

LOCUS d

Instructions for Use

22/12/2022

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Key to symbols

Symbols on the machine

This product complies with applicable EU directives.



Symbols in this user manual

Warning/Caution!



The document was originally written in Swedish

Application area

LOCUS is a setpoint selector switch with built-in temperature sensor that is used to increase or decrease the setpoint temperature. It also displays air flows, pressure, VOC CO2 and alarms, and can be used as a configuration tool during commissioning.



The product may not be used for anything other than its intended use.

General



Read through the entire instructions for use before you install/use the product and save the instructions for future reference. It's not permissible to make changes or modifications to this product other than those specified in this document.

Protective equipment



Always use appropriate personal protective equipment for the work in question, in the form of gloves, respirators and protective glasses during handling, installation, cleaning and service/maintenance.

Electrical safety

Permitted voltage, see "Electrical data". It is not permissible to insert foreign objects into the product's connectors or the electronics' ventilation openings; risk for short circuiting.

Cable classification:

Always follow the local/national rules for who are permitted to carry out this type of electrical installation.

Handling

- The product must be handled with care.

Installation

- Moist, cold and aggressive environments must be avoided.
- Avoid installing the product near a heat source.
- Assemble the product according to applicable industry regulations.
- Install the product for easy access during service/maintenance.
- If the product is mounted above a fixed ceiling, the inspection hatch must be located so that the product is accessible for inspection.
- Check to make sure that the product doesn't have any visible defects.
- Check that the product is properly secured after it has been installed.
- Check that all cables are properly secured in place after installation.

Assembly

LOCUS should ideally be mounted between 1.5 and 1.8 m above the floor on the surface of a wall in a standardised adjusted installation box, see figure 1.

The product can be mounted on top of a connection box (flush mounting). LOCUS is designed to fit the normal 55x55 mm frames (Schneider Exxact, Merten, Gira, Elko, etc.).

The installation position needs to be selected with care to eliminate fault factors that can affect the measurement.

For example, the room unit should not be exposed to:

- direct sunlight
- distance from the user
- air flows from windows and doors
- air flows from ventilation nozzles
- air flows through the junction box
- draughts caused by an external wall

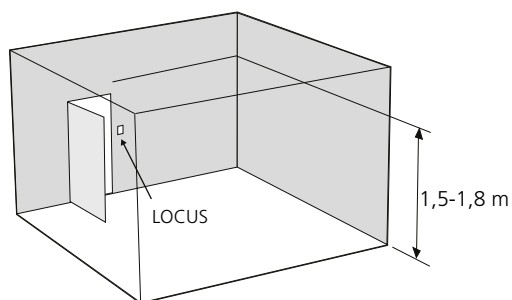


Figure 1. Recommended installation in room.

Dimensions

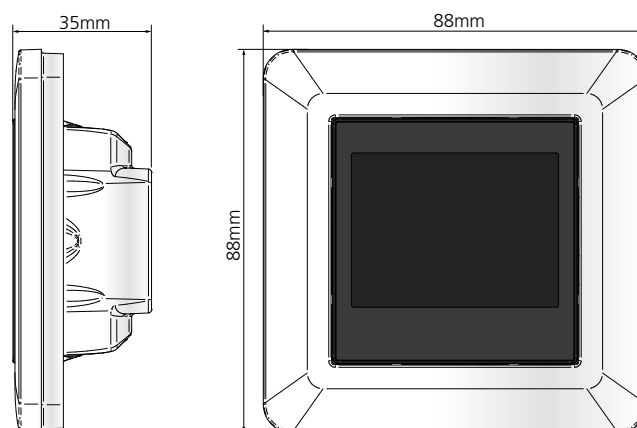


Figure 2. Dimensions, LOCUS.

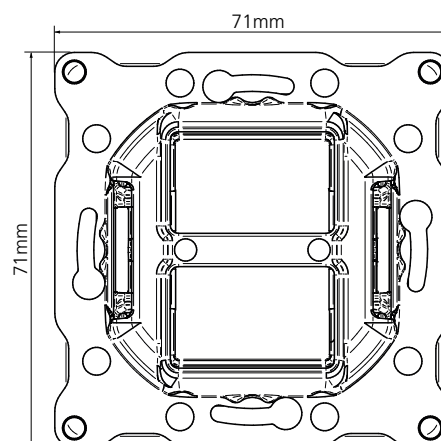


Figure 3. Dimensions, LOCUS mounting attachment.

Connection

LOCUS is connected to controller URC1 with the help of RJ12. Slave loop, port 24 or 25.

Modbus

Modbus settings/Properties

ID:	247
Protocol:	RS-485 Modbus RTU
Bus speed/Baud rate:	38400 bit/s
Data bits:	8
Parity:	none
Stop bits:	1

Configuration can be performed via the LOCUS panel by going to the "Parameters" menu.

There, you can access all Modbus settings for the URC controller.

Commissioning

Note: Check all settings and parameters during commissioning. In this way, you can guarantee that the selected application will work correctly.



Figure 4. Room unit LOCUS.

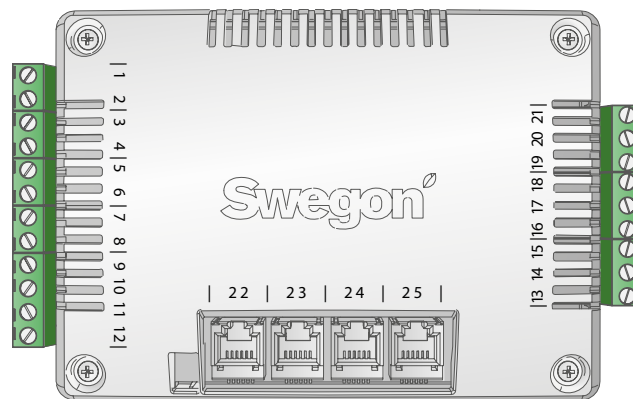
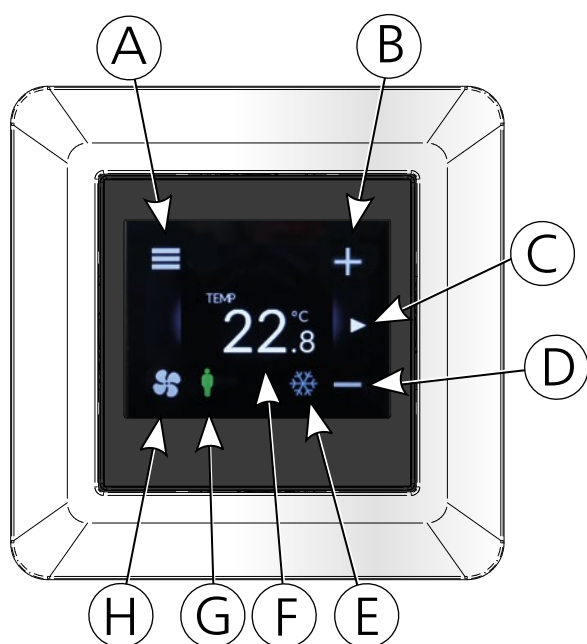


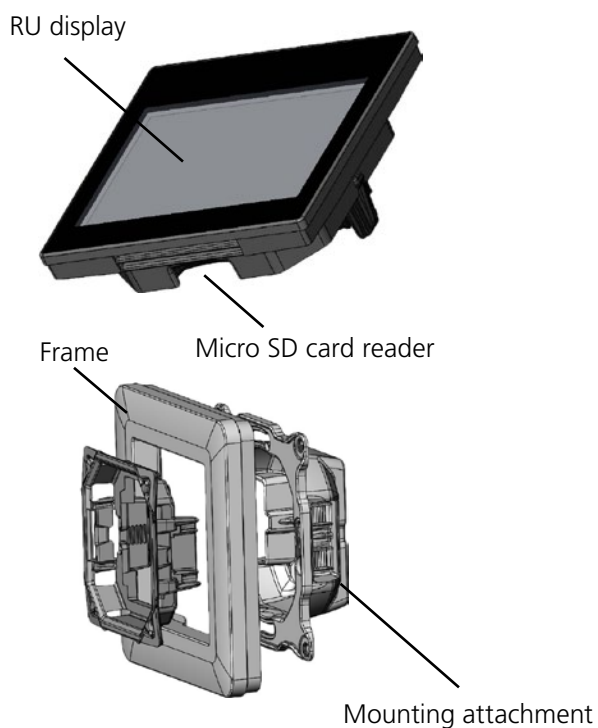
Figure 5. Controller URC1.

User mode



- A. menu
- B. increase
- C. swipe left to go to the next page
- D. decrease
- E. symbol showing cooling or heating in progress
- F. shows programmed setpoint or measured temperature
- G. shows occupancy in the room
- H. press to activate boost flow






Component parts



Mark the following parameters:

Display	Description	Explanation
	Display in stand by mode	Activated by clicking on the display
	Main screen active	The + and – signs increase/decrease the setpoint temperature
	Boost mode enabled	
	Swipe left for display mode two	Show input values from connected sensors
	Swipe right for display main screen	
Main menu		
	Settings menu	Code 1919
	Main menu	
Display settings		
	Backlight	Brightness in display
	Main screen boost	Make boost button available
	Main screen alarms	Show alarms symbol

Display settings		
	HMI temp sensor use	Use of the unit's internal temp sensor
	Main screen value	What to show on main screen
	Stand by screen	What to show on stand by screen
Modbus settings		
	Modbus settings	For communication with controller unit
	Modbus ID	ID for LOCUS unit (247)
	Stop bits	No. of stop bits (1)
	Parity	Choose parity (None)
	Data bits	No. of data bits (8)
	Baud rate	Communication speed (38400)

Parameter		
	Parameters	Modbus list
	Parameter menu	Choose Modbus register
Main menu		
	Thermostat settings	Use of temperature sensors
	Temp. Calibration	Offset of measured value
Main menu		
	Information	SW version

Technical data

Display	Capacitive touch TFT Display QVGA 2.3"
Screen resolution	320 x 240
Communication	Modbus RTU via RS-485
Temperature sensor	Internal 10K NTC sensor
Operating temperature	+5 ... +40°C
Degree of protection	IP20
Dimensions	88 x 88 x 35 mm
Operating voltage	12-40 VDC
Current requirement	0.5 W

Connection

LOCUS	Connection	Description
VDD	RJ12	12-40 VDC power supply
A+	RJ12	RS-485 bus connection
B-	RJ12	RS-485 bus connection
GND	RJ12	Earth for 12-40 VDC power supply
Memory card slot		The user panel's software can be updated via a Micro SD card

Standards and directives

The following standards have been observed:

EC Directive:	93/68/EEC
Low Voltage Directive:	2014/35/EU
Machinery Directive:	2006/42/EEC
EMC Directive:	2014/30/EU
RoHS Directive:	2002/95/EC
Vibrations:	EN-60721-3-3