

• 15W0132B100 •

# SINUS S

AC DRIVE 0.37 ... 37 kW / 0.5 ... 50 HP

## Diagnostic modules, blanking cover - Mounting instructions -

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R.03

- This manual is integrant and essential to the product. Carefully read the instructions contained herein as they provide important hints for use and maintenance safety.
- This device is to be used only for the purposes it has been designed to. Other uses should be considered improper and dangerous. The manufacturer is not responsible for possible damages caused by improper, erroneous and irrational uses.
- Enertronica Santerno S.p.A. is responsible for the product in its original setting.
- Any changes to the structure or operating cycle of the product must be performed or authorized by Enertronica Santerno S.p.A.
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## About this document

### Document description

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## About this document

### **WARNING!**

Read this documentation thoroughly before carrying out the installation and commissioning.

► Please observe the safety instructions!

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This accessory may be operated under the same conditions as the assigned products.  
Deviating or additional operating conditions are given in this document.

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## Document description



You will find information on wiring and commissioning in the mounting and switch-on instructions of the inverter.

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Information and tools with regard to the Enertronica Santerno products can be found on the Internet:  
[santerno.com](http://santerno.com)

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## Product description

### Keypad

#### Parameter setting and diagnostics









Thanks to the intuitive operating structure, the navigation keys allow a quick and easy access to the most important parameters, either to configure functions or to query current values. Parameters and actual values are indicated on the easy-to-read display.



Function of the keypad keys in operating mode			
Key	Actuation	Condition	Action
	Shortly	Local keypad control active. Display "LOC"	Run motor.
		Remote control active Display "REM" Display "KSTOP"	Deactivate keypad triggered stop. The motor remains at standstill. Display changes from "KSTOP" to "STOP"
	Shortly	No Jog operation	Stop motor. Display "KSTOP"
	Shortly	Operating mode	Change to parameterisation mode.
	More than 3 s	None (anytime possible)	Save parameter settings in the user memory of the memory module.
	Shortly	During operation	Scroll through information in the above status line.
	Shortly	Manual setpoint selection via keypad active. Display "MAN"	Change frequency setpoint.
	Shortly	Operating mode	Activate full keypad control  Display "ON?" → Confirm with  Control and setpoint selection can now only be carried out via keypad. Actuating again:  Display "OFF?" → Confirm with  Exit full keypad control.
	Shortly	Local keypad control active. Display "LOC"	Reversal of rotation direction.  Display "REV?" → Confirm with 

## Product description

### Keypad

Function of the keypad keys in the parameterisation mode			
Key	Actuation	Condition	Action
	Shortly	Local keypad control active. Display "LOC"	Run motor.
		Remote control active Display "REM"	Deactivate keypad triggered stop. The motor remains at standstill.
	Shortly	Display "KSTOP"	Display changes from "KSTOP" to "STOP"
	Shortly	No Jog operation	Stop motor. Display "KSTOP"
		Parameterisation mode	Navigate to one level below. Group level → Parameter level → [SUB parameter level] → Editing mode
	More than 3 s	Editing mode	Exit editing mode and accept new setting.
		None (anytime possible)	Save parameter settings in the user memory of the memory module.
	Shortly	Parameterisation mode	Navigate to one level above. [SUB parameter level] → Parameter level → Group level → Operating mode
		Editing mode	Abort Exit editing mode without accepting new setting.
	Shortly	Group level/Parameter level	Navigate: Select group/parameter.
		Editing mode	Change parameter setting.
			Without function
			Without function

Keypad	
Order code	Design
ZZ0132023	7-digit LED display Display in German/English

## USB module

### Interface to the PC

The USB 2.0-connecting cable is used to connect the inverter with a PC with the Enertronica Santerno Remote Sinus Engineering Tool. The Remote Sinus serves to configure the inverter via graphical interfaces. They create diagnostics with trend functions or monitor parameter values.

Parameterising without supplying the inverter with voltage: If you connect the inverter directly to the PC without a hub, in many cases the USB interface of the PC is sufficient for the voltage supply.



Inverters with network option EtherCAT, PROFINET or EtherNET/IP must be supplied with an additional voltage for setting parameters if a connection cable longer than 3 m is used.

Please observe the following for USB modules labelled as "PRE-SERIES": Inverters with network option EtherCAT, PROFINET or EtherNET/IP must always be supplied with an additional voltage for setting parameters.

USB module	
Order code	Version
ZZ0132033	Parameter setting without voltage supply of the inverter USB 2.0 connecting cable required

Connecting cable		
Order code	Length	Version
PC6604600	3 m	USB 2.0-connecting cable (A plug to micro-B plug)
PC6604800	5 m	

## Product description

### WLAN module

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#### WLAN module

The wireless interface

Wireless communication with the inverter.

- via a PC with the Enertronica Santerno Remote Sinus Engineering Tool



#### **WARNING!**

- ▶ This product contains FCC ID: QQQWF121/IC: 5123A-BGTWF121
  - ▶ To comply with FCC and Industry Canada RF radiation exposure limits for general population, the transmitter with its antenna must be installed such that a minimum separation distance of 20 cm is maintained between the radiator (antenna) and all persons at all times.
  - ▶ This product must not be collocated or operated in conjunction with any other antenna or transmitter.
  - ▶ -----
  - ▶ Le produit contient un module transmetteur certifié FCC ID: QQQWF121/IC: 5123A-BGTWF121
  - ▶ Afin de se conformer aux réglementations de la FCC et d'Industry Canada relatives aux limites d'exposition aux rayonnements RF pour le grand public, le transmetteur et son antenne doivent être installés de sorte qu'une distance minimale de 20 cm soit constamment maintenue entre le radiateur (antenne) et toute personne.
  - ▶ Le produit ne doit pas être utilisé en combinaison avec d'autres antennes ou transmetteurs.
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LED status displays			
LED 1	LED 2	LED 3	Meaning
Power (green)	TX/RX (yellow)	WLAN (green)	
Supply voltage status	Communication status	WLAN status	
OFF	OFF	OFF	No voltage
ON	ON	ON	Self-test (approx. 1 s)
ON	OFF	OFF	Ready for operation No active WLAN connection
ON	Flashing	ON	Communication active
ON	OFF	Blinking	Client Mode Waiting for connection
Blinking	OFF	OFF	Trouble

Additional conformities and approvals		
CE	R&TTE/RED	EN 301489-1 V1.9.2:2011
		EN 301489-17 V2.2.1:2012
		EN 300328 V1.8.1:2012-06
FCC	Part 15.107/15.109 ICES-003	

Connection data (default setting)	
IP address	192.168.178.1
SSID	<Product type>_<10-digit identifier>
Password	password

WLAN module	
Order code	Design
ZZ0132043	Range in open space: 100 m, conditions on site may restrict the range.

## Blanking cover

### Protection and optics

The blanking cover protects the terminals and provides for uniform optics if no other module is plugged on.



Blanking cover		
Order code	Version	VPE
		Piece
ZZ0132013	Protection against dust Uniform optics	4



## Mounting

### Mounting steps



The mounting steps are the same for all diagnostic modules and the blanking cover. This example shows the installation of the USB module.

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1. Hook the diagnostic module into the upper mounting slots.



2. Turn it downwards until it engages into the lower mounting slot.



The diagnostic module is mounted