CONDUCTOR W3

Installation instruction
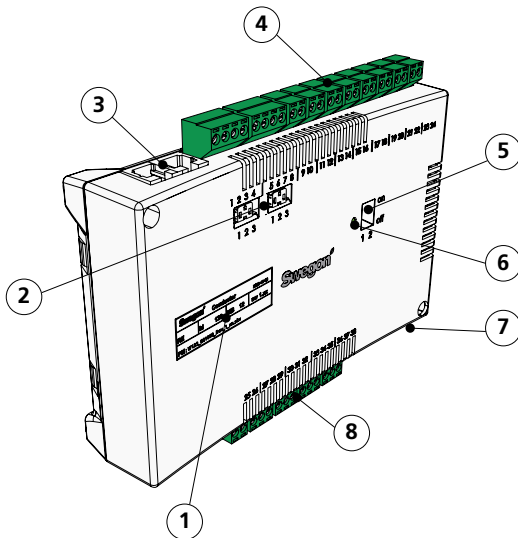
Content

Symbols
Warning/Caution!

Controller

Figure 1. Overview of the Controller.

Pos 1. Product marking.

Pos 2. Termination resistance.

> *1 = The unit is the last node in the network*
>
> *2 = The unit is the first node in the network*
>
> *3 = The unit is situated between the first and last nodes*

Pos 3. Modular Contact / ModBUS RTU units (pressure sensor and room unit)

Pos 4. Inputs: Wiring terminals for the connection of sensors.

Pos 5. DIP switch for ModBUS RTU.

> *1 (=on) boosts the controller to Modbus address 1*
>
> *2 (=on) access to Modbus register via BMS system (requires a restart of the controller)*

Pos 6. LED, indicates the status of the controller.

Pos 7. Input and output for signal to external relay.

Pos 8. Outputs: Wiring terminals for the connection of valve and damper actuators.
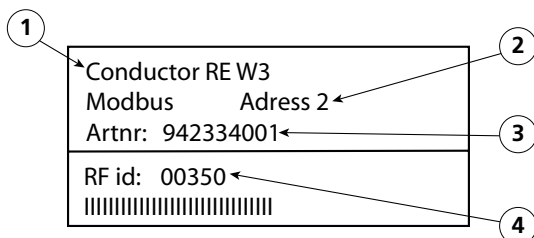
Product Identification Label

Conductor RE W3
Modbus   Adress 2
Artnr: 942334001

RF id: 00350
|||||||||||||||||||||||||||||||

Figure 2. Product identification label on the controller.

Pos 1. Name of the product.

Pos 2. ModBus RTU address default from factory.

Pos 3. Part number.

Pos 4. Controller ID number.
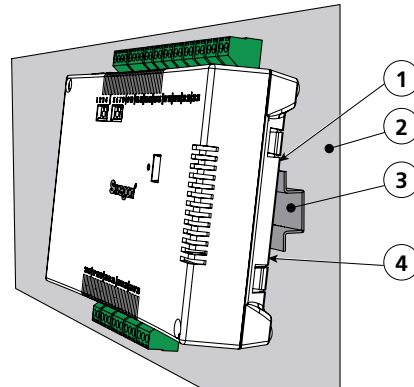
To mount the controller

Mounting on a DIN rail

Figure 3. To mount the controller.

Pos 1. Plastic hooks

Pos 2. Supporting surface

Pos 3. DIN rail

Pos 4. Snap-on fastener.

To be installed above a false ceiling

If a DIN rail is NOT available pre-mounted or is not available, the controller can be appropriately mounted above the false ceiling (**not** on the module).
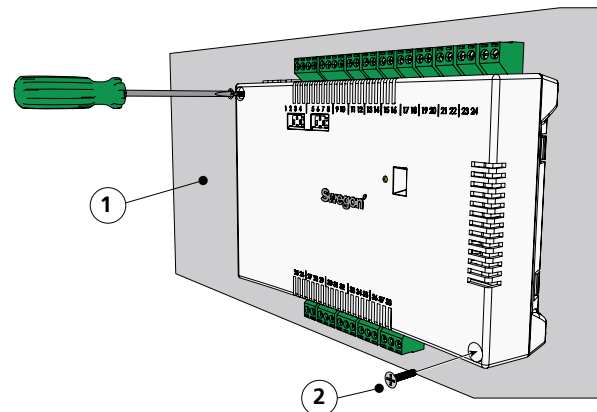

Figure 4. To mount the controller.

Pos 1. Supporting surface, NOT for the comfort module or climate beam.

Pos 2. Screws.

a. Secure the controller by means of screws in the upper left-hand and the lower right-hand corners. Use screws suitable for the supporting surface.
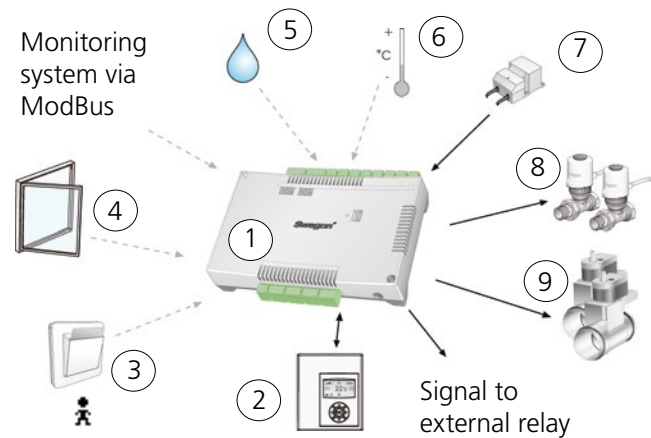
Wiring

Monitoring system via ModBus

Signal to external relay

Figure 5. CONDUCTOR W3: Integral Components

1	Controller	Conductor RE
2	Room unit	Conductor RU
3	Key card/	SYST SENSO/
	presence detector	Detect Occupancy
4	Window contact	
5	Condensation sensor	
6	External temp. sensor	CONDUCTOR T-TG
7	Transformer	SYST TS-1
8	Valve actuator	ACTUATOR b 24V NC
9	Ventilation damper	CRTc -aaa-2
	incl. damper actuator	(aaa = dimension)

| Room unit	RJ12	Modular contact
MODBUS RS2	1	Data (B)
	2	Data (A)
	3	Earth
MODBUS RS1	5	Data (B)
	6	Data (A)
	7	Earth
Condensation sensor	17	Resistance
	18	
Temperature sensor	19	KTY
	20	
Transformer	23	+ 24V AC
	24	-G0
Window contact	25	10V
	10	10V
Key card	26	10V
	12	10V
Valve actuator for cooling water.	27	-G0
	29	+24V
Valve actuator, for heating water.	30	-G0
	32	+24V
Damper, supply air (SA)	33	-G0
	34	0-10V
	35	+24V
Damper, extract air (EA)	36	-G0
	37	0-10V
	38	+24V
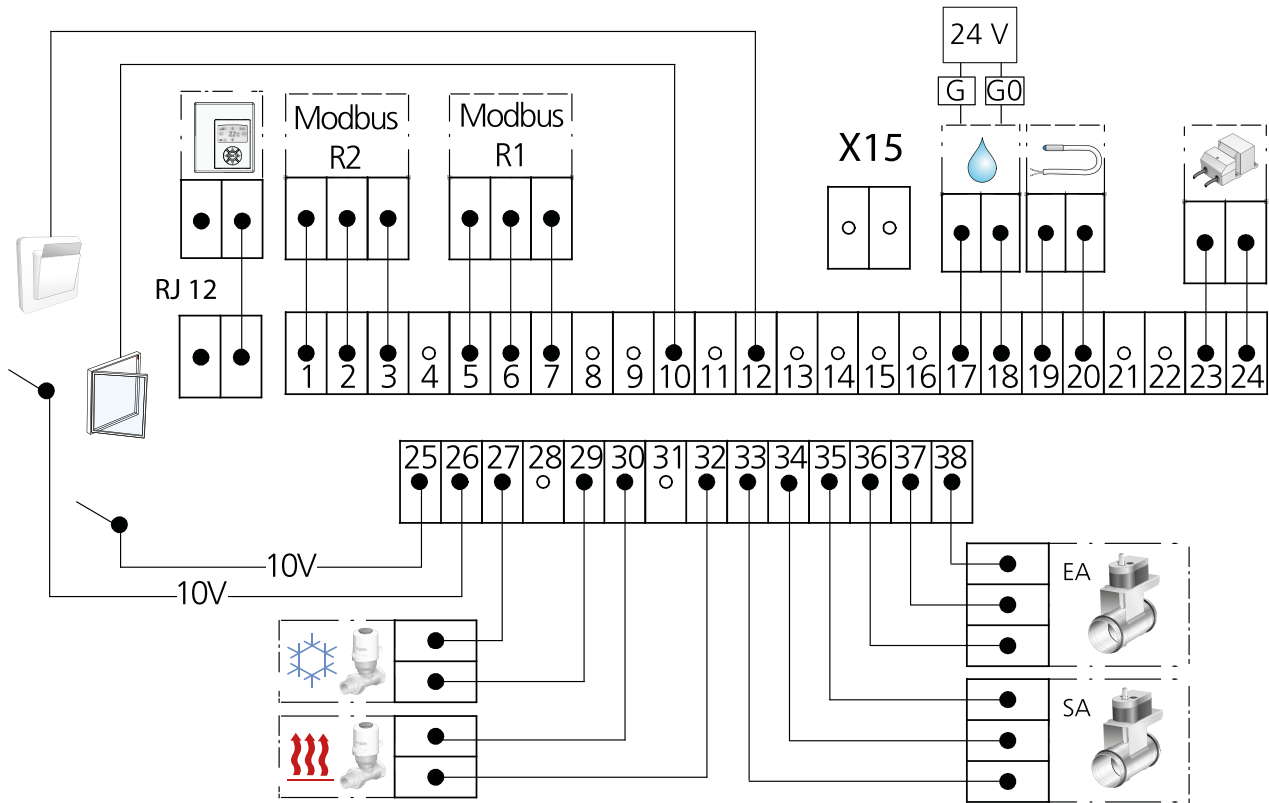
Figure 6. Wiring diagram, CONDUCTOR W3

Room unit
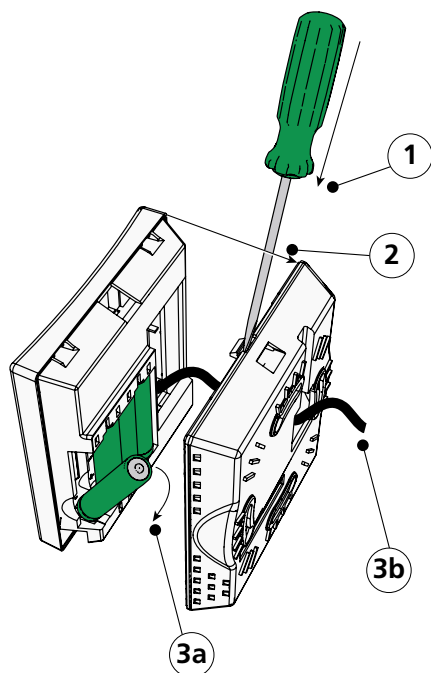
Figure 7. Wireless: 3xAAA, (pos 3a), Cable: RJ12 (pos 3b).
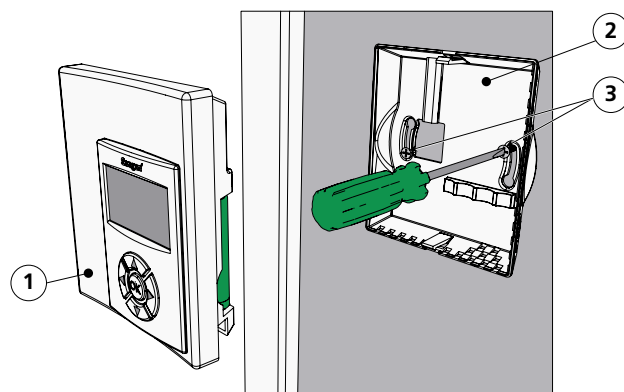

Figure 8. To mount the room unit (thermostat).

Pos 1. Front piece.

Pos 2. Back piece.

Pos 3. Screws suitable for the supporting surface.

- *Recommended installation height RU = standard height for light switches*

- *RU should not be exposed to direct sunlight, or other disturbing heat sources.*

- *Room air should be able to circulate around the front and sides of the RU.*
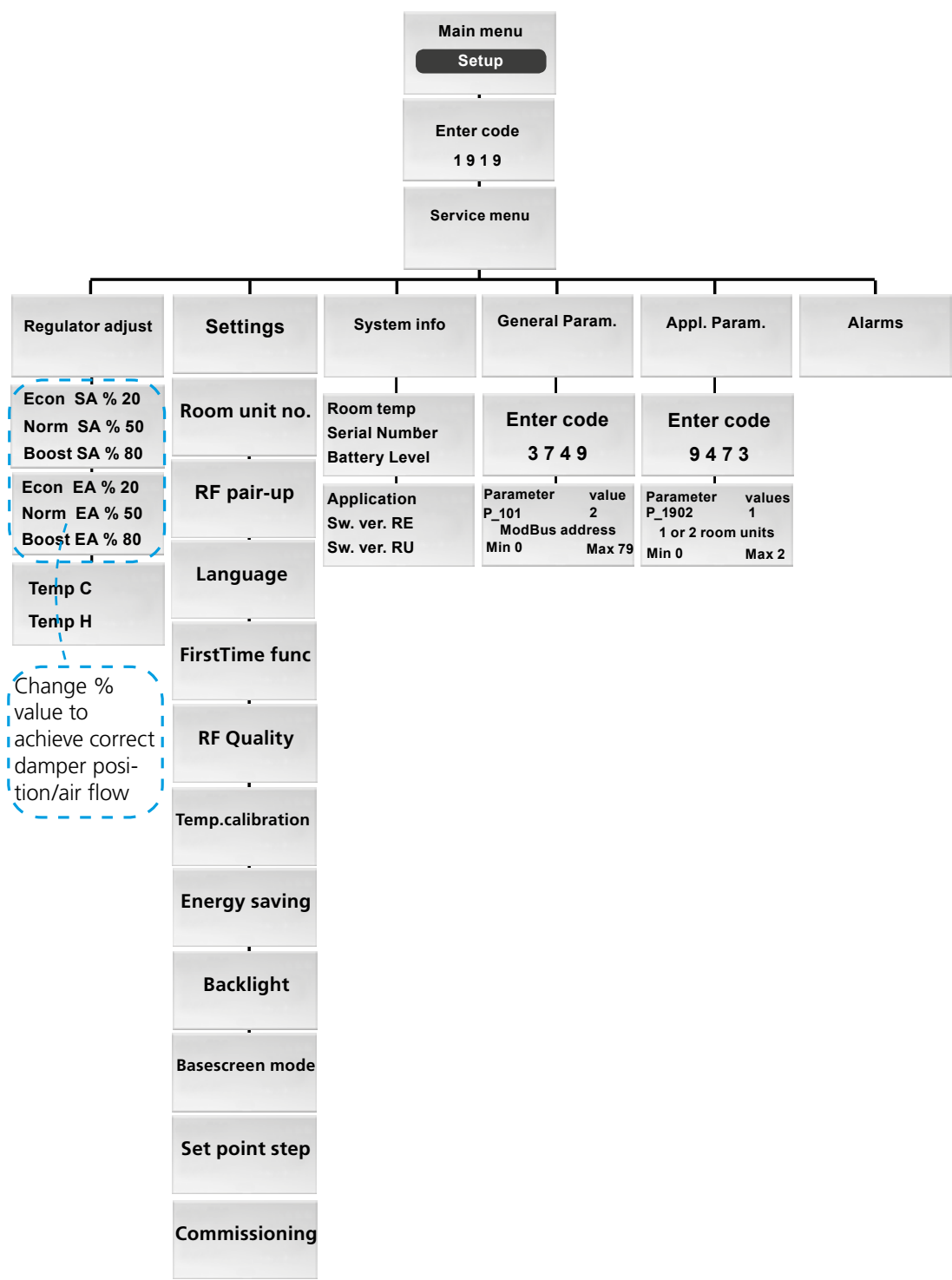
Overview over the menu system

```
                          Main menu
                           Setup

                          Enter code
                            1 9 1 9

                          Service menu
```

| Regulator adjust | Settings | System info | General Param. | Appl. Param. | Alarms |

Regulator adjust

```
Econ  SA % 20
Norm  SA % 50
Boost SA % 80
Econ  EA % 20
Norm  EA % 50
Boost EA % 80

Temp C
Temp H
```

Change % value to achieve correct damper position/air flow

Settings
- Room unit no.
- RF pair-up
- Language
- FirstTime func
- RF Quality
- Temp.calibration
- Energy saving
- Backlight
- Basescreen mode
- Set point step
- Commissioning

System info
```
Room temp
Serial Number
Battery Level

Application
Sw. ver. RE
Sw. ver. RU
```

General Param.
```
Enter code
  3 7 4 9

Parameter      value
P_101            2
   ModBus address
Min 0        Max 79
```

Appl. Param.
```
Enter code
  9 4 7 3

Parameter      values
P_1902           1
  1 or 2 room units
Min 0        Max 2
```

Figure 9. Overview over the menu system of the room unit.
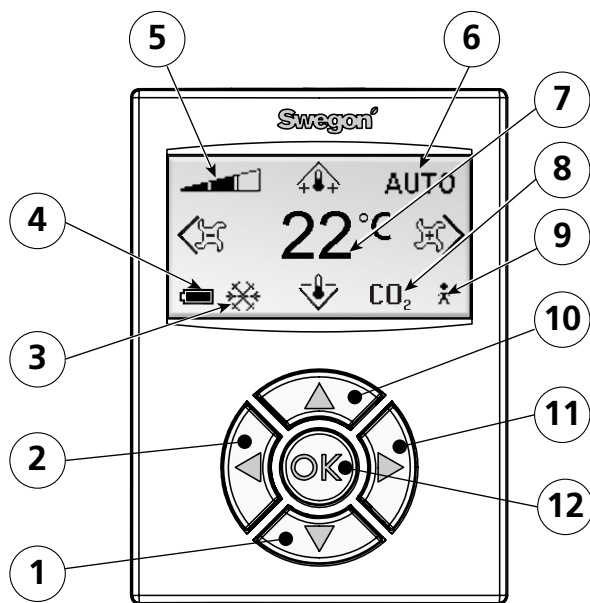
CONDUCTOR W3

Room unit overview

Figure 10. Overview of the main image of the room unit.

Pos 1. Cursor key for moving DOWN.
Pos 2. Cursor key for moving to the LEFT.
Pos 3. Heating/cooling.
Pos 4. Battery charge status/Window status.
Pos 5. Current airflow.
Pos 6. Operating mode.
Pos 7. Current temperature.
Pos 8. Carbon dioxide content.
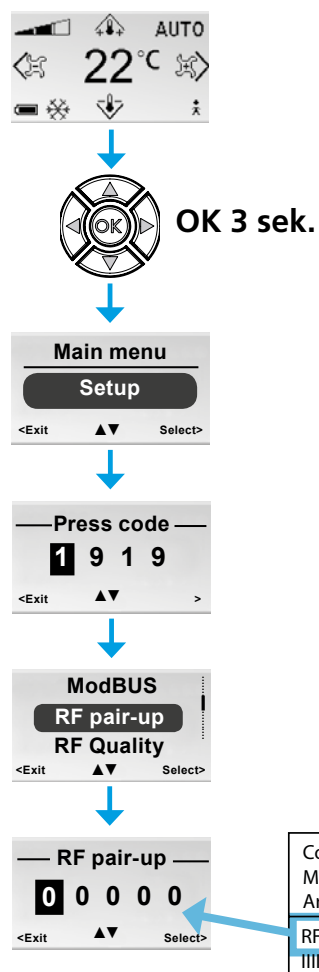Pos 9. Occupancy status
Pos 10. Cursor key for moving UP.
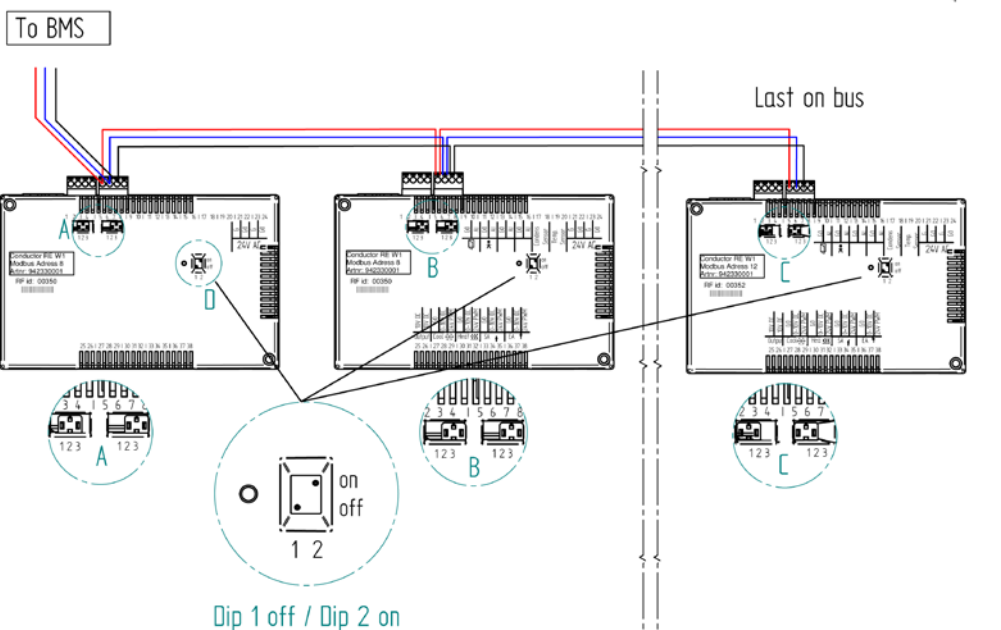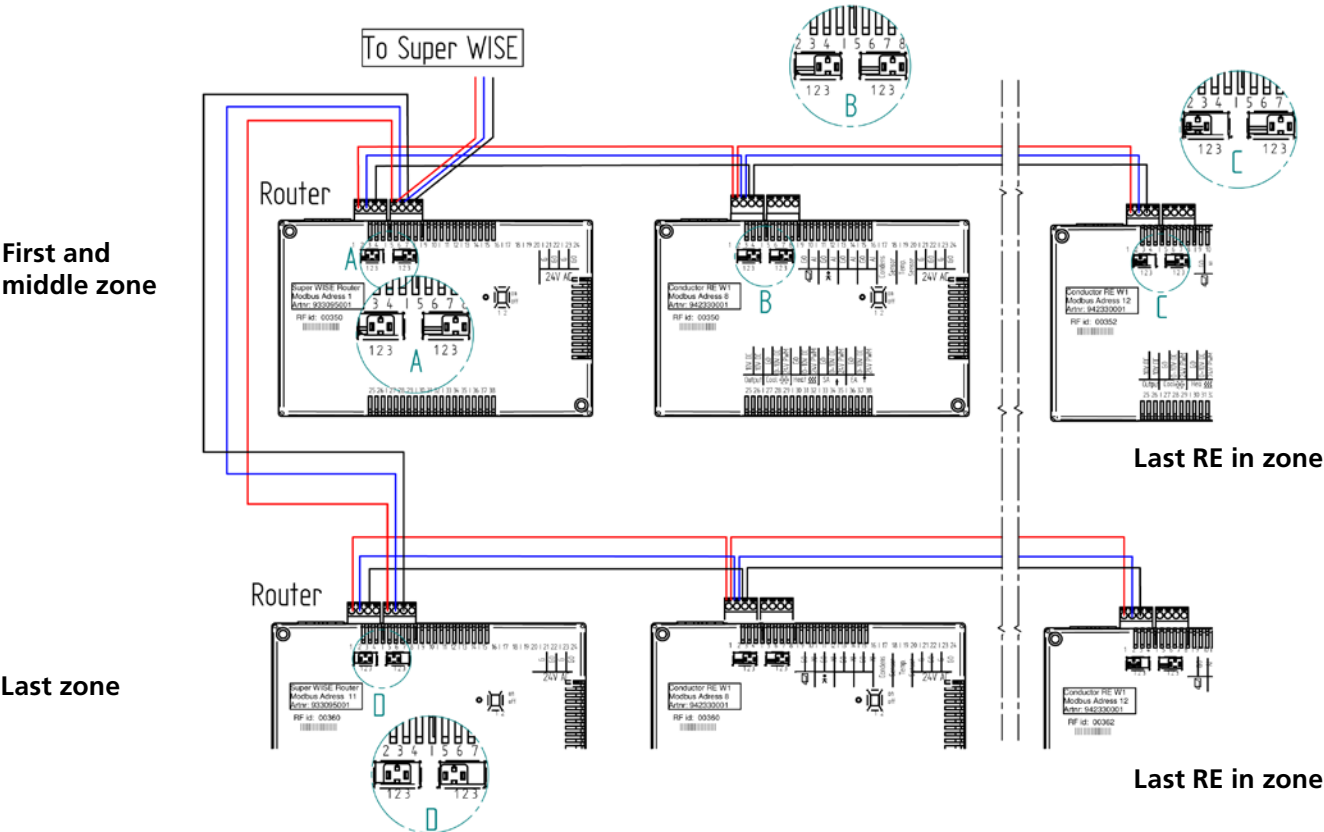Pos 11. Cursor key for moving to the RIGHT.
Pos 12. OK key.

RF pair-up (When RJ12 not used)

OK 3 sek.

Main menu
Setup
<Exit   ▲▼   Select>

—— Press code ——
1 9 1 9
<Exit   ▲▼   >

ModBUS
RF pair-up
RF Quality
<Exit   ▲▼   Select>

—— RF pair-up ——
0 0 0 0
<Exit   ▲▼   Select>

Conductor RE W3
Modbus   Adress 2
Artnr: 942334001
RF id: 00350

Product identification label on the controller.

Swegon

Conductor to BMS and SuperWise (WISE gen.1)

WARNING:
All electrical installation, including wiring the actuators, valve actuators and various sensors is to be carried out by the electrical contractor or the systems contractor.

Safety precautions / Responsibility
It is the responsibility of the user to do the following:
• Assess all the risks involved in the activities which are related to this instruction.
• Make sure that all necessary safety precautions are made be-fore starting the activities which are related to this instruction.

For US and Canada market
WARNING:
The power feeding shall be a Low Voltage class 2 circuit.

Swegon