

4-pipe temperature control

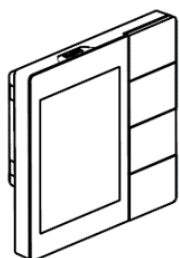
0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

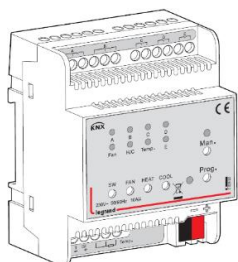
Cat.No(s): 281027BB

0 028 90

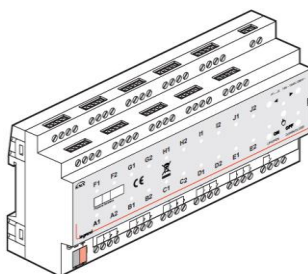
0 026 72



281027BB



0 028 90



0 026 72

CONTENTS	PAGE
1. USAGE SCENARIO	1
2. DESCRIPTION	1
3. WIRING DIAGRAM.....	2
4. KNX DIAGRAM.....	3
5. KNX PROJECT	3
6. DEVICE PARAMETERS WITH ETS5.....	4
7. NOTES	12

1. USAGE SCENARIO

Hotel/residential room



Office/meeting room



2. DESCRIPTION

The thermostat combined with an HVAC actuator is used to control a fan coil equipped with 4 pipes, 0-10V valve and 3(ON/OFF) Speed ventilation. The system will regulate the temperature of an office around the set point. An external command can be used to switch from winter to summer mode and vice versa. Set HVAC actuator the mode (comfort, eco, standby and protection).

1. Using the thermostat's touch-sensitive buttons, the user can:

- Change the temperature setpoint.
- Select the mode (comfort, eco, standby and protection).
- Adjust the fan speed.

2.Using the thermostat buttons (4, 6 or 8), the user can also send a scene command to the bus. You can connect the corresponding actuator to execute the required scene.

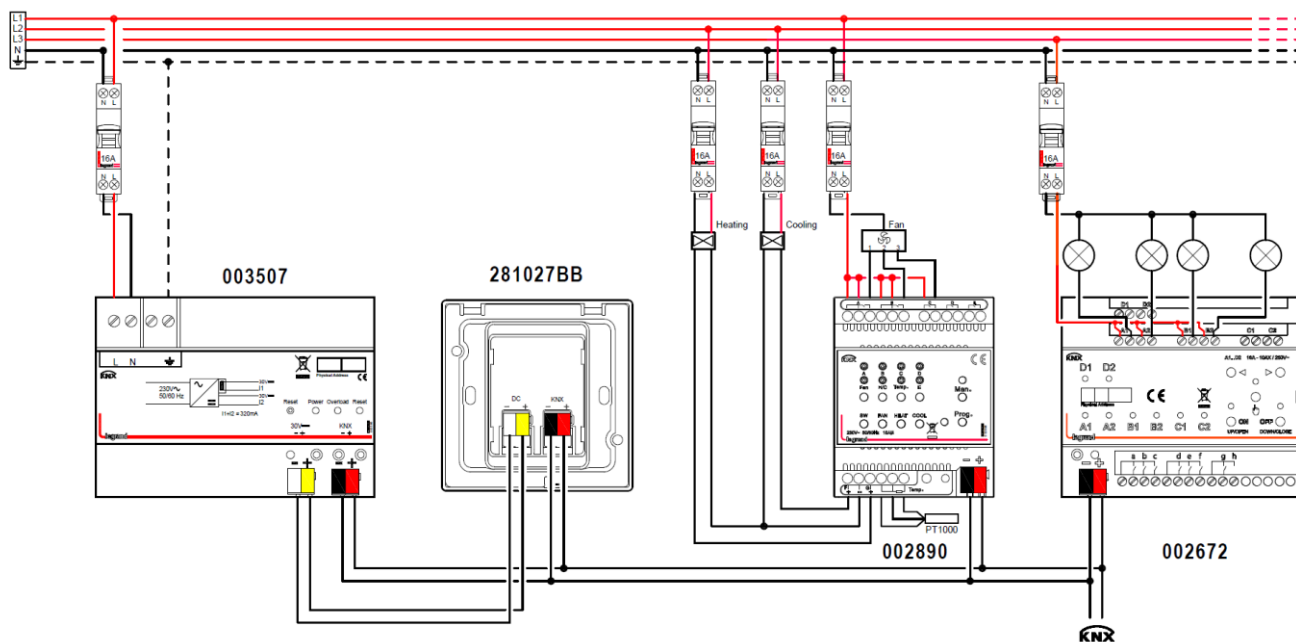
Here is a table of compatible Mallia thermostats.

LG-281027MW	KNX-Mallia Senses command 4 push with thermostat white
LG-281028MW	KNX-Mallia Senses command 6 push with thermostat white
LG-281029MW	KNX-Mallia Senses command 8 push with thermostat white
LG-281027DS	KNX-Mallia Senses command 4 push with thermostat silver
LG-281028DS	KNX-Mallia Senses command 6 push with thermostat silver
LG-281029DS	KNX-Mallia Senses command 8 push with thermostat silver
LG-281027BB	KNX-Mallia Senses command 4 push with thermostat black
LG-281028BB	KNX-Mallia Senses command 6 push with thermostat black
LG-281029BB	KNX-Mallia Senses command 8 push with thermostat black

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

3. WIRING DIAGRAM



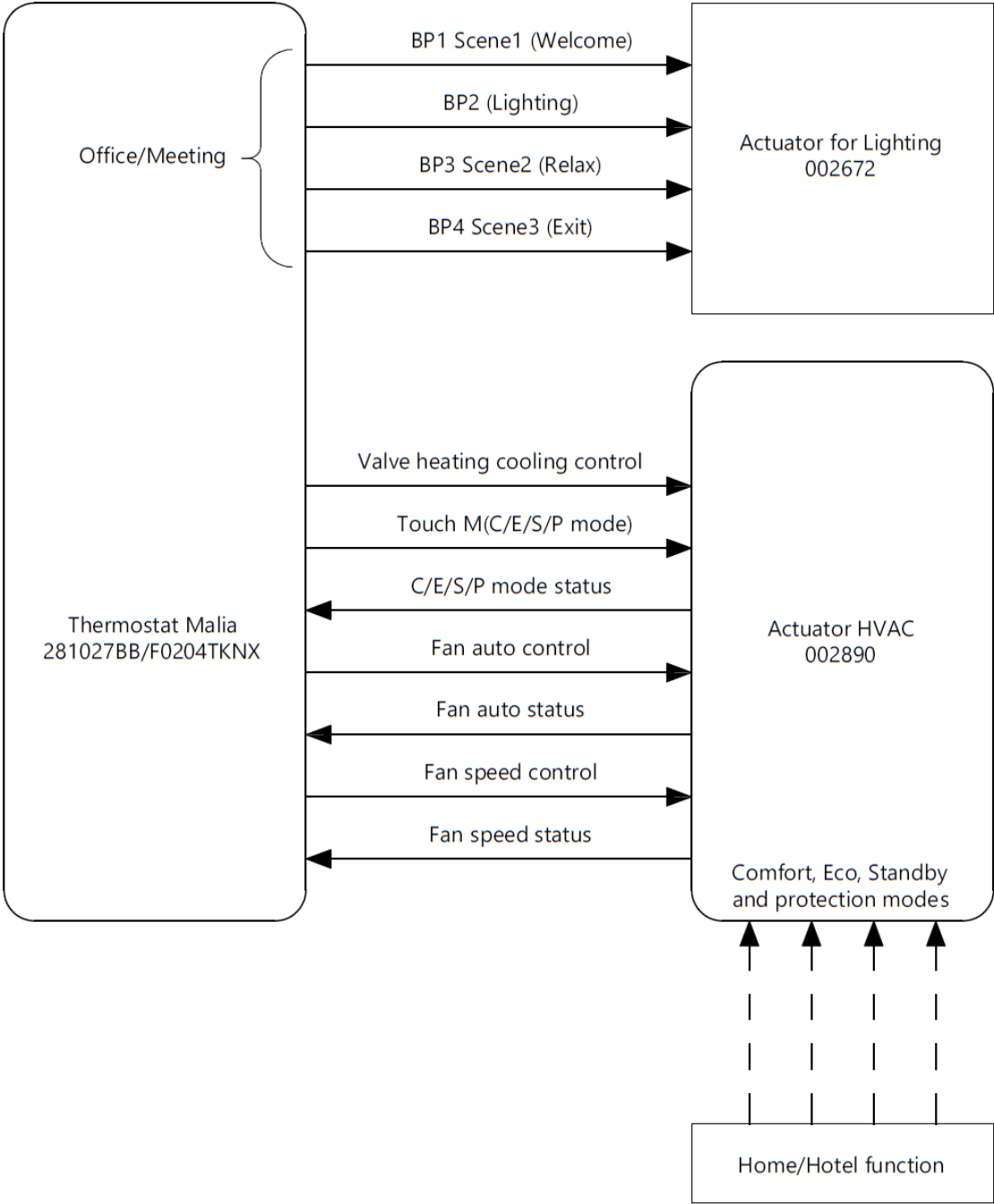
NB:

For more information about wiring each device, refer to the instructions on site.



www.legrand.com

4. KNX DIAGRAM



5. KNX Diagram

This project **002890_Thermoregulation 4P 0-10V Valves ON-OFF Fan.knxproj** is available on www.legrand.com and can be imported into ETS5.

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS

6.1 Thermostat 281027BB

Devices

+ Add Channels

✗ Delete

↓ Download

?

Help

Highlight Changes

Default Parameters

Grant Customer Access

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > General > General setting

General

General setting

Proximity setting

+ Button

+ Internal sensor

+ HVAC controller

Normal day backlight [10..100]

70

%

Normal night backlight [10..100]

50

%

Normal standby backlight [0..10]

5

%

Normal to standby delay time [1..255]

30

s

Buzzer volume level [0..5, 0=inactive]

5

Touch button vibration feedback

☐

Long operation for touch after

1.0

s

Devices

+ Add Channels

✗ Delete

↓ Download

?

Help

Highlight Changes

Default Parameters

Grant Customer Access

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > General > Proximity setting

General

General setting

Proximity setting

+ Button

The Proximity function triggered via

Sensor

Object type of output value

1bit[On/Off]

Output value

☐ OFF ☒ ON

Delay time for sending [0..65535]s

0

Devices

+ Add Channels

✗ Delete

↓ Download

?

Help

Highlight Changes

Default Parameters

Grant Customer Access

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > Button setting

+ General

- Button

Button setting

Button 1

Button 2

Button 3

Delay time for no operation [0..255, 0=inactive]

10

s

LED status object read request after restart

☐

Initial LED status

☒ No ☐ As status as object value "0"

Brightness setting

Brightness of cool white LED

50

%

Brightness of warm white LED

50

%

Devices

+ Add Channels

✗ Delete

↓ Download

?

Help

Highlight Changes

Default Parameters

Grant Customer Access

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > Button 1

+ General

- Button

Button setting

Button 1

Button 2

Button 3

Function of button

Scene control

Distinction between short and long operation

☒ No ☐ Yes

Reaction on short operation or closing the contact

Recall scene

8 bit scene number

Scene NO.1

Reaction on long operation or opening the contact

No reaction

Disable function

☒ Disable ☐ Enable

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.1 Thermostat 281027BB (continued)

Devices

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > Button 2

+

General

-

Button

Button setting

Button 1

Button 2

Button 3

Function of button

Distinction between short and long operation

Reaction on short operation or closing the contact

8 bit scene number

Reaction on long operation or opening the contact

Disable function

Scene control

No

Yes

Recall scene

Scene NO.2

No reaction

No

Disable

Enable

Devices

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > Button 3

+

General

-

Button

Button setting

Button 1

Button 2

Button 3

Function of button

Distinction between short and long operation

Reaction on short operation or closing the contact

8 bit scene number

Reaction on long operation or opening the contact

Disable function

Scene control

No

Yes

Recall scene

Scene NO.3

No reaction

No

Disable

Enable

Devices

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > Button 4

+

General

-

Button

Button setting

Button 1

Button 2

Button 3

Button 4

Function of button

Distinction between short and long operation

Reaction on short operation or closing the contact

8 bit scene number

Reaction on long operation or opening the contact

Disable function

Scene control

No

Yes

Recall scene

Scene NO.4

No reaction

No

Disable

Enable

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETS5 (continued)

6.1 Thermostat 281027BB (continued)

Devices

+

 Add Channels

✗

 Delete

↓

 Download

?

 Help

🖌

 Highlight Changes

⚙

 Default Parameters

🔑

 Grant Customer Access

📁

 Devices

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Button > LED function

+

 General

−

 Button

Button setting

Button 1

Button 2

Button 3

Button 4

LED function

LED 1 function

☒ Disable
 ☐ Control by external object

LED 2 function

☒ Disable
 ☐ Control by external object

LED 3 function

☒ Disable
 ☐ Control by external object

LED 4 function

☒ Disable
 ☐ Control by external object

Devices

Add Channels | Delete | Download | Help | Highlight Changes | Default Parameters | Grant Customer Access

Devices

Dynamic Folders
1.1.1 KNX-Mallia Senses command 4 push with...
1.1.2 KNX 0-10V Fan coil Actuator
1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > Internal sensor > Measurement setting

+ General
+ Button
- Internal sensor

Measurement setting

Temperature sensor setting

Temperature calibration

0.0 °C

Send temperature when the result change by [0..10]

0.5 °C

Cyclically send temperature [0..255,0=inactive]

1 min

Devices

- + Add Channels | ✖ Delete | ⬇ Download | ? Help | 🖌 Highlight Changes | Default Parameters | Grant Customer Access

Devices

- Dynamic Folders
- 1.1.1 KNX-Mallia Senses command 4 push with...
- 1.1.2 KNX 0-10V Fan coil Actuator
- 1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > HVAC controller > Controller setting

+ General	Room temperature control function as	FCU control
+ Button	Ventilation function	<input type="checkbox"/>
+ Internal sensor	Floor heating function	<input type="checkbox"/>
- HVAC controller		

[Controller setting](#)

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.1 Thermostat 281027BB (continued)

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > HVAC controller > FCU setting

General

General setting

Proximity setting

Button

Button setting

Button 1

Button 2

Button 3

Button 4

LED function

Internal sensor

Measurement setting

HVAC controller

Controller setting

FCU setting

Work mode

Room temperature reference from

Control value after temp. error [0..100]
(if 2-point control, set value '0'=0, set value '>0'=1)

Interface display temperature

Setpoint temperature adjustment step

Min. setpoint temperature [5..37]

Max. setpoint temperature [5..37]

Power on/off status after download

Power on/off status after voltage recovery

Low temperature protection when power off

Room temperature control mode

Heating/Cooling switchover

Heating/Cooling status after download

Heating/Cooling status after voltage recovery

Room temperature control system

Room temperature operation mode

Controller status after download

Controller status after voltage recovery

Extended comfort mode [0..255,0=inactive]

Window contact input function

Bus presence detector function

Fan

Timer

Scene

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.1 Thermostat 281027BB (continued)

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > HVAC controller > FCU setting > Setpoint

General

Button

Internal sensor

HVAC controller

Controller setting

FCU setting

Setpoint

Heating/Cooling control

Fan

Setpoint method for operating mode

Relative

Absolute

Heating

Setpoint temperature in comfort mode [5..37]

21

°C

Setpoint temperature in standby mode [5..37]

19

°C

Setpoint temperature in economy mode [5..37]

17

°C

Setpoint temperature in frost protection [5..10]

7

°C

Cooling

Setpoint temperature in comfort mode [5..37]

23

°C

Setpoint temperature in standby mode [5..37]

25

°C

Setpoint temperature in economy mode [5..37]

27

°C

Setpoint temperature in heat protection [30..37]

35

°C

Note: The heating setpoint must be always less than the cooling setpoint.

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > HVAC controller > FCU setting > Heating/Cooling control

General

General setting

Proximity setting

Button

Internal sensor

HVAC controller

Controller setting

FCU setting

Setpoint

Heating/Cooling control

Type of heating control

Switching on/off(use 2-point control)

Invert control value

☐

Lower Hysteresis [0..200]

10

*0.1K

Upper Hysteresis [0..200]

10

*0.1K

Type of cooling control

Switching on/off(use 2-point control)

Invert control value

☐

Lower Hysteresis [0..200]

10

*0.1K

Upper Hysteresis [0..200]

10

*0.1K

Cyclically send control value[0..255]

0

min

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.1 KNX-Mallia Senses command 4 push with thermostat brushed black > HVAC controller > FCU setting > Fan

General

Button

Internal sensor

HVAC controller

Controller setting

FCU setting

Setpoint

Heating/Cooling control

Fan

Object datatype of 1byte fan speed

Percentage (DPT_5.001)

Fan stage (DPT_5.100)

Output value for Fan speed

Output value for Fan speed low

1

Output value for Fan speed medium

2

Output value for Fan speed high

3

Status feedback for Fan speed

Status value for Fan speed low

1

Status value for Fan speed medium

2

Status value for Fan speed high

3

Automatic operation function

External controller

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.2 Actuator HVAC 0 028 90

Devices ▾		1.1.2 KNX 0-10V Fan coil Actuator > General	
Devices ▾		General	Relay operation delay after power voltage recovery[5...250s]
Dynamic Folders		Interface Setting	Sending cycle of "In operation" telegram (1...240s,0=inactive)
1.1.1 KNX-Mallia Senses command 4 push with...		HVAC-General	Manual operation
1.1.2 KNX 0-10V Fan coil Actuator		Temperature	Manual to automatic by
1.1.3 LG-002672 Room Control Unit, 8 Output		Heating/Cooling valve (0-10V)	Delay time*1s[10...6000]
		Fan	Report operation status function for HVAC
		Auto.operation	Central control for switch function

Devices ▾		1.1.2 KNX 0-10V Fan coil Actuator > Interface Setting	
Devices ▾		General	Fan drive interface
Dynamic Folders		Interface Setting	HVAC Control mode
1.1.1 KNX-Mallia Senses command 4 push wit...		HVAC-General	HVAC System
1.1.2 KNX 0-10V Fan coil Actuator		Temperature	Heating valve drive interface
1.1.3 LG-002672 Room Control Unit, 8 Output			Cooling valve drive interface

Devices ▾		1.1.2 KNX 0-10V Fan coil Actuator > HVAC-General	
Devices ▾		General	Controller define
Dynamic Folders		Interface Setting	Number of control value
1.1.1 KNX-Mallia Senses command 4 push wit...		HVAC-General	Control value object type
1.1.2 KNX 0-10V Fan coil Actuator		Temperature	Monitoring control value
1.1.3 LG-002672 Room Control Unit, 8 Output			

Devices ▾		1.1.2 KNX 0-10V Fan coil Actuator > Temperature	
Devices ▾		General	Temperature measure by
Dynamic Folders		Interface Setting	Time period for requesting external sensor[0...255]*min
1.1.1 KNX-Mallia Senses command 4 push with...		HVAC-General	
1.1.2 KNX 0-10V Fan coil Actuator		Temperature	
1.1.3 LG-002672 Room Control Unit, 8 Output			

Devices ▾		1.1.2 KNX 0-10V Fan coil Actuator > Heating valve (0-10V)	
Devices ▾		General	Valve control mode
Dynamic Folders		Interface Setting	Valve type
1.1.1 KNX-Mallia Senses command 4 push wit...		HVAC-General	The Controller use 2-point control method
1.1.2 KNX 0-10V Fan coil Actuator		Temperature	
1.1.3 LG-002672 Room Control Unit, 8 Output		Heating valve (0-10V)	Reply mode of Obj."status of valve position" 1bit function
		Cooling valve (0-10V)	Valve purge function
		Fan	"Disable heating" object function

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.2 Actuator HVAC 0 028 90 (continued)

Devices ▾	
1.1.2 KNX 0-10V Fan coil Actuator > Cooling valve (0-10V)	
General	Valve control mode <input checked="" type="radio"/> 2 state-10V/0V <input type="radio"/> Continuous control
Interface Setting	Valve type <input checked="" type="radio"/> Normal (de-energised closed) <input type="radio"/> Inverted (de-energised open)
HVAC-General	The Controller use 2-point control method <input type="text" value="<--Attention"/>
Temperature	
Heating valve (0-10V)	Reply mode of Obj."status of valve position" 1bit function <input type="radio"/> Respond after read only <input checked="" type="radio"/> Respond after change
Cooling valve (0-10V)	Valve purge function <input checked="" type="radio"/> Disable <input type="radio"/> Enable
Fan	"Disable cooling" object function <input checked="" type="radio"/> Disable <input type="radio"/> Enable

Devices ▾	
1.1.2 KNX 0-10V Fan coil Actuator > Fan	
General	Fan type <input type="radio"/> One level <input checked="" type="radio"/> Multi-level
Interface Setting	Fan speeds on 2 limit <input checked="" type="radio"/> No <input type="radio"/> Yes
HVAC-General	Fan operation mode <input checked="" type="radio"/> Changeover switch <input type="radio"/> Step switch
Temperature	Delay between fan speed switch*ms [50...5000] <input type="text" value="500"/>
Heating/Cooling valve (0-10V)	When bus failure,Fan speed is <input type="text" value="Unchange"/>
Fan	When bus recovery, fan speed is <input type="text" value="Unchange"/>
Auto.operation	After downloading, fan speed is <input type="text" value="OFF"/>
Fan status	Threshold value for Fan speed 1[1...255] <input type="text" value="1"/>
Scene	Threshold value for Fan speed 2[1...255] <input type="text" value="2"/>
Output D	Threshold value for Fan speed 3[1...255] <input type="text" value="3"/>
Output E	"Forced operation" function <input checked="" type="radio"/> Disable <input type="radio"/> Enable
	Auto. operation function (only for HVAC) <input type="radio"/> Disable <input checked="" type="radio"/> Enable
	Direct operation function <input checked="" type="radio"/> Disable <input type="radio"/> Enable
	Delay time for function OFF *0.1s [0...65535] <input type="text" value="0"/>
	Starting characteristic of fan <input checked="" type="radio"/> Disable <input type="radio"/> Enable

Devices ▾	
1.1.2 KNX 0-10V Fan coil Actuator > Auto.operation	
General	Auto.operation on object value <input type="radio"/> 0=Auto/1=Cancel <input checked="" type="radio"/> 1=Auto/0=Cancel
Interface Setting	State of Auto.operation after startup <input type="radio"/> Disable auto.operation <input checked="" type="radio"/> Enable auto.operation
HVAC-General	Automatically enable auto.operation <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Threshold value OFF<-->speed 1[1...255] (For 2 point,it's Tem.difference*0.1°C) <input type="text" value="10"/>
Heating/Cooling valve (0-10V)	Threshold value speed 1<-->speed 2 [1...255](For 2 point,it's Tem.difference*0.1°C) <input type="text" value="20"/>
Fan	Threshold value speed 2<-->speed 3 [1...255](For 2 point,it's Tem.difference*0.1°C) <input type="text" value="30"/>
Auto.operation	Hysteresis value is threshold value in +/- [0...50](For 2 point,it is unused) <input type="text" value="10"/>
Fan status	Minimum time in fan speed[0...65535]*s <input type="text" value="10"/>
Scene	Limitation function <input checked="" type="radio"/> Disable <input type="radio"/> Enable
Output D	

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.2 Actuator HVAC 0 028 90 (continued)

Devices ▾

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.2 KNX 0-10V Fan coil Actuator > Fan status

General

Reply mode of Obj. "status ON/OFF mode" 1bit function

Respond after change ▾

Interface Setting

Reply mode of Obj. "status Auto. mode" 1bit function

Respond after change ▾

HVAC-General

Reply mode of Obj. "Status fan speed x" 1bit function

Respond after change ▾

Temperature

Reply mode of Obj. "Status fan speed" 1byte function

Respond after change ▾

Heating/Cooling valve (0-10V)

Object value for Status Fan speed 1 [1...255]

1 ▾

Fan

Object value for Status Fan speed 2 [1...255]

2 ▾

Auto.operation

Object value for Status Fan speed 3 [1...255]

3 ▾

Fan status

Devices ▾

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.2 KNX 0-10V Fan coil Actuator > Scene

General

Scene function

☒ Disable ☐ Enable

Interface Setting

HVAC-General

Temperature

Heating/Cooling valve (0-10V)

Fan

Auto.operation

Fan status

Scene

Devices ▾

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push wit...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.2 KNX 0-10V Fan coil Actuator > Output D

General

Switch function

☒ Disable ☐ Enable

Interface Setting

HVAC-General

Temperature

Heating valve (0-10V)

Cooling valve (0-10V)

Fan

Auto.operation

Fan status

Scene

Output D

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.2 Actuator HVAC 0 028 90 (continued)

Devices

Devices

Dynamic Folders

1.1.1 KNX-Mallia Senses command 4 push with...

1.1.2 KNX 0-10V Fan coil Actuator

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.2 KNX 0-10V Fan coil Actuator > Output E

General

Interface Setting

HVAC-General

Temperature

Heating/Cooling valve (0-10V)

Fan

Auto.operation

Fan status

Scene

Output D

Output E

Switch function

Disable

Enable

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.3 Actuator for Lighting 0 026 72

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > General	
General	Enable manual operation <input type="radio"/> disable <input checked="" type="radio"/> enable
Enable Output A...J	Reset manual operation to KNX operation <input checked="" type="radio"/> via push button <input type="radio"/> automatically and via push button
A1 - General	Device alive operation active <input type="radio"/> yes <input checked="" type="radio"/> no
A1 - Function	First telegram send time in s[2...255] 2
A1 - Scene	Telegram limit active <input type="radio"/> yes <input checked="" type="radio"/> no
A2 - General	Activate scene <input checked="" type="radio"/> yes <input type="radio"/> no
A2 - Function	Weather alarm function <input type="radio"/> yes <input checked="" type="radio"/> no

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > Enable Output A...J	
General	Output group A and B individually
Enable Output A...J	Output group A <input type="radio"/> shutter/blind AC <input checked="" type="radio"/> 2 x switch
A1 - General	Output group B <input type="radio"/> shutter/blind AC <input checked="" type="radio"/> 2 x switch
A1 - Function	Output group C and D no function

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > A1 - General	
General	Contact type <input type="radio"/> normally closed <input checked="" type="radio"/> normally open
Enable Output A...J	Send switch status feedback telegram after change or request
A1 - General	Create status object "Status Switch" <input checked="" type="radio"/> yes <input type="radio"/> no
A1 - Function	Send status after bus voltage return <input type="radio"/> yes <input checked="" type="radio"/> no
A1 - Scene	Behavior after ETS program or after ETS reset keep position
A2 - General	Behavior bus voltage failure keep position
A2 - Function	Behavior bus voltage return state as before bus voltage failure

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > A1 - Function	
General	Enable staircase <input type="radio"/> yes <input checked="" type="radio"/> no
Enable Output A...J	Enable extenal logic <input type="radio"/> yes <input checked="" type="radio"/> no
A1 - General	Enable priority <input type="radio"/> yes <input checked="" type="radio"/> no
A1 - Function	Enable sweep <input type="radio"/> yes <input checked="" type="radio"/> no

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.3 Actuator for Lighting 0 026 72 (continued)

Devices ▾		
Devices ▾	1.1.3 LG-002672 Room Control Unit, 8 Output > A1 - Scene	
Dynamic Folders	General	Overwrite scene on download <input checked="" type="radio"/> yes <input type="radio"/> no
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...	
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General	1...64 scene number (0 = no assignment) 1
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function	Value <input type="radio"/> OFF <input checked="" type="radio"/> ON
	A1 - Scene	1...64 scene number (0 = no assignment) 2
	A2 - General	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	A2 - Function	1...64 scene number (0 = no assignment) 3
	A2 - Scene	Value <input type="radio"/> OFF <input checked="" type="radio"/> ON
	B1 - General	1...64 scene number (0 = no assignment) 4
	B1 - Function	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	B1 - Scene	1...64 scene number (0 = no assignment) 0
	B2 - General	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	B2 - Function	1...64 scene number (0 = no assignment) 0
	B2 - Scene	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON

Devices ▾		
Devices ▾	1.1.3 LG-002672 Room Control Unit, 8 Output > A2 - General	
Dynamic Folders	General	Contact type <input type="radio"/> normally closed <input checked="" type="radio"/> normally open
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...	Send switch status feedback telegram after change or request
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General	Create status object "Status Switch" <input checked="" type="radio"/> yes <input type="radio"/> no
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function	Send status after bus voltage return <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Scene	Behavior after ETS program or after ETS reset keep position
	A2 - General	Behavior bus voltage failure keep position
	A2 - Function	Behavior bus voltage return state as before bus voltage failure

Devices ▾		
Devices ▾	1.1.3 LG-002672 Room Control Unit, 8 Output > A2 - Function	
Dynamic Folders	General	Enable staircase <input type="radio"/> yes <input checked="" type="radio"/> no
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...	Enable external logic <input type="radio"/> yes <input checked="" type="radio"/> no
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General	Enable priority <input type="radio"/> yes <input checked="" type="radio"/> no
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function	Enable sweep <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Scene	
	A2 - General	
	A2 - Function	

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.3 Actuator for Lighting 0 026 72 (continued)

Devices ▾		
Devices ▾	1.1.3 LG-002672 Room Control Unit, 8 Output > A2 - Scene	
Dynamic Folders	General	Overwrite scene on download <input checked="" type="radio"/> yes <input type="radio"/> no
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...	1...64 scene number (0 = no assignment) 1
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General	Value <input type="radio"/> OFF <input checked="" type="radio"/> ON
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function	1...64 scene number (0 = no assignment) 2
	A1 - Scene	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	A2 - General	1...64 scene number (0 = no assignment) 3
	A2 - Function	Value <input type="radio"/> OFF <input checked="" type="radio"/> ON
	A2 - Scene	1...64 scene number (0 = no assignment) 4
	B1 - General	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	B1 - Function	1...64 scene number (0 = no assignment) 0
	B1 - Scene	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	B2 - General	1...64 scene number (0 = no assignment) 0
	B2 - Function	Value <input checked="" type="radio"/> OFF <input type="radio"/> ON
	B2 - Scene	1...64 scene number (0 = no assignment) 0
		Value <input checked="" type="radio"/> OFF <input type="radio"/> ON

Devices ▾		
Devices ▾	1.1.3 LG-002672 Room Control Unit, 8 Output > B1 - General	
Dynamic Folders	General	Contact type <input type="radio"/> normally closed <input checked="" type="radio"/> normally open
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...	Send switch status feedback telegram after change or request
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General	Create status object "Status Switch" <input checked="" type="radio"/> yes <input type="radio"/> no
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function	Send status after bus voltage return <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Scene	Behavior after ETS program or after ETS reset keep position
	A2 - General	Behavior bus voltage failure keep position
	A2 - Function	Behavior bus voltage return state as before bus voltage failure
	A2 - Scene	
	B1 - General	

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.3 Actuator for Lighting 0 026 72 (continued)

Devices

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.3 LG-002672 Room Control Unit, 8 Output > B1 - Function

General

Enable staircase

☐ yes ☒ no

Enable Output A...

Enable external logic

☐ yes ☒ no

A1 - General

Enable priority

☐ yes ☒ no

A1 - Function

Enable sweep

☐ yes ☒ no

A1 - Scene

A2 - General

A2 - Function

A2 - Scene

B1 - General

B1 - Function

Devices

1.1.3 LG-002672 Room Control Unit, 8 Output

1.1.3 LG-002672 Room Control Unit, 8 Output > B1 - Scene

General

Overwrite scene on download

☒ yes ☐ no

Enable Output A...

Assignment to scene number
(no 1...64, 0 = no assignment)

1

Value

☒ OFF ☐ ON

A1 - General

Assignment to scene number
(no 1...64, 0 = no assignment)

2

Value

☐ OFF ☒ ON

A1 - Function

Assignment to scene number
(no 1...64, 0 = no assignment)

3

Value

☐ OFF ☒ ON

A1 - Scene

Assignment to scene number
(no 1...64, 0 = no assignment)

4

Value

☒ OFF ☐ ON

A2 - General

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

A2 - Function

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

A2 - Scene

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B1 - General

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B1 - Function

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B1 - Scene

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B2 - General

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B2 - Function

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

B2 - Scene

Assignment to scene number
(no 1...64, 0 = no assignment)

0

Value

☒ OFF ☐ ON

4-pipe temperature control
0-10V valves, 2 Automatic hot/cold change-over pipes
3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB
0 028 90
0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.3 Actuator for Lighting 0 026 72 (continued)

Devices ▾		
<div><div>Devices</div><div><div>Dynamic Folders</div><div>1.1.1 KNX-Mallia Senses command 4 push with...</div><div>1.1.2 KNX 0-10V Fan coil Actuator</div><div>1.1.3 LG-002672 Room Control Unit, 8 Output</div></div></div>	1.1.3 LG-002672 Room Control Unit, 8 Output > B2 - General	
	General	Contact type <input type="radio"/> normally closed <input checked="" type="radio"/> normally open
	Enable Output A...	Send switch status feedback telegram <div>after change or request ▾</div>
	A1 - General	Create status object "Status Switch" <input checked="" type="radio"/> yes <input type="radio"/> no
	A1 - Function	Send status after bus voltage return <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Scene	Behavior after ETS program or after ETS reset <div>keep position ▾</div>
	A2 - General	Behavior bus voltage failure <div>keep position ▾</div>
	A2 - Function	Behavior bus voltage return <div>state as before bus voltage failure ▾</div>
	A2 - Scene	
	B1 - General	
	B1 - Function	
	B1 - Scene	
	B2 - General	

Devices ▾		
<div><div>Devices</div><div><div>Dynamic Folders</div><div>1.1.1 KNX-Mallia Senses command 4 push with...</div><div>1.1.2 KNX 0-10V Fan coil Actuator</div><div>1.1.3 LG-002672 Room Control Unit, 8 Output</div></div></div>	1.1.3 LG-002672 Room Control Unit, 8 Output > B2 - Function	
	General	Enable staircase <input type="radio"/> yes <input checked="" type="radio"/> no
	Enable Output A...	Enable external logic <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - General	Enable priority <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Function	Enable sweep <input type="radio"/> yes <input checked="" type="radio"/> no
	A1 - Scene	Enable current detection <input type="radio"/> yes <input checked="" type="radio"/> no
	A2 - General	
	A2 - Function	
	A2 - Scene	
	B1 - General	
	B1 - Function	
	B1 - Scene	
	B2 - General	
	B2 - Function	

4-pipe temperature control

0-10V valves, 2 Automatic hot/cold change-over pipes

3(ON/OFF) Speed ventilation

Cat.No(s): 281027BB

0 028 90

0 026 72

6. DEVICE PARAMETERS WITH ETSS (continued)

6.4 Group address ETSS

Group Addresses																
Add Group Addresses Delete Download Info Reset Unload Print																
Search																
Group Addresses	Device	Object	Sending	Data Type	C	R	W	T	U	Product	Program	Length	Priority	Group Ad	Description	
Dynamic Folders																
1 HVAC function																
1/0 Control																
1/0/0 HVAC ON/OFF	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	90: FCU - ON/OFF, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Malli...	1 bit	Low	1/0/0		HVAC ON/OFF	
1/0/1 HVAC mode	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	95: FCU - Operation mode, Out	S	HVAC mode	C	R	-	T	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/1		HVAC mode	
1/0/2 Valve Heating	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	96: FCU - Heating control value, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Malli...	1 bit	Low	1/0/2		Valve Heating	
1/0/3 Valve Cooling	11.2 KNX 0-10V Fan coil Actuator	34: Valve Heating - Control value	S	switch	C	-	W	-	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/0/2		Valve Heating	
1/0/4 Fan speed control	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	97: FCU - Cooling control value, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Malli...	1 bit	Low	1/0/3		Valve Cooling	
1/0/5 Fan automatic control	11.2 KNX 0-10V Fan coil Actuator	38: Valve Cooling - Control value	S	switch	C	-	W	-	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/0/3		Valve Cooling	
1/0/6 Scenes																
1/1 Status																
1/1/0 HVAC ON/OFF	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	98: FCU - Fan speed, Out	S	fan stage (... C	R	-	T	-	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/4		Fan speed control	
1/1/1 HVAC mode status	11.2 KNX 0-10V Fan coil Actuator	10: Fan - Fan speed	S	percentag...	C	-	W	-	-	KNX 0-1... KNX 0-10V...	1 byte	Low	1/0/4		Fan speed control	
1/1/2 Valve Heating status	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	99: FCU - Fan Automatic operation, Out	S	enable	C	R	-	T	-	KNX-Mal...KNX-Malli...	1 bit	Low	1/0/5		Fan automatic control	
1/1/3 Valve Cooling status	11.2 KNX 0-10V Fan coil Actuator	20: Fan - Automatic function	S	enable	C	-	W	-	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/0/5		Fan automatic control	
1/1/4 Fan speed Status																
1/1/5 Fan automatic status																
2 Temperature management																
2/0 Current temperature	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	10: Button 4 - Short/Close, Scene	S	scene num...	C	-	T	-	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/6		Scenes	
2/0/1 Temperature	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	7: Button 3 - Short/Close, Scene	S	scene num...	C	-	T	-	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/6		Scenes	
2/0/2 Setpoint	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	4: Button 2 - Short/Close, Scene	S	scene num...	C	-	T	-	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/6		Scenes	
2/0/3 Instantaneous Setpoint	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	1: Button 1 - Short/Close, Scene	S	scene num...	C	-	T	-	-	KNX-Mal...KNX-Malli...	1 byte	Low	1/0/6		Scenes	
	11.3 LG-002672 Room Control Unit, 8 Output	1: General - Scene 8-bit	S	scene cont...	C	-	W	-	-	LG-0026... LG-00267...	1 byte	Low	1/0/6		Scenes	
1/1/0 HVAC ON/OFF	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	78: FCU - ON/OFF status, In	S	switch	C	-	W	-	U	KNX-Mal...KNX-Malli...	1 bit	Low	1/1/0		HVAC ON/OFF	
1/1/1 HVAC mode status	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	82: FCU - Operation mode, In	S	HVAC mode	C	-	W	-	U	KNX-Mal...KNX-Malli...	1 byte	Low	1/1/1		HVAC mode status	
1/1/2 Valve Heating status	11.2 KNX 0-10V Fan coil Actuator	37: Valve Heating - Status of valve position	S	switch	C	R	-	T	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/1/2		Valve Heating status	
1/1/3 Valve Cooling status	11.2 KNX 0-10V Fan coil Actuator	41: Valve Cooling - Status of valve position	S	switch	C	R	-	T	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/1/3		Valve Cooling status	
1/1/4 Fan speed Status	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	83: FCU - Fan speed, In	S	fan stage (... C	-	W	T	U	KNX-Mal...KNX-Malli...	1 byte	Low	1/1/4			Fan speed Status	
1/1/5 Fan automatic status	11.2 KNX 0-10V Fan coil Actuator	16: Fan - Status Fan speed	S	counter pu...	C	R	-	T	-	KNX 0-1... KNX 0-10V...	1 byte	Low	1/1/4			Fan speed Status
	11.1 KNX-Mallia Senses command 4 push with thermostat brushed black	84: FCU - Fan automatic operation, In	S	enable	C	-	W	T	U	KNX-Mal...KNX-Malli...	1 bit	Low	1/1/5			Fan automatic status
	11.2 KNX 0-10V Fan coil Actuator	21: Fan - Status Automatic	S	enable	C	R	-	T	-	KNX 0-1... KNX 0-10V...	1 bit	Low	1/1/5			Fan automatic status

7. NOTES

The whole HVAC system is managed by thermostat 281027BB (heating/cooling regulation, setpoint mode and automatic ventilation).

When the customer arrives in the room, can set the temperature to comfort mode, and when they leave the temperature returns to economy mode or standby mode. (touch "M" button on the thermostat 281027BB to switch each mode.)

The HVAC valve is connected to controller 002890 (F, G connector) and fan is connected to controller 002890 (A, B, C connector); the room controller 002890 provide ON/OFF to switch or shut valve.

The setpoint value can be altered on thermostat 281027BB by touching the buttons "+" and "-".

The fan speed can be altered by touching the button on the bottom of the thermostat. There are 3 manual fan speed levels and an automatic mode run by the thermostat.