVO 5000

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G59/2
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 5000
Approximate power of the photovoltaic field	5750 Wp max ; 4000 Wp min
Rated AC power	5000 W
Maximum AC power	5000 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	150÷720 Vdc
MPPT at full rating range	240÷720 Vdc
Working range	150÷800 Vdc
Maximum input current	13Adc/MPPT
Voltage during system startup	110 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	4
MPPT number	2
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	21,7 Aac
Maximum current	25 Aac
Fault level contribution	25 Aac
DC current injection	<108 mA
Current Harmonic Distorsion (THDi)	<3%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Terminal block 16mm²
SYSTEM	
Maximum efficiency	97,15%
European efficiency	> 96%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 424x173,5x682 mm

Weight: 35 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

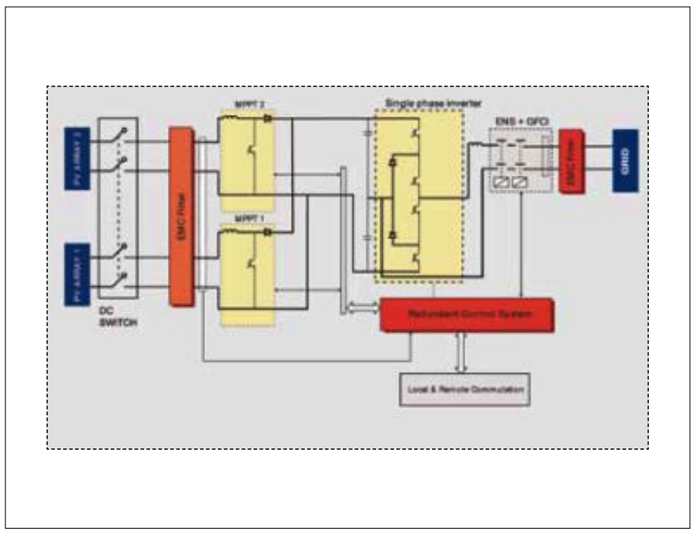
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

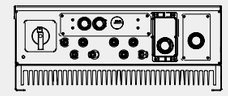
STANDARDS

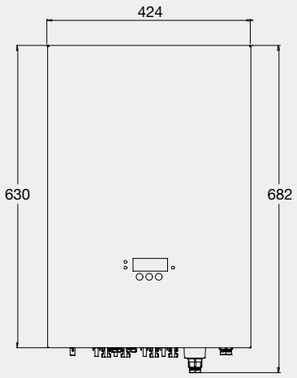
EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

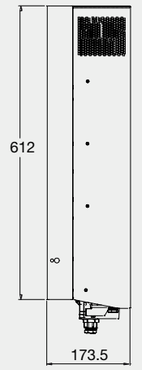
Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G59/2, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109









01

Sirio EVO 6000

INVERTER TL

GRID CONNECTION CRITERIA

The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G59/2
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL

Each device has an internal type B differential protection in compliance with Standard IEC 60755

MODEL	Sirio EVO 6000
Approximate power of the photovoltaic field	6900 Wp max ; 4800 Wp min
Rated AC power	6000 W
Maximum AC power	6000 W
INPUT	
Maximum DC voltage in an open circuit	800 Vdc
MPPT operating range	150÷720 Vdc
MPPT at full rating range	270÷720 Vdc
Working range	150÷800 Vdc
Maximum input current	16 Adc/MPPT
Voltage during system startup	110 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	60 Vdc
Ripple voltage	<3%
Number of inputs	4
MPPT number	2
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	230 Vac
Operating interval	184÷276 Vac (1)
Maximum power range	200÷276 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	26 Aac
Maximum current	30 Aac
Fault level contribution	30 Aac
DC current injection	<130 mA
Current Harmonic Distorsion (THDi)	<3%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Terminal block 16mm²
SYSTEM	
Maximum efficiency	97,20%
European efficiency	96,30%
Stand-by consumption	~9W
Night consumption	1W (4W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Convection
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 424x173,5x682 mm

Weight: 35 kg

Protection level: IP65

Acoustic noise: <35dBA

COMMUNICATION

Display: LCD 2-line, 16 characters

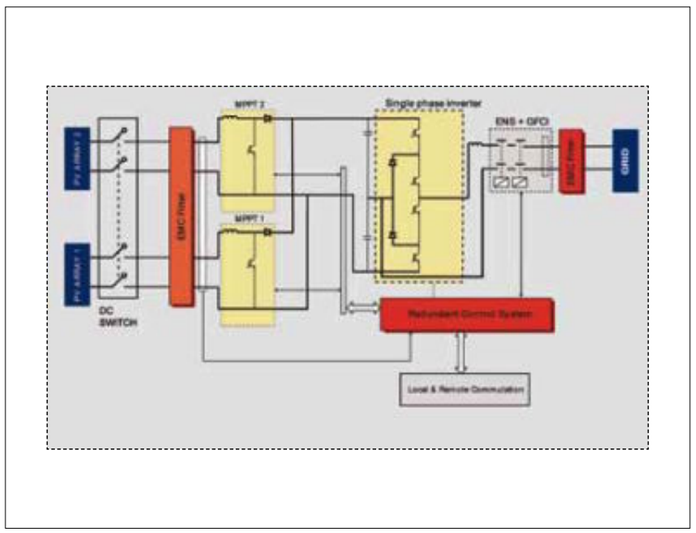
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

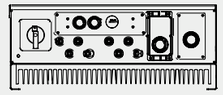
STANDARDS

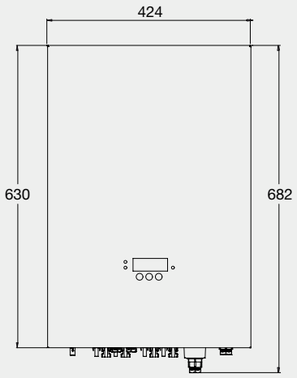
EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

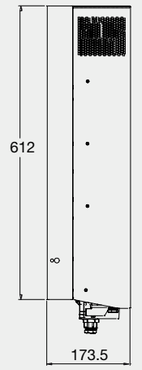
Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G59/2, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109









01

Sirio EVO 10000

INVERTER TL

GRID CONNECTION CRITERIA
The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G59/2
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL
Each device has an internal type B differential protection in compliance with Standard IEC 60755

Available from October 2012

MODEL	Sirio EVO 10000
Approximate power of the photovoltaic field	11500 Wp max ; 8000 Wp min
Rated AC power	10000 W
Maximum AC power	10000 W
INPUT	
Maximum DC voltage in an open circuit	1000 Vdc
MPPT operating range	150÷900 Vdc
MPPT at full rating range	300÷800 Vdc
Working range	150÷1000 Vdc
Maximum input current	18 Adc/MPPT
Voltage during system startup	110 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	70 Vdc
Ripple voltage	<3%
Number of inputs	4
MPPT number	2
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	400 Vac
Operating interval	318÷480 Vac (1)
Maximum power range	346÷480 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	14,5 Aac
Maximum current	17 Aac
Fault level contribution	17 Aac
DC current injection	<72,5 mA
Current Harmonic Distorsion (THDi)	<4%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	98%
European efficiency	97,6%
Stand-by consumption	~1W
Night consumption	0,6W (5W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Forced (by temperature controlled fans)
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 533x219,5x742 mm

Weight: 50 kg

Protection level: IP65

Acoustic noise: <35dBA (<45dBA with fans running)

COMMUNICATION

Display: LCD 2-line, 16 characters

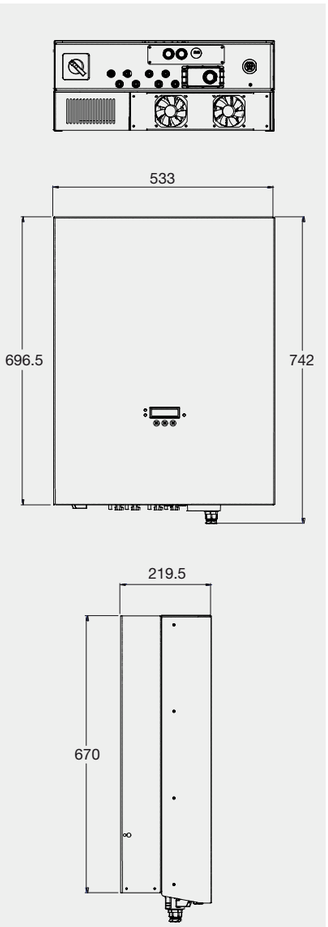
Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

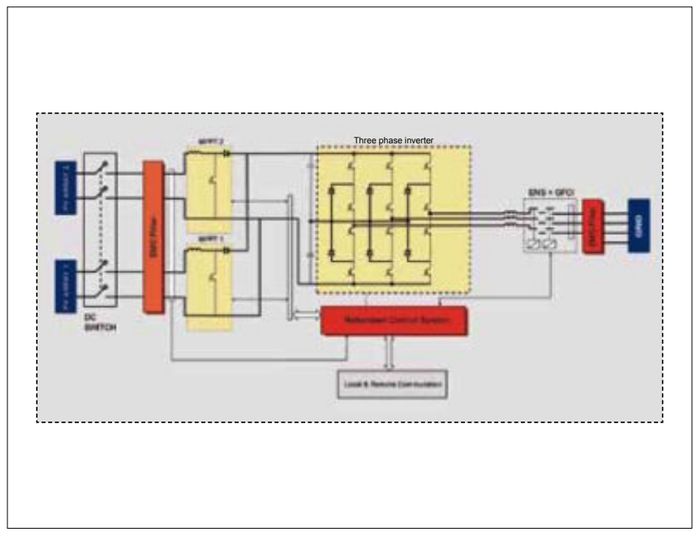
STANDARDS

EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G59/2, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109





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01

Sirio EVO 12500

INVERTER TL

GRID CONNECTION CRITERIA
The entire range can be configured according to the following standards:
- CEI 0-21
- CEI 0-16
- VDE AR-N-4105
- VDE 0126-1-1
- G59/2
- Real Decreto 1663-2000
- PO12.3

CLASS B DIFFERENTIAL
Each device has an internal type B differential protection in compliance with Standard IEC 60755

Available from October 2012

MODEL	Sirio EVO 12500
Approximate power of the photovoltaic field	14500 Wp max ; 10000 Wp min
Rated AC power	12500 W
Maximum AC power	12500 W
INPUT	
Maximum DC voltage in an open circuit	1000 Vdc
MPPT operating range	150÷900 Vdc
MPPT at full rating range	360÷800 Vdc
Working range	150÷1000 Vdc
Maximum input current	18 Adc/MPPT
Voltage during system startup	110 Vdc
Initial feeding voltage	220 Vdc
Shutdown voltage	70 Vdc
Ripple voltage	<3%
Number of inputs	4
MPPT number	2
DC connectors	MC4 type or compatible
OUTPUT	
Operating voltage	400 Vac
Operating interval	318÷480 Vac (1)
Maximum power range	346÷480 Vac (1)
Frequency range	47,5÷51,5 Hz (1)
Settable frequency range	47÷52 Hz (1)
Nominal current	18 Aac
Maximum current	21 Aac
Fault level contribution	21 Aac
DC current injection	<90 mA
Current Harmonic Distorsion (THDi)	<4%
Power factor	from 0,9 ind. to 0,9 cap. (1)
Galvanic separation	No
AC connectors	Wieland RST25 connector
SYSTEM	
Maximum efficiency	98%
European efficiency	97,7%
Stand-by consumption	~1W
Night consumption	0,6W (5W if night-time consultation is active)
Internal protections	Protection DC/AC side (RCD type B in accordance with IEC 60755). Overvoltage protection (OVR type 3)
Off-Grid protection	Depending on the local regulations
Detecting earth leakage	Yes
Heat dissipation	Forced (by temperature controlled fans)
Operating temperature	-20°C÷60°C (+45°C without derating)
Storage temperature	-20°C÷70°C
Humidity	4÷100% condensing

(1) These values can vary depending on the local regulations.

FEATURES

Colour: RAL 3020

Dimensions (WxDxH): 533x219,5x742 mm

Weight: 50 kg

Protection level: IP65

Acoustic noise: <35dBA (<45dBA with fans running)

COMMUNICATION

Display: LCD 2-line, 16 characters

Communication interface: RS485, USB and dry contact supplied as standard, ModBUS and Ethernet optional (slot version)

STANDARDS

EMC: Directive 2004/108/CE, EN61000-6-3: 2007, EN61000-6-2: 2005

Grid monitoring: CEI 0-21, CEI 0-16, A70, VDE AR-N-4105, VDE 0126-1-1, G59/2, Real Decreto 1663-2000, PO12.3

Directives: 2006/95/CE - EN62109