

LUNA_d MB

Digital room controller for air- and waterborne indoor climate systems



QUICK FACTS

- Versatile room controller for temperature control of air, heating and cooling.
- Built-in temperature sensor and the possibility to connect an external temperature sensor.
- Built-in communication port for connection to a communication bus (Modbus RTU over RS485), for reading values from a computer.
- Inputs for condensation sensor or occupancy sensor.
- Four outputs to control heating and cooling actuators.
- Three different operating modes (day, night and economy).
- If necessary, the settings can be easily changed with the help of the hand-held terminal LUNA d T-CU.

Technical description

Design

LUNAd RE MB is a room controller that gives a stable and comfortable room temperature by efficiently and accurately controlling and regulating the air as well as heating- and cooling actuators.

- Four outputs that can individually be adjusted to suit most requirements. In the supplied version the room controller is set to control air, heating and cooling actuators with 24 V AC and 0–10 V DC.
- Built-in temperature sensor for detection and setting of the room temperature.
- Built-in communication port for connection to a communication bus (Modbus RTU over RS485), for reading values from a computer.
- Input for condensation sensor and external temperature sensor or occupancy sensor.
- Three different operating modes (day, night and economy).

If necessary the controller's settings can be changed with the help of the hand-held terminal LUNAd T-CU. The hand-held terminal is connected temporarily to the controller's 4-way connector located behind the controller's cover.

If you wish to install an external sensor, for example, in the room or in the air duct, the sensor is connected to the screw terminals in the controller. The external sensor is then activated automatically.

Different types of sensors can be connected to the controller, for example, occupancy sensor, condensation sensor, extra temperature sensor or an external contact. The external sensors' functions can be set on the menus on the hand-held terminal LUNA d T-CU with display.

Function

LUNAd RE is a stable and comfortable room temperature. The air, heating and cooling actuators are accurately and efficiently controlled and regulated by reading the room temperature with the built-in or external temperature sensor.

Installation

The product is mounted on a wall.

Maintenance

If necessary, use a dry cloth when cleaning. Never use water, detergent, cleaning solvent or a vacuum cleaner.

Environment

The Building Material Declaration is available for downloading at www.swegon.com.

Documentation

The following documentation can be downloaded from our website www.swegon.com

LUNAd MB Instructions for Use

LUNAd RE-1-MB/RE-S-MB wiring instructions

LUNAd RE Building materials declaration



Figure 1. LUNAd RE MB



Figure 2. Accessories, LUNAd T-CU

Accessories

- Hand-held terminal LUNA d T-CU

Accessory for temperature control

- Sensor built-in LUNAd RE
- External resistive sensor (type NTC, 10 kOhm at 25°C)
- Sensor for the measurement of supply temperature on water pipes

Accessory to detect/avoid condensation

- Condensation sensor with reactive function, i.e. regulates when condensation arises between conductive paths on the sensor
- Condensation sensor where the relay is activated when the dew point temperature drops below the setpoint value.

Technical data

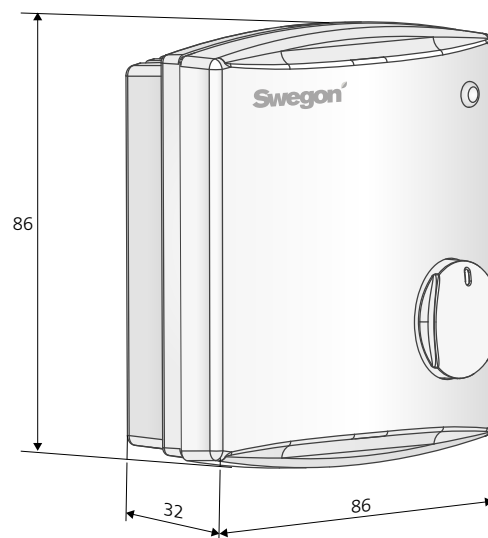


Figure 3. Dimensional drawing - LUNAd RE MB

Room controller LUNA d RE MB

Designation:	LUNAd RE-1-MB: Design with cable for connection to the connection card LUNA KK
	LUNAd RE-S-MB: Design with screw terminals, suitable for air solution REACT
Power supply:	24 V AC (22...26 V)
Set point:	19...25 °C
Accuracy (measurement)	±0.5 °C
Dead band:	
- Day	1 °C
- Night	4 °C
- Economy	8 °C
P-band:	
- Heating	1.5 °C
- Cooling	1 °C
I-time	20 minutes
Outputs	2 x 24 V AC max. load 2 A (48 VA) 2 x 0...10 V, 10 mA
Inputs	1 x condensation input 1 x temperature, contact or occupancy
Operating areas (ambient)	
- Temperature	0...50 °C
- Relative humidity	0...85% RH (not condensing)
Screw terminals	1.5 mm ²
Enclosure:	ABS plastic, IP 20
Dimensions:	W86 x H86 x D32 mm
The product is CE marked and meets EU provisions applicable to EMC.	

Specification

Product

Module Controller	LUNA	d	RE	a	MB
Version:					
Design:					
1= With prefitted controller cable					
S = Screw terminals					
Modbus					

Accessories

Hand-held terminal / Configuration tool	LUNA	d	T-CU
Version:			

Temperature sensor	LUNA	d	T-TG-2
Sensor for temperature control			
External resistive sensor			
(type NTC, 10 kOhm at 25°C)			
Version:			

Temperature sensor	LUNA	d	T-CS C/O
Sensor for the measurement of supply temperature on water pipes			
Version:			

Condensation sensor	CG-IV	a
Condensation sensor with reactive function		
Version:		

Condensation sensor	WCD2	a
The relay is activated when the dew point temperature drops below the setpoint value		
Version:		

Specification text

Example of a specification text according to VVS AMA.

Swegon's room controller for air and waterborne climate systems.

LUNAd RE MB, with the following features:

- Versatile room controller for temperature control.
- Built-in temperature sensor
- Input for condensation sensor and external temperature sensor or occupancy sensor
- Four outputs that can individually be adjusted to suit most requirements.
- Built-in communication port for connection to a communication bus (Modbus RTU over RS485), for reading values from a computer.
- Three different operating modes: day, night and economy.
- If necessary, the settings can be easily changed with the help of the hand-held terminal LUNAd T-CU.

Ordering examples

- Controller LUNAd RE-1-MB XX items

Accessories

- Hand-held terminal LUNAd T-CU XX items

- External temperature sensor LUNAd T-TG-2 XX items

- External temperature sensor LUNAd T-CS C/O XX items

- Condensation sensor CG-IV XX items

- Condensation sensor WCD2 XX items