

Translation of original operating instruction SCS-03 - SunControlServer®



1 General information

1.1 Notice

This document is part of the product. Keep this operating instruction for future references.

1.2 Scope of delivery

Check the delivery according to the delivery note.

Product designation

Art.-Nr.	Beschreibung
99125.xxx	SCS-03 - SunControlServer®
	Connection plug
	Operating instruction

1.3 Accessories

Art.-Nr.	Beschreibung
99123.xxx	SCS-license extension (25 sektors each)
99123.xxx	SCS-Client (User license)
0109001.XXX	Interface SCS - KNX(TP)
0143101.XXX	NS-05 - 5 Port network switch
0104001.XXX	Quadra® - solar shading control unit

1.4 Product description

The SunControlServer® is a solar shading control unit for at least 50 sectors. Via license extensions up to 250 sectors can be activated. For the automation, corresponding comfort (shading, temperature, heat, dusk, lighting, time, input) and security programs (wind, precipitation, frost, global radiation) are available.

Communication with the KNX bus for receiving the current weather data and sending the control commands (6-byte SunControlObject) is performed via the KNXnet / IP protocol. The device configuration is done via remote desktop access to the SCS manager. For system operation the SCS client visualization interface is provided for each user license via a WEB server.

1.5 Limitations of liability

All information and notes in this operating instruction has been compiled in consideration of the applicable standards and regulations, the state of the art as well as our many years of knowledge and experiences.

The manufacturer assumes no liability for damages and operational malfunction due to

- disregarding this operating instruction
- improper use
- faulty connection
- non-use of original spare parts and accessories

1.6 Disposal

The disposal of this product in normal household waste is forbidden within the European Union.

Dispose of the device via the municipal collection points.

The packaging materials used are recyclable. Dispose of packaging materials that are no longer required according to local regulations.

1.7 Copyright

This documentation is protected by copyright.

All rights reserved, including those of photomechanical reproduction, copying and distribution by means of special procedures (e.g. data processing, data carriers, and data networks), even in parts. Subject to technical changes and alterations in content.

1.8 Manufacturer/ Customer service

BMS – Building Management Systems

Heinrich-Heine Straße 3
47906 Kempen
Germany

Phone: +49 (0) 2152 / 95 989 – 0

Fax: +49 (0) 2152 / 95 989 – 9

E-Mail: info@bms-solutions.de

Internet: www.bms-solutions.de

2 Safety

2.1 Intended use

The SunControlServer® receives the current weather data and sends the control commands to the actuators/ motor control units in a KNX system within the specified limits.

Any other use or extended use is considered to be improper.

2.2 Foreseeable misuse

Any use for a purpose other than the above mentioned purpose is improper. The risk of improper use or misuse is borne solely by the operator.

All types of claims due to damage arising from improper use are excluded.

2.3 Personnel's qualification


Improper use can cause considerable personal injury and material damage!


All tasks for installation, connection and commissioning must be carried out exclusively by a qualified electrician.


A qualified electrician is able to carry out work on electrical installations due to her/ his professional training, knowledge, and experience as well as knowledge of the relevant standards and regulations. She/ he can identify and avoid possible dangers.

The qualified electrician is trained for the specific place of employment in which she/ he is working and is aware of the relevant standards and regulations.




2.4 Basic safety instructions

⚠ DANGER	
	<p>Danger of life! There is a risk of life when touching live parts.</p> <ul style="list-style-type: none"> ▶ All tasks must be carried out exclusively by qualified personnel. ▶ Disconnect all power supplies before starting work.

⚠ GEFAHR	
	<p>Personal injury! The metallic rear of the housing can heat up depending on the operating environment.</p> <ul style="list-style-type: none"> ▶ Check temperature before touching. ▶ If necessary let the device cool down after switching off the power supply and before carrying out further work.

⚠ CAUTION	
	<p>Material damage! Incorrect wiring and configuration of the device can lead to damage up to total failure.</p> <ul style="list-style-type: none"> ▶ Ensure that the supply voltage corresponds to the specifications from the technical data for the device. ▶ Refer to the software-helpfile for details on the configuration.


2.5 Signage

Symbol	Meaning
	General warning
	Electrostatic discharge
	CE label

3 Installation

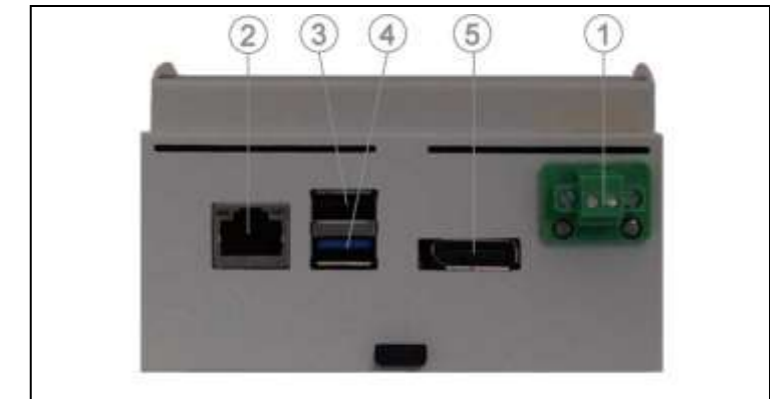
3.1 Mounting

Place the SCS on the DIN rail in the desired position and lock in.

i HINWEIS	
	Observe the operating temperature range. Possibly ventilate to maintain temperature range.

3.2 Electrical connection

Overview



Connection plan

1 Supply voltage

Connect the supply voltage via the connection plug to the SCS as follows

Power	
1	0V
2	+12V

2 LAN connection

Create the network connection to the KNX / IP interface via a network cable with RJ45 connectors. Possibly use a network switch NS-05 to integrate even more KNX / IP interfaces or configuration / operating PCs (SCS clients)

3 USB2.0 port

The USB2.0 port (Type A) is intended for service purposes. Use is only permitted after consultation with the manufacturer.

4 USB3.0 port

The USB3.0 port (Type A) is intended for service purposes. Use is only permitted after consultation with the manufacturer..

5 Display port

The Display port is intended for service purposes. Use is only permitted after consultation with the manufacturer.

3.3 Configuration

The SCS is configured directly on the device. For this purpose, a remote desktop connection (RDP) has to be established to the device.

Requirements

- the SCS must be started up and the commissioning PC must be connected to the SCS via LAN or WLAN
- the computer name of the SCS is SCS-xxxxx, where xxxxx is the digits 5 to 9 from the 11-digit serial number of the SCS

Set up the LAN connection

- connect the PC / laptop directly to the SCS via a network cable or network switch
- ⇐ the factory setting for the SCS LAN card is the fixed IP address 192.168.200.200
- configure the PC / Laptop so that it is in this IP address range
- call the IP address (192.168.200.200) of the SCS via the Windows application Remote Desktop Connection (> Start> Programs> Accessories> Remote Desktop Connection)
- ⇐ the login window of the SCS appears
- log in with user name: BMS and password: SCS
- ⇐ the configuration interface of the SCS appears

Set up the WLAN connection

- the PC / laptop can be connected directly to the SCS via WLAN and an ad-hoc connection
- ⇐ the factory setting for the SCS WLAN card is the fixed IP address 169.254.200.200
- let the PC / laptop search for the WLAN network of the SCS
- ⇐ the WLAN SSID is SCS-xxxxx, where xxxxx is the digits 5 to 9 from the 11-digit serial number of the SCS
- register with the WLAN password: BMSSCS01
- call the IP address (169.254.200.200) of the SCS via the Windows application Remote Desktop Connection (> Start> Programs> Accessories> Remote Desktop Connection)
- ⇐ the login window of the SCS appears
- log in with user name: BMS and password: SCS
- ⇐ the configuration interface of the SCS appears


Upload the project data into the SCS

- you can handle the currently opened configuration file via the tab >File >Reset/ Restore/ Backup project data
- via the tab >SCS >Program project data, the currently opened configuration file is uploaded into the SCS; analogue reading / unloading of the SCS is also possible

3.4 Commissioning/ Test run

For commissioning of the SCS proceed as follows

- check the condition of the device and the tight attachment of the terminals and connections
- switch on supply voltage
- check supply voltage and status display on the device

	NOTICE
	Correct setting of date, time and mounting position is necessary for the calculation of sun position and shading control.

- check the date and time and adjust if necessary (in the SCS Manager select the tab >Settings >Date and time or via the configured KNX group addresses)
- mount all protective covers
- maintain system documentation and, if necessary, affix labels and/ or signs

4 Operation

4.1 User control


The SCS client is designed for the operation of the SunControlServer®. By means of a WEB browser sectors can be operated, sector states can be displayed, programs can be switched on/ off, program limit values can be changed and current measurement and error values can be displayed.

4.2 Automatic operation

Operation is performed by the parameters specified in the configuration. The control commands (input programs, measured values) received via the KNX bus, the executed operations via the SCS client, as well as hysteresis and delay times are taken into account.

5 Technische Daten

General		
Operating environment	Dry rooms (free of condensation) +5° to +35°C pollution index 2	
Mounting	DIN rail 35mm or equivalent	
Dimensions (W x H x D)	6 SU	
	108 x 90.5 x 62	mm
Weight	450	g

	NOTICE
	The connection and the wiring of the supply voltage must be carried out according to the current SELV requirements.

Connection data		
Supply voltage	12	V _{DC}
	only use original accessories	
Cable	2 wires	
	single or fine wire	
Wire cross-section	1	mm ²
Terminal tightening torque	0,4	Nm
Power consumption	< 10	W
Degree of protection	IP 20	
Protection class	III	

Interface ports	
LAN	1 x RJ45
WLAN	2,4 GHz
USB	1 x USB3.0
	1 x USB2.0
Display port	Resolution 2560 x 1400