CONDUCTOR W4

Installation instruction for W4.1 and W4.2

Controller

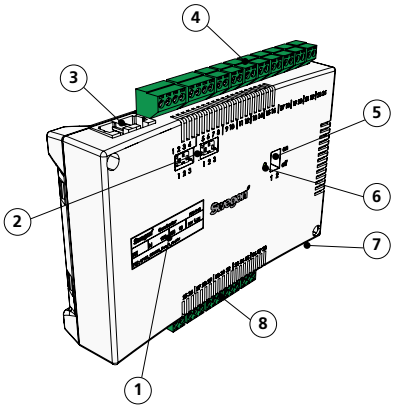


Figure 1. Overview of the Controller.

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

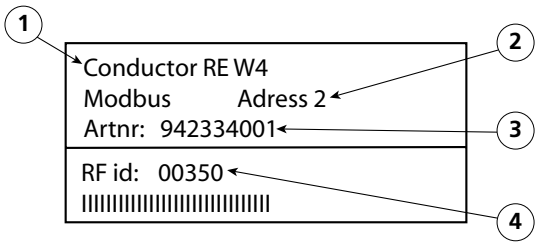


Figure 2. Product identification label on the controller.

Pos 1. Name of the product.

Pos 2. ModBus RTU address default from factory.

Pos 3. Part number.

Pos 4. Controller ID number.

To 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).

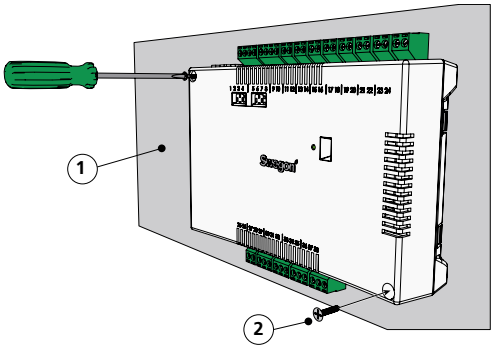


Figure 4. To mount the controller.

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.

To mount the controller.

Mounting on a DIN rail

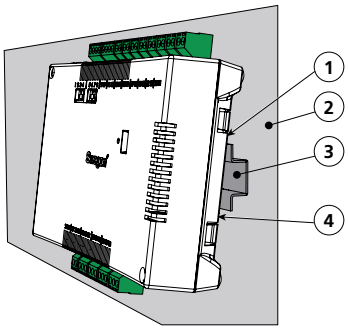


Figure 3. To mount the controller.

Pos 1. Plastic hooks

Pos 2. Supporting surface

Pos 3. DIN rail

Pos 4. Snap-on fastener.

W4.1 (Hotel/Office)

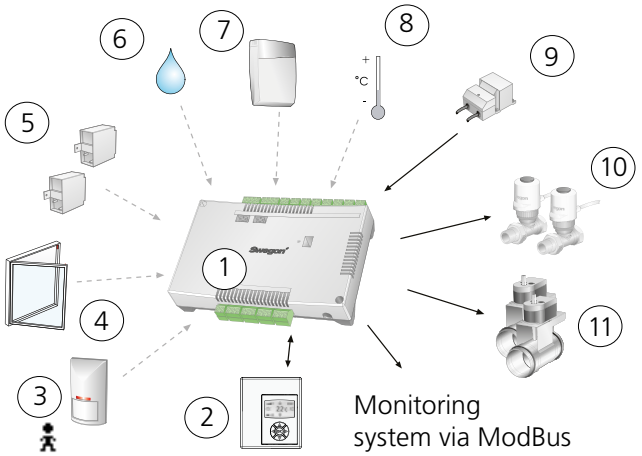


Figure 5. CONDUCTOR W4.1: Integral Components

1	*Controller*	*Conductor RE*
2	*Room unit*	*Conductor RU*
3	*Presence detector*	*DETECT Occupancy*
4	*Window contact*	
5	*Pressure sensor*	*SYST PS*
6	*Condensation sensor*	*SYST CG*
7	*CO_2-sensor*	*DETECT Quality*
8	*External temp. sensor*	*CONDUCTOR T-TG*
9	*Transformer*	*SYST TS-1*
10	*Valve actuator*	*ACTUATOR b 24V NC*
11	*Ventilation damper incl. damper actuator*	*CRTc -aaa-2 (aaa = dimension)*

- Connect the presence sensor, check application parameter P_1910
- Connect the window contact, check application parameter P_1909
- Connect the pressure sensor to the Modular contact. Set the address on sensor: SA1 = 3, EA = 4
- Check application parameters P_1929, P_1930 and P_1931. (P_1930 allways 0 in appl W4.1)

Room unit	RJ12	Modular contact
Pressure sensor	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
Presence detector	26	10V
	12	0-10V
	21	+24V AC
	22	-G0
Valve actuator, cooling	27	-G0
	29	+24V
Valve actuator, heating	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
CO_2-sensor	16	0-10V Signal
	21	+24V AC
	22	-G0

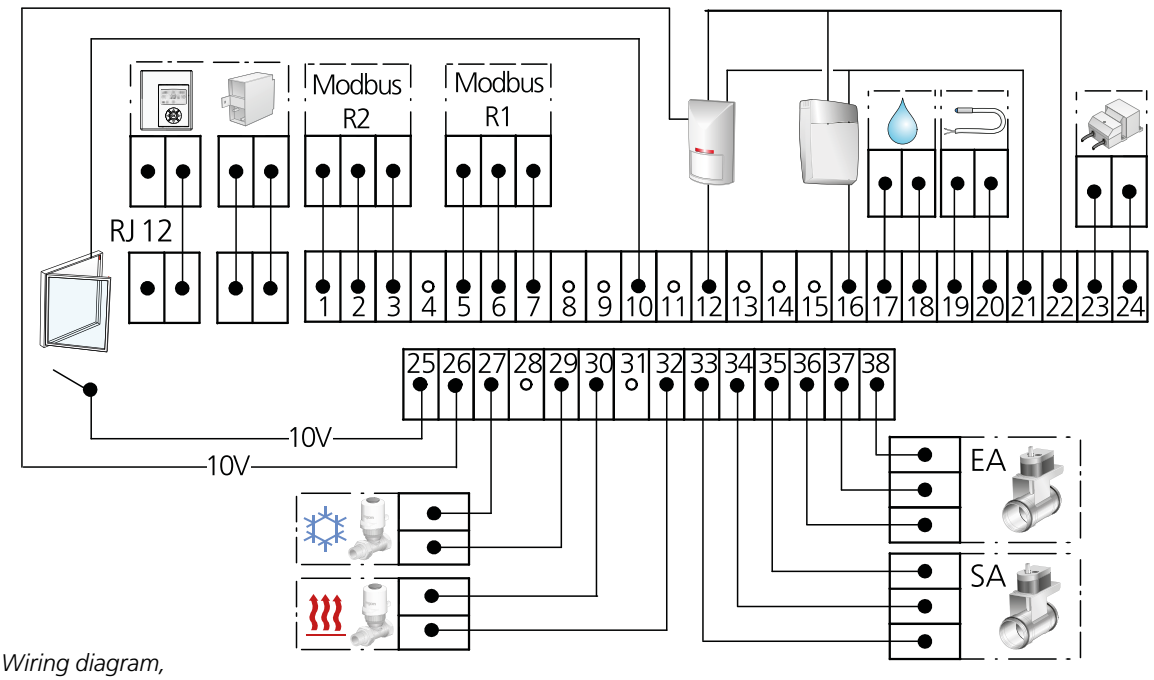


Figure 6. Wiring diagram, CONDUCTOR W4.1

W4.2 (Conference)

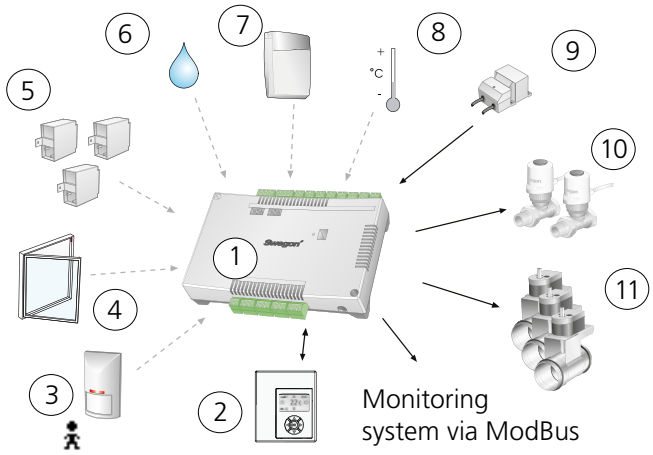


Figure 7. CONDUCTOR W4.2: Integral Components

1	*Controller*	*Conductor RE*
2	*Room unit*	*Conductor RU*
3	*Presence detector*	*DETECT Occupancy*
4	*Window contact*	
5	*Pressure sensor*	*SYST PS*
6	*Condensation sensor*	*SYST CG*
7	*CO_2-sensor*	*DETECT Quality*
8	*External temp. sensor*	*CONDUCTOR T-TG*
9	*Transformer*	*SYST TS-1*
10	*Valve actuator*	*ACTUATOR b 24V NC*
11	*Ventilation damper incl. damper actuator*	*CRTc aaa-2 (aaa = dimension)*

- Connect the presence sensor, check application parameter P_1910
- Connect the window contact, check application parameter P_1909
- Connect the pressure sensor to the Modular contact.
  Set the address on sensor: SA1 = 3, SA2 = 6, EA = 4
- Check application parameters P_1929, P_1930 and P_1931.

Room unit	RJ12		Modular contact
Pressure sensor	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		
Valve actuator, heating	21		+24V
	22	X15	-G0
Transformer	23		+ 24V AC
	24		-G0
Window contact	25		10V
	10		10V
Presence detector	26		10V
	12		0-10V
	21		+24V AC
	22		-G0
Valve actuator, cooling	27		-G0
	29		+24V
Damper 2, supply air (SA2)	30		-G0
	31		0-10V
	32		+24 V
Damper 1, supply air (SA1)	33		-G0
	34		0-10V
	35		+24V
Damper, extract air (EA)	36		-G0
	37		0-10V
	38		+24V
CO_2-sensor	16		0-10V Signal
	21		+24V AC
	22		-G0

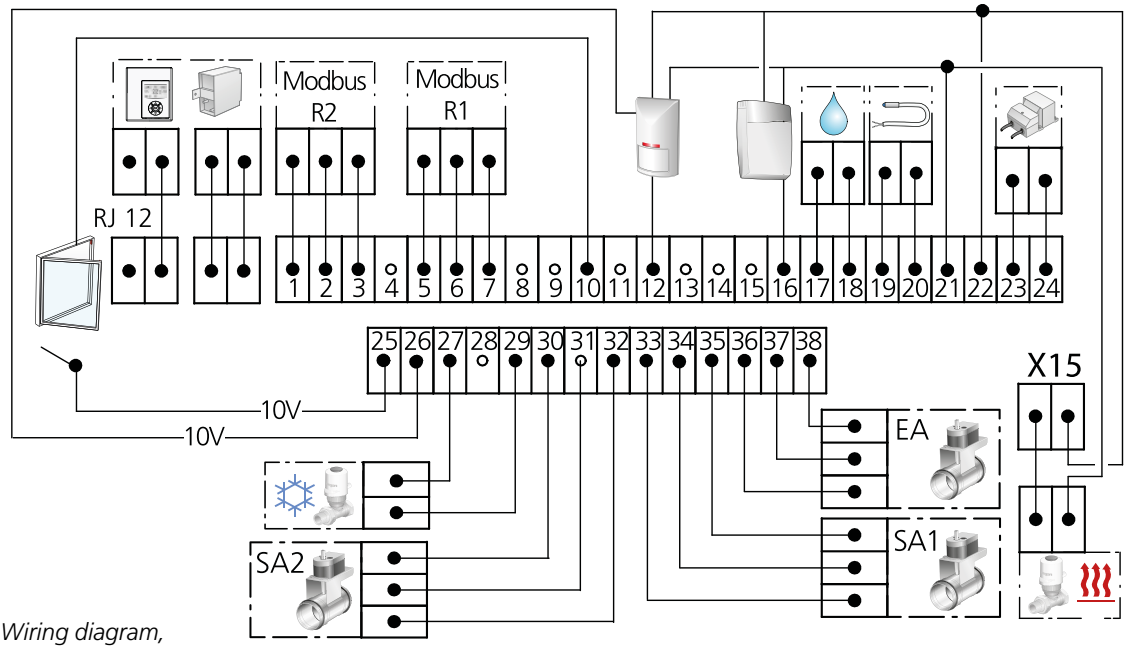


Figure 8. Wiring diagram, CONDUCTOR W4.2

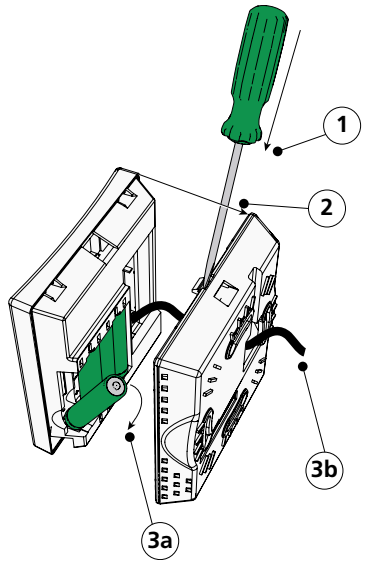


Figure 9. Wireless: 3xAAA, (pos 3a), Cable: RJ12 (pos 3b).

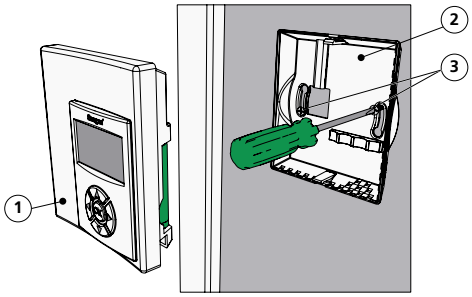


Figure 10. To mount the room unit (thermostat).
Pos 1. Front piece.
Pos 2. Back piece.
Pos 3. Screws suitable for the supporting surface.

- 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.

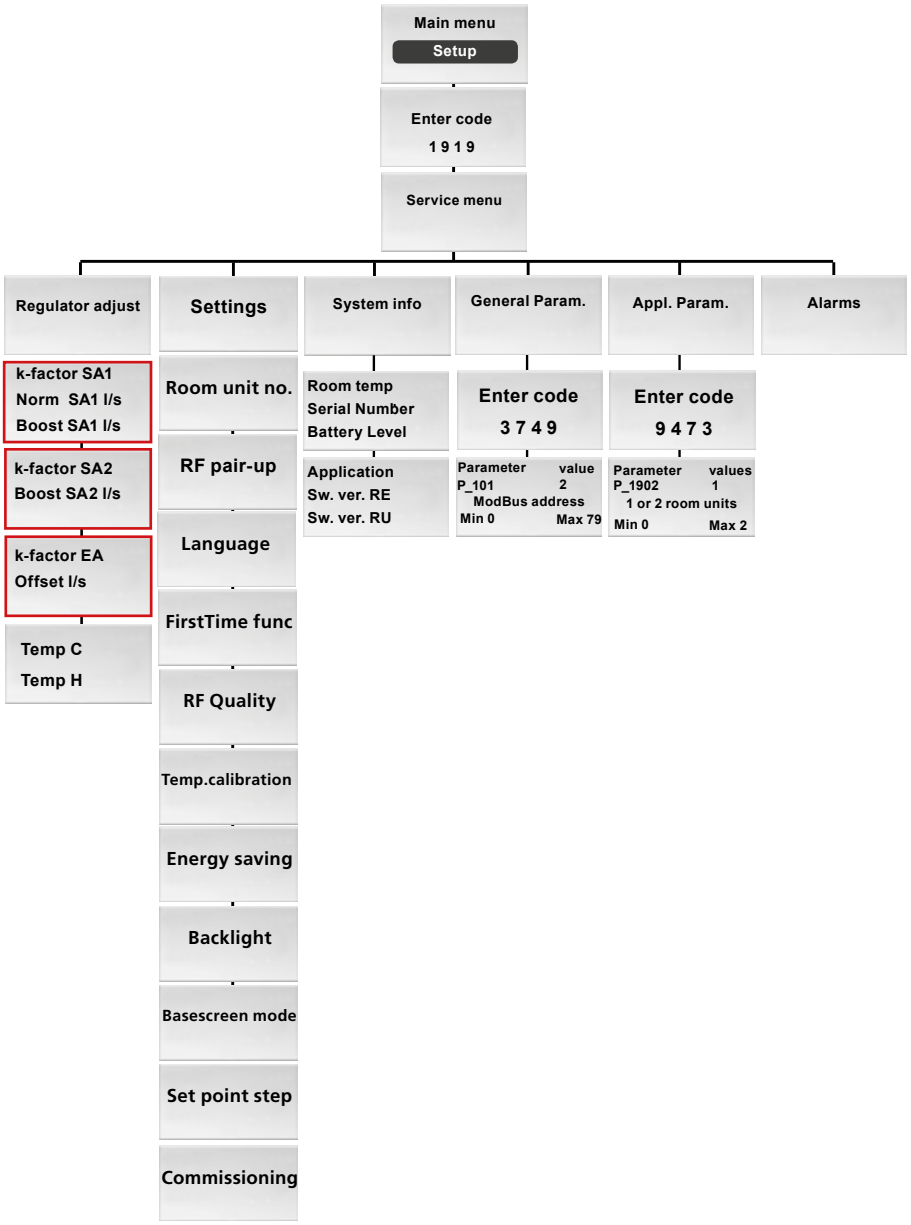


Figure 11. Overview over the menu system of the room unit.

Room unit overview

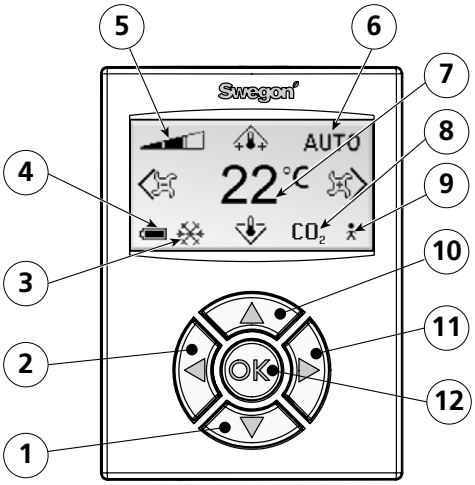
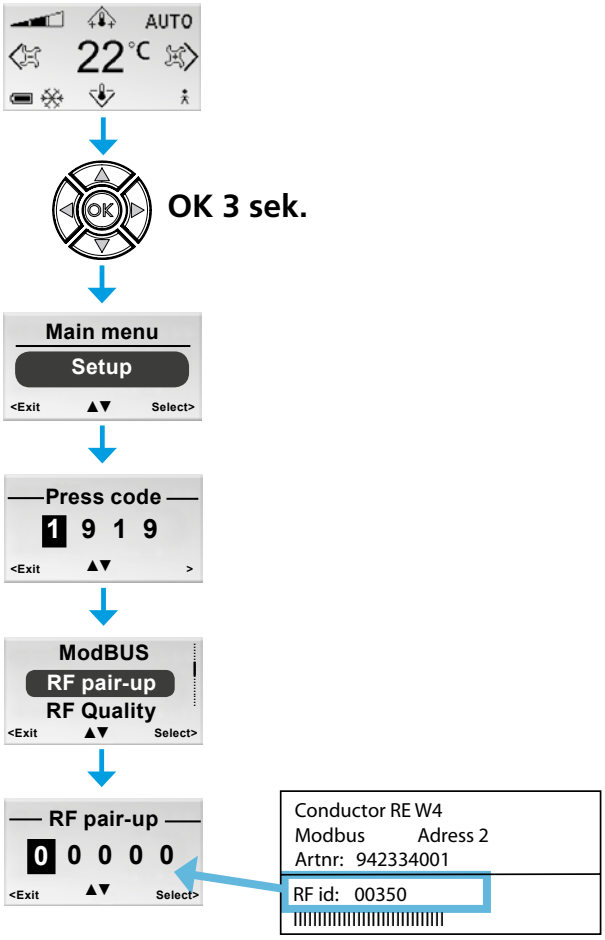


Figure 12. Overview of the main image of the room unit.

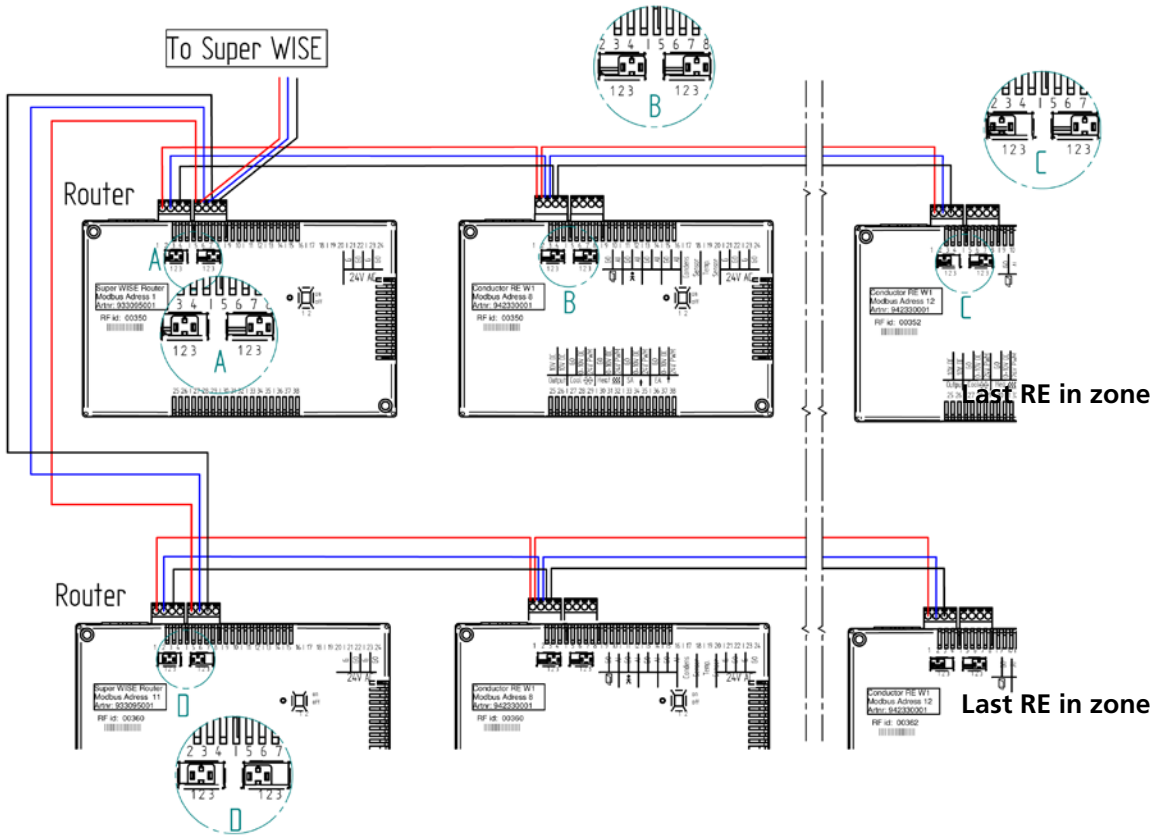
Pos 1. Cursor key for moving DOWN.
Pos 2. Cursor key for moving to the LEFT.
Pos 3. Heating/cooling.
Pos 4. Battery charge status/Window status.
Pos 5. Current airflow.
Pos 6. Operating mode.
Pos 7. Current temperature.
Pos 8. Carbon dioxide content.
Pos 9. Occupancy status
Pos 10. Cursor key for moving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

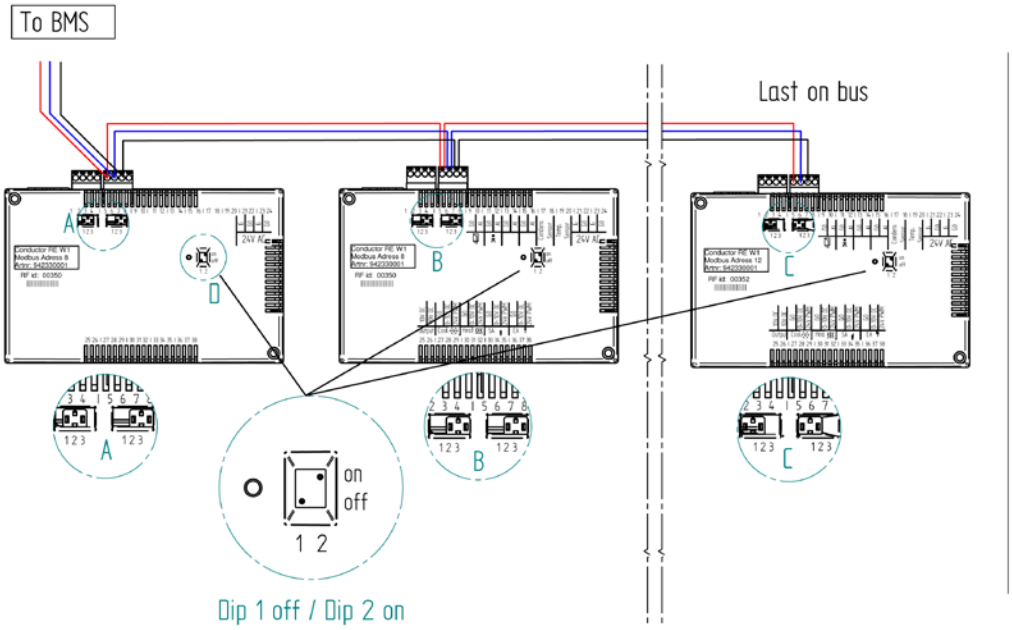
RF pair-up (When RJ12 not used)



Product identification label on the controller.

Conductor to BMS and SuperWise





FCC ID: ZIW-COND02

This device complies with part 15 of the FCC rules and RSS-210 of IC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet équipement est conforme au chapitre 15 des directives FCC et RSS-210 des directives IC. Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférences nuisibles, et (2) cet appareil doit accepter toute autre interférence reçue, y compris celles pouvant entraîner un dysfonctionnement.

Changes or modification not expressly approved by the partly responsible for compliance could void the user's authority to operate the equipment.

Toute transformation ou modification non expressément autorisée par l'autorité responsable de l'appareil est susceptible de faire perdre à l'utilisateur son droit d'utiliser l'équipement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna. – Increase the separation between the equipment and receiver. –Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. –Consult the dealer or an experienced radio /TV technician for help.

"The term "IC" before the equipment certification number only signifies that the industry Canada technical specifications"

"Le terme « IC » figurant devant le numéro de certification de cet équipement signifie uniquement le respect des spécifications techniques de Canada Industrie."

For US and Canada market

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.

The power feeding shall be a Low Voltage class 2 circuit.

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.*