Schneider Electric 5500NAC2 Network Automation Controller User Guide

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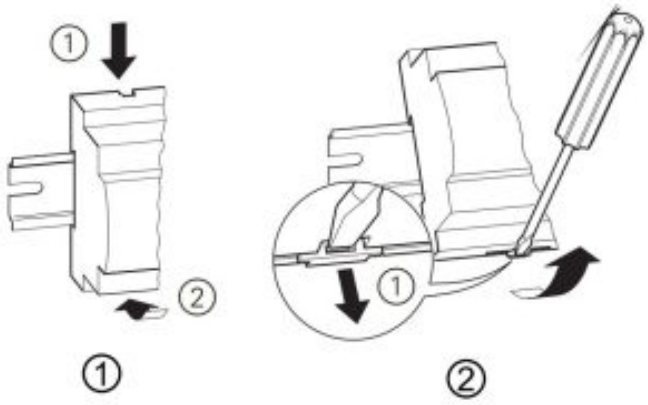
Contents

Introduction

The SpaceLogic C-Bus Network Automation Controller controls and manages C-Bus systems for buildings and integrates Building Management Systems such as Heating /Cooling, Emergency and exit lighting control systems and Energy Monitoring/Control.

The product needs an external power supply
(24 V DC).

Mounting/Removing the controller



1. Mounting
2. Removing

For your Safety

DANGER
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- It is illegal for persons other than an appropriately licensed electrical contractors or other persons authorised by legislation to work on the fixed wiring of any electrical installation.
- To comply with all safety standards, the product must be used only for the purpose described in this instruction and must be installed in accodance with the wiring rules and regulation in the location where it is installed.
- There are no user serviceable parts inside the product.

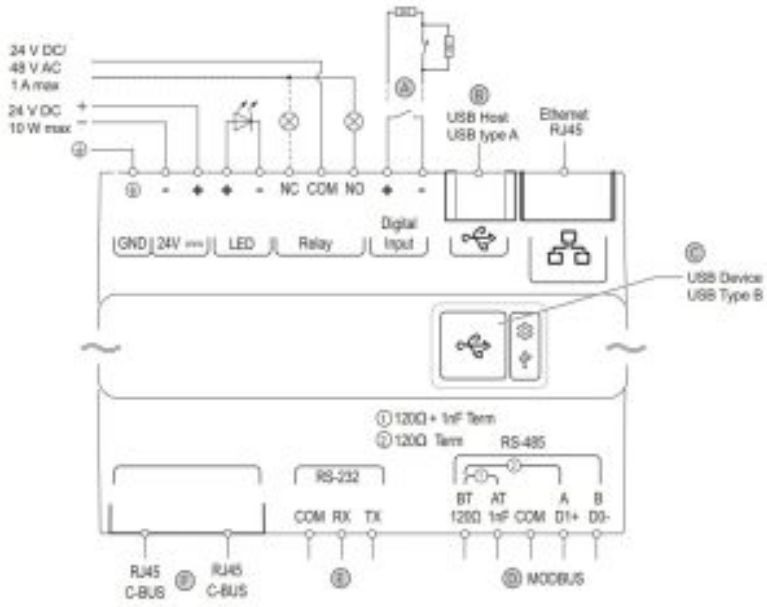
Failure to follow these instructions will result in death or serious injury.

CAUTION
EQUIPMENT DAMAGE HAZARD
Install the device according to instructions in this document:

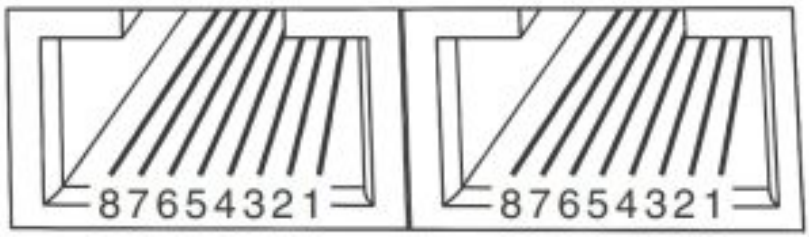
- Pay attention to the specifications and wiring diagrams related to the installation.
- Do not use this product for any other purpose than specified in this instruction.

Failure to follow these instructions can result in injury or equipment damage.

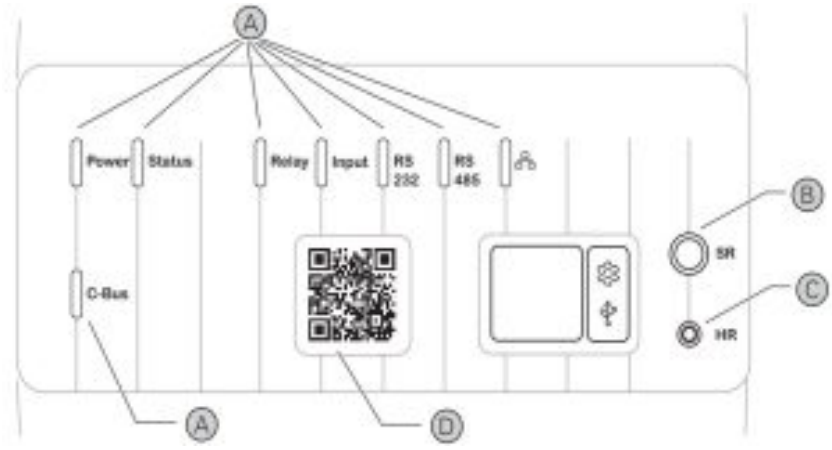
Wiring diagram and electrical connections



A Digital Input	
Compatible with either a potential-free contact or a monitored cable using End of Line Resistance	
B USB Host	
USB Type A connector for USB Host	USB 1.1 and USB 2.0 devices are supported
C USB Device	
USB Type B connector for USB programming Port	USB 1.1 full speed is supported
D RS-485	
MODBUS	D1+ and D0- = twisted wires
Shield must be connected to earth at end of line	Incorporates 47kΩ polari- sation resistors
Line must be terminated at each end	Link AT-BT to enable low power line termination of 120 Ω + 1nF (optional)

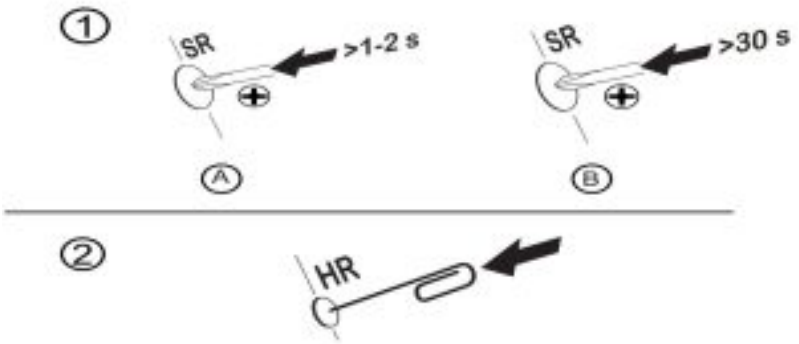
	Link BT-A to enable legacy line termination of 120Ω (optional)
E RS-232	
	TX = Transmit | RX = Re- ceive | COM = Common
F C-Bus	
2 C-Bus Connectors with RJ pins  To use RJ 45 with C-Bus Cat-5 network cablePin1-Remote ON Pin2- Remote ON Pin3 -C-Bus Neg(-) Pin4-C-Bus Pos(+) Pin5- C-Bus Neg(-) Pin 6- C-Bus Pos(+) Pin7-Remote OFF Pin8-Remote OFF	

Displays and Operating Elements



A Status Feedback indicators
B Software Reset button
C Hardware Reset button
D QR code with link to information about this specific unit.

How to Reset



SR-Software Reset
A Shut down and Reset

- Forces running processes to stop and reboots after

B Factory Reset

- Recover your system to its original factory condition

HR- Hardware Reset
Processor Reboot

- Power turned off and back on again.
- Wake up signal for a unit that has been shut down

Meaning of the Status Feedback Indicators

Indicators	**Cause**
Power	
Green, Blinking Red	Controller is running with blink rate proportional to proc essor load
Green	Controller is powered but has been shut down
Red	Problem with processor board or power supply

Off	Controller has no power
Status	
Green	Controller is running properly
Red Flashing	During factory reset
Red	During software reset
Off	During boot up
Relay	
Green	Relay is On
Off	Relay is Off
Digital Input	
Green	**Monitored Input:** Input in high resistance (6.9 kΩ) – s witch open state
Yellow	**Monitored Input:** Open circuit (> 12 kΩ). **Potential free contact (switch/relay):** Input is open ci rcuit.

Red	**Monitored Input:** Short circuit (< 1 kΩ). **Potential free contact (switch/relay):** Input is closed circuit.
Off	**Monitored Input:** Input in low resistance (2.2 kΩ) – switch closed state
RS 232	
Green	Controller is transmitting
Magenta	Controller is receiving
White	Controller is receiving and transmitting
Off	No communication
RS 485	
Green	Controller is transmitting
Magenta	Controller is receiving
White	Controller is receiving and transmitting
Off	No communication

Ethernet	
Green	Ethernet is operating (100 Mbit/s)
Yellow	Ethernet is operating (10 Mbit/s)
Blinking	Data traffic
C-Bus	
Green	C-Bus powered and clock active
Flashing	C-Bus low voltage warning
Off	No C-Bus power or no active clock

Configuration

Access to the web server of the Controller

- Default user name: admin
- Default password: admin

Access via Ethernet

- The Controller must be supplied with 24 V DC
- The default IP address is 192.168.0.10
    1. Connect Ethernet cable with PC.
    2. Use on the PC e.g. address 192.168.0.9 and subnet mask 255.255.255.0.
    3. Run Google Chrome™ or Firefox® and go to 192.168.0.10.

Access via USB Device

- The Controller may be powered by USB for configuration purposes.
- The IP address is 192.168.254.10.
- The USB drivers are included with the latest C-Bus Toolkit installation
    1. Connect the USB Type B connector to a USB port on the PC. The PC is given a DHCP IP address in the range of 192.168.254.1 – 192.168.254.9
    2. Run Google Chrome™ or Firefox® and go to 192.168.254.10.

With the C-Bus Installation software you can configure, export and import a C-Bus project

It is recommended to update the firmware to install the latest features, security updates and bug fixes. Scan the QR code using your smartphone for a link to information specific to your device.

Technical data

Power Supply:	24V DC +/- 5% 10 W max 2W typical
C-Bus Power:	15-36V DC, 32mA
Operating Elements:	Software Reset button Hardware Reset button
Display Elements	8 Status Feedback Indicators Power, Status, Relay, Di gital Input, RS232, RS485, Ethernet, C-Bus
External Interfaces	
Power Supply:	24 V DC plus separate GND
LED Output Driver:	40 mA current limited
Relay Output:	NO, NC, Common 48 V AC/24 V DC 1 A max

Digital Input:	Potential free contact or moni- tored input impedances of 2.2 kΩ closed, and 6.9 kΩ open
USB Host	Type A USB 2.0 high speed host
USB Device	Type B USB 1.1 full speed device, for configuration
Ethernet	RJ45 for 10/100 BASE-T UTP
RS-485, MODBUS:	120 Ω Terminator, 1 nF Terminator, Common, A D1+, B D0-
RS-232	Receive, Transmit, Common
C-Bus:	2x RJ45
Terminals:	18x screw terminals 1.5 mm² single-core and multi-cor e
Dimensions (WxHxD):	108 x 63 x 93 mm
Mounting method:	DIN Rail, clips
External conditions:	

Ambient temperature during operation:	-5 °C to +45 °C
Ambient temperature during storage:	-20 °C to +80 °C
Rel. humidity (not condensing):	10 % to 93 %
Type of protection:	IP 20
Radiated Emissions:	1. EN 55032 Class A 2. EN 50491-5-2 Class B with ferrite 3.EN 55035 **Warning:** This is a Class A product. In a domestic env iro- ment this product may cause radio interference in which case the user may be required to take adequate measures.
Product Compliance	

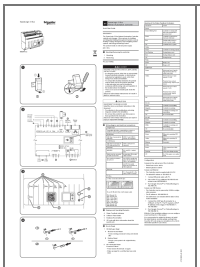
Schneider Electric Industries SAS
If you have technical questions, please contact the Customer Care Centre in your country. **se.com/contact**

Warranty

For Warranty information and service, visit **se.com/contact**.

Disclaimer
Hereby, Schneider Electric Industries, declares that this product is in compliance with the essential requirements and other relevant provisions of RADIO EQUIPMENT DIRECTIVE 2014/53/EU. Declaration of conformity can be downloaded on:
se.com/docs

Documents / Resources



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