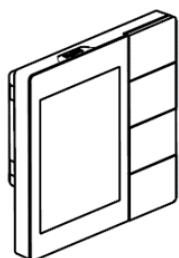


4-pipe temperature control ON/OFF valves, 2 Automatic hot/cold change-over pipes 3(ON/OFF) Speed ventilation

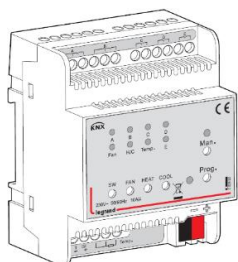
Cat.No(s): 281027BB

0 028 90

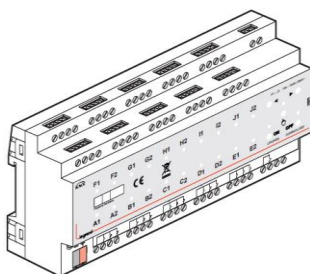
0 026 72



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, ON/OFF 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.

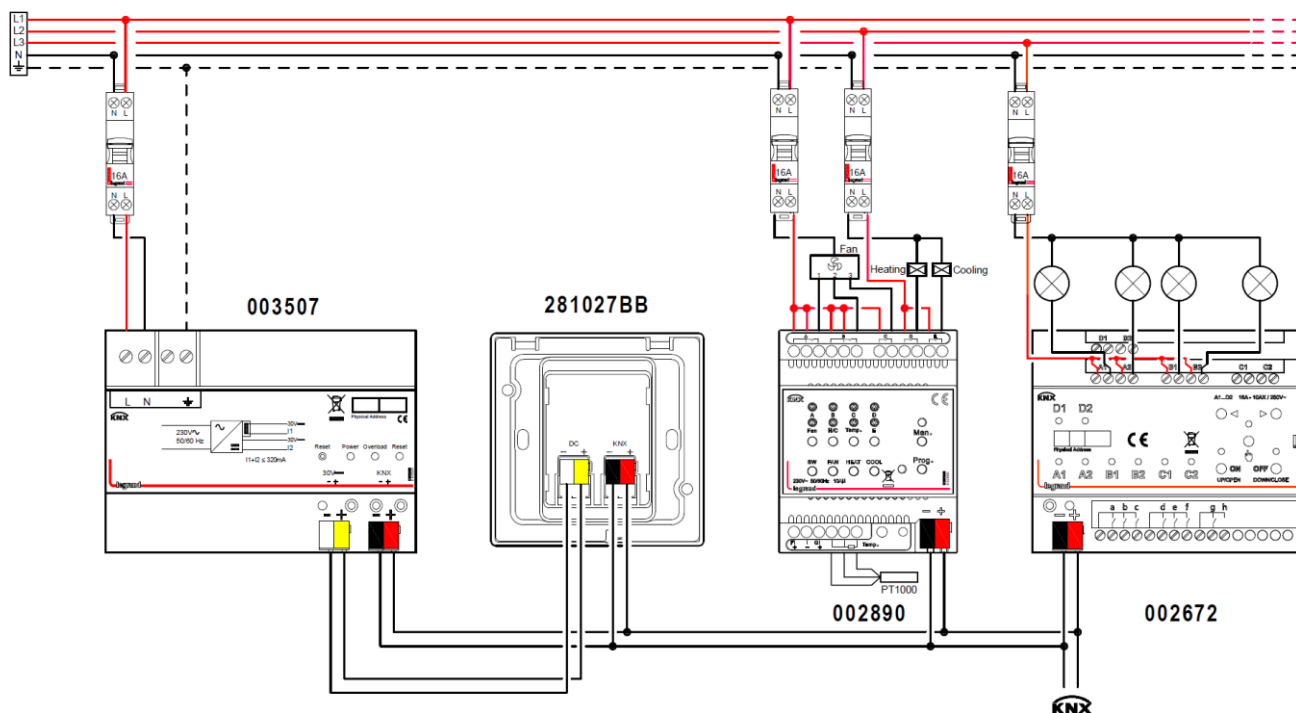
Here is a table of compatible Mallia thermostats.

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
ON/OFF 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



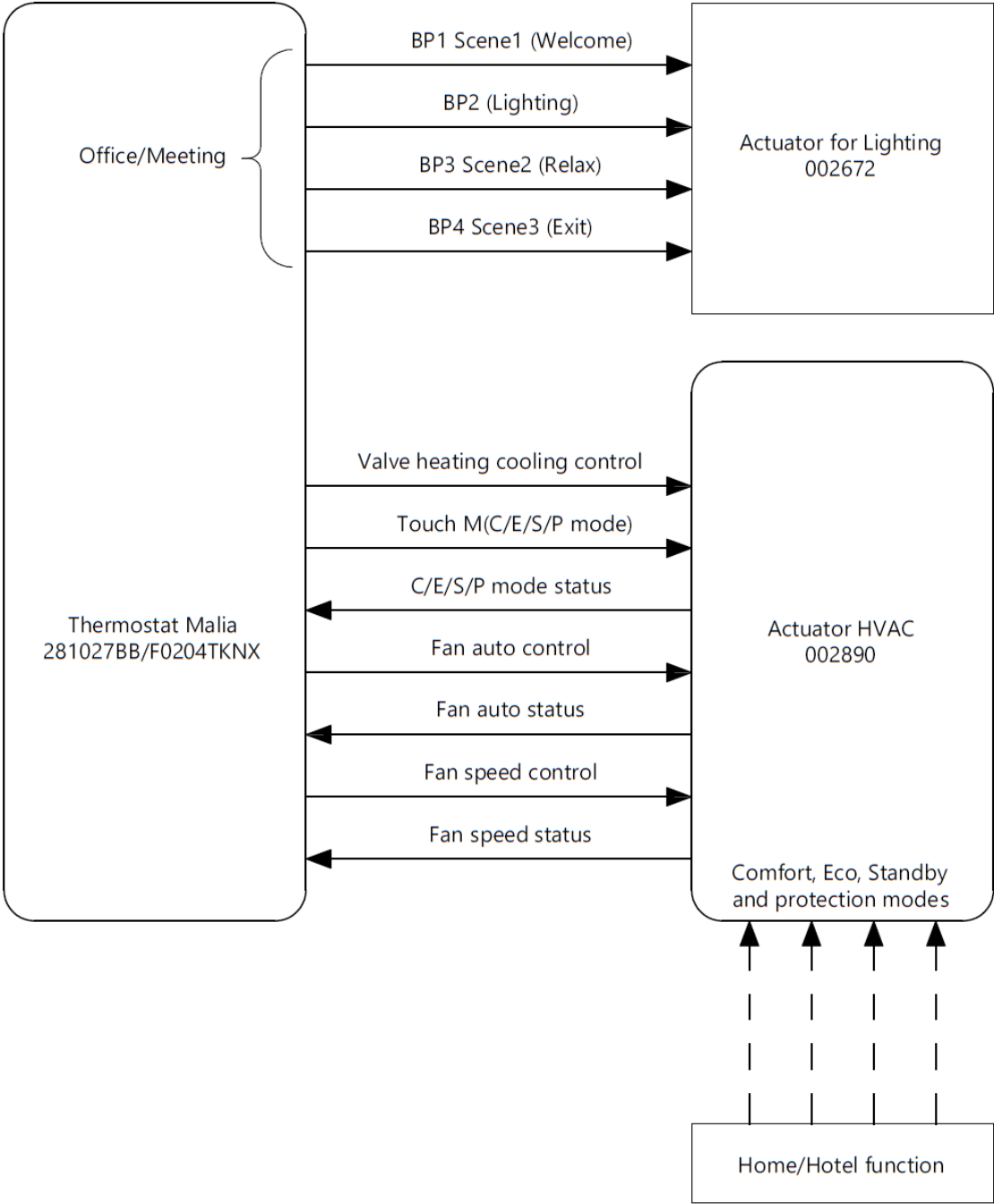
NB:

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 ON-OFF Valves&Fan.knxproj** is available on www.legrand.com and can be imported into ETS5.

4-pipe temperature control

ON/OFF 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
ON/OFF 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

+ 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 > Button > Button 2

+ 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.2

Reaction on long operation or opening the contact

No reaction

Disable function

☒ Disable ☐ Enable

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 > Button > Button 3

+ 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.3

Reaction on long operation or opening the contact

No reaction

Disable function

☒ Disable ☐ Enable

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 > Button > Button 4

+ General

- Button

Button setting

Button 1

Button 2

Button 3

Button 4

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.4

Reaction on long operation or opening the contact

No reaction

Disable function

☒ Disable ☐ Enable

3(ON/OFF) Speed ventilation

0 026 72

6.1 Thermostat 281027BB (continued)

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
ON/OFF 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 thermostat brushed black > HVAC controller > FCU setting	
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	
General	
General setting	Work mode <input checked="" type="radio"/> Master <input type="radio"/> Slave
Proximity setting	Room temperature reference from <input checked="" type="radio"/> Internal sensor <input type="radio"/> External sensor
Button	Control value after temp. error [0..100] (if 2-point control, set value '0'=0, set value '>0'=1) <input type="text" value="0"/> %
Button setting	Interface display temperature <input type="radio"/> Setpoint temperature <input checked="" type="radio"/> Actual temperature
Button 1	Setpoint temperature adjustment step <input checked="" type="radio"/> 0.5K <input type="radio"/> 1K
Button 2	Min. setpoint temperature [5..37] <input type="text" value="16"/> °C
Button 3	Max. setpoint temperature [5..37] <input type="text" value="32"/> °C
Button 4	Power on/off status after download <input checked="" type="radio"/> OFF <input type="radio"/> ON
LED function	Power on/off status after voltage recovery <input type="text" value="As before voltage failure"/>
Internal sensor	Low temperature protection when power off <input type="checkbox"/>
Measurement setting	Room temperature control mode <input type="text" value="Heating and Cooling"/>
HVAC controller	Heating/Cooling switchover <input type="radio"/> Only via object <input checked="" type="radio"/> Automatic changeover
Controller setting	Heating/Cooling status after download <input type="radio"/> Heating <input checked="" type="radio"/> Cooling
+ FCU setting	Heating/Cooling status after voltage recovery <input type="text" value="As before voltage failure"/>
	Room temperature control system <input type="radio"/> 2 pipes system <input checked="" type="radio"/> 4 pipes system
	Room temperature operation mode <input checked="" type="checkbox"/>
	Controller status after download <input type="text" value="Standby mode"/>
	Controller status after voltage recovery <input type="text" value="As before voltage failure"/>
	Extended comfort mode [0..255,0=inactive] <input type="text" value="0"/> min
	Window contact input function <input type="checkbox"/>
	Bus presence detector function <input type="checkbox"/>
	Fan <input checked="" type="checkbox"/>
	Timer <input type="checkbox"/>
	Scene <input type="checkbox"/>

4-pipe temperature control

ON/OFF 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

Button

Internal sensor

HVAC controller

Controller setting

FCU setting

Setpoint

Heating/Cooling control

Fan

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

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

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

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

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

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

4-pipe temperature control

ON/OFF 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 (Relay)	
General	Valve control mode <input checked="" type="radio"/> 2 state-ON/OFF <input type="radio"/> Continuous,PWM
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	When bus failure, valve position <input type="text" value="Unchange"/>
Heating valve (Relay)	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 (Relay)	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	
Output E	

4-pipe temperature control
ON/OFF 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
Interface Setting
HVAC-General
Temperature
Heating/Cooling valve (0-10V)
Fan
Auto.operation
Fan status

Reply mode of Obj. "status ON/OFF mode" 1bit function
Reply mode of Obj. "status Auto. mode" 1bit function
Reply mode of Obj. "Status fan speed x" 1bit function
Reply mode of Obj. "Status fan speed" 1byte function
Object value for Status Fan speed 1 [1...255]
Object value for Status Fan speed 2 [1...255]
Object value for Status Fan speed 3 [1...255]

Respond after change
Respond after change
Respond after change
Respond after change
1
2
3

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
Interface Setting
HVAC-General
Temperature
Heating/Cooling valve (0-10V)
Fan
Auto.operation
Fan status
Scene

Scene function
Disable
Enable

Usage scenario memo: S000125341EN_1

Updated:

Created: 20/05/2024

legrand

11/18

4-pipe temperature control
ON/OFF 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	
Dynamic Folders	General
1.1.1 KNX-Mallia Senses command 4 push with...	Enable manual operation
1.1.2 KNX 0-10V Fan coil Actuator	Reset manual operation to KNX operation
1.1.3 LG-002672 Room Control Unit, 8 Output	Enable Output A...J
	A1 - General
	A1 - Function
	A1 - Scene
	A2 - General
	A2 - Function

Enable manual operation ☐ disable ☒ enable

Reset manual operation to KNX operation ☒ via push button ☐ automatically and via push button

Device alive operation active ☐ yes ☒ no

First telegram send time in s[2...255] 2

Telegram limit active ☐ yes ☒ no

Activate scene ☒ yes ☐ no

Weather alarm function ☐ yes ☒ no

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > Enable Output A...J	
Dynamic Folders	General
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...J
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function

Output group A and B individually

Output group A ☐ shutter/blind AC ☒ 2 x switch

Output group B ☐ shutter/blind AC ☒ 2 x switch

Output group C and D no function

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > A1 - General	
Dynamic Folders	General
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...J
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function

Contact type ☐ normally closed ☒ normally open

Send switch status feedback telegram after change or request

Create status object "Status Switch" ☒ yes ☐ no

Send status after bus voltage return ☐ yes ☒ no

Behavior after ETS program or after ETS reset keep position

Behavior bus voltage failure keep position

Behavior bus voltage return state as before bus voltage failure

Devices ▾	
1.1.3 LG-002672 Room Control Unit, 8 Output > A1 - Function	
Dynamic Folders	General
1.1.1 KNX-Mallia Senses command 4 push with...	Enable Output A...J
1.1.2 KNX 0-10V Fan coil Actuator	A1 - General
1.1.3 LG-002672 Room Control Unit, 8 Output	A1 - Function

Enable staircase ☐ yes ☒ no

Enable extenal logic ☐ yes ☒ no

Enable priority ☐ yes ☒ no

Enable sweep ☐ yes ☒ no

4-pipe temperature control
ON/OFF 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

ON/OFF 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
ON/OFF 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

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

B1 - Scene

Overwrite scene on download

☒ yes ☐ no

Enable Output A...

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

1

A1 - General

Value

☒ OFF ☐ ON

A1 - Function

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

2

A1 - Scene

Value

☐ OFF ☒ ON

A2 - General

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

3

A2 - Function

Value

☐ OFF ☒ ON

A2 - Scene

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

4

B1 - General

Value

☒ OFF ☐ ON

B1 - Function

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

0

B1 - Scene

Value

☒ OFF ☐ ON

B2 - General

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

0

B2 - Function

Value

☒ OFF ☐ ON

B2 - Scene

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

0

Value

☒ OFF ☐ ON

4-pipe temperature control
ON/OFF 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 ▾

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

1.1.3 LG-002672 Room Control Unit, 8 Output > B2 - General

General

Enable Output A...

A1 - General

A1 - Function

A1 - Scene

A2 - General

A2 - Function

A2 - Scene

B1 - General

B1 - Function

B1 - Scene

B2 - General

Contact type

☐ normally closed ☒ normally open

Send switch status feedback telegram

after change or request

Create status object "Status Switch"

☒ yes ☐ no

Send status after bus voltage return

☐ yes ☒ no

Behavior after ETS program or after ETS reset

keep position

Behavior bus voltage failure

keep position

Behavior bus voltage return

state as before bus voltage failure

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

1.1.3 LG-002672 Room Control Unit, 8 Output > B2 - Function

General

Enable Output A...

A1 - General

A1 - Function

A1 - Scene

A2 - General

A2 - Function

A2 - Scene

B1 - General

B1 - Function

B1 - Scene

B2 - General

B2 - Function

Enable staircase

☐ yes ☒ no

Enable external logic

☐ yes ☒ no

Enable priority

☐ yes ☒ no

Enable sweep

☐ yes ☒ no

Enable current detection

☐ yes ☒ no

3(ON/OFF) Speed ventilation

0 026 72

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

1.1.3 LG-002672 Room Control Unit, 8 Output > B2 - Scene

General	<div> <div>Overwrite scene on download</div> <div> <input checked="" type="radio"/> yes <input type="radio"/> no </div> </div>
Enable Output A...	
A1 - General	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>1</div> </div>
A1 - Function	<div> <div>Value</div> <div> <input checked="" type="radio"/> OFF <input type="radio"/> ON </div> </div>
A1 - Scene	
A2 - General	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>2</div> </div>
A2 - Function	<div> <div>Value</div> <div> <input type="radio"/> OFF <input checked="" type="radio"/> ON </div> </div>
A2 - Scene	
B1 - General	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>3</div> </div>
B1 - Function	<div> <div>Value</div> <div> <input type="radio"/> OFF <input checked="" type="radio"/> ON </div> </div>
B1 - Scene	
B2 - General	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>4</div> </div>
B2 - Function	<div> <div>Value</div> <div> <input checked="" type="radio"/> OFF <input type="radio"/> ON </div> </div>
B2 - Scene	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>0</div> </div>
	<div> <div>Value</div> <div> <input checked="" type="radio"/> OFF <input type="radio"/> ON </div> </div>
	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>0</div> </div>
	<div> <div>Value</div> <div> <input checked="" type="radio"/> OFF <input type="radio"/> ON </div> </div>
	<div> <div>Assignment to scene number (no 1...64, 0 = no assignment)</div> <div>0</div> </div>
	<div> <div>Value</div> <div> <input checked="" type="radio"/> OFF <input type="radio"/> ON </div> </div>

4-pipe temperature control

ON/OFF 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 Main Groups Delete Download Info Reset Unload Print										
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	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	90: FCU - ON/OFF, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 bit Low 1/0/0 HVAC ON/OFF
1/0/1 HVAC mode	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	95: FCU - Operation mode, Out	S	HVAC mode	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/1 HVAC mode
1/0/2 Valve Cooling	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	97: FCU - Cooling control value, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 bit Low 1/0/2 Valve Cooling
1/0/3 Valve Heating	1/1.2 KNX 0-10V Fan coil Actuator	38: Valve Cooling - Control value	S	switch	C	-	W	-	-	KNX 0-1... KNX 0-10V... 1 bit Low 1/0/2 Valve Cooling
1/0/4 Fan speed control	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	96: FCU - Heating control value, Out	S	switch	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 bit Low 1/0/3 Valve Heating
1/0/5 Fan automatic control	1/1.2 KNX 0-10V Fan coil Actuator	34: Valve Heating - Control value	S	switch	C	-	W	-	-	KNX 0-1... KNX 0-10V... 1 bit Low 1/0/3 Valve Heating
1/0/6 Scenes										
1/1 Status										
1/1/0 HVAC ON/OFF	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	98: FCU - Fan speed, Out	S	fan stage (0.255)	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/4 Fan speed control
1/1/1 HVAC mode status	1/1.2 KNX 0-10V Fan coil Actuator	10: Fan - Fan speed	S	percentage (0.100%)	C	-	W	-	-	KNX 0-1... KNX 0-10V... 1 byte Low 1/0/4 Fan speed control
1/1/2 Valve Heating status	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	99: FCU - Fan Automatic operation, Out	S	enable	C	R	-	T	-	KNX-Mal...KNX-Mallia... 1 bit Low 1/0/5 Fan automatic control
1/1/3 Valve Cooling status	1/1.2 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	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	10: Button 4 - Short/Close, Scene	S	scene number	C	-	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/6 Scenes
1/1/5 Fan automatic status	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	7: Button 3 - Short/Close, Scene	S	scene number	C	-	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/6 Scenes
2 Temperature management										
2/0 Current temperature	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	4: Button 2 - Short/Close, Scene	S	scene number	C	-	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/6 Scenes
2/0/1 Temperature	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	1: Button 1 - Short/Close, Scene	S	scene number	C	-	-	T	-	KNX-Mal...KNX-Mallia... 1 byte Low 1/0/6 Scenes
2/0/2 Setpoint	1/1.3 LG-002672 Room Control Unit, 8 Output	1: General - Scene 8-bit	S	scene control	C	-	W	-	-	LG-0026... LG-002672... 1 byte Low 1/0/6 Scenes
2/0/3 Instantaneous Setpoint										
1/1/0 HVAC ON/OFF	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	78: FCU - ON/OFF status, In	S	switch	C	-	W	-	U	KNX-Mal...KNX-Mallia... 1 bit Low 1/1/0 HVAC ON/OFF
1/1/1 HVAC mode status	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	82: FCU - Operation mode, In	S	HVAC mode	C	-	W	-	U	KNX-Mal...KNX-Mallia... 1 byte Low 1/1/1 HVAC mode status
1/1/2 Valve Heating status	1/1.2 KNX 0-10V Fan coil Actuator	3: General - Operation status for HVAC	S	switch	C	R	-	T	-	KNX 0-1... KNX 0-10V... 1 byte Low 1/1/1 HVAC mode status
1/1/3 Valve Cooling status	1/1.2 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
1/1/4 Fan speed status	1/1.2 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
1/1/5 Fan automatic status	1/1.1 KNX-Mallia Senses command 4 push with thermostat brushed black	83: FCU - Fan speed, In	S	fan stage (0.255)	C	-	W	T	U	KNX-Mal...KNX-Mallia... 1 byte Low 1/1/4 Fan speed Status
	1/1.2 KNX 0-10V Fan coil Actuator	16: Fan - Status Fan speed	S	counter pulses (0.255)	C	R	-	T	-	KNX 0-1... KNX 0-10V... 1 byte Low 1/1/4 Fan speed Status
	1/1.1 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-Mallia... 1 bit Low 1/1/5 Fan automatic status
	1/1.2 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 (D, E 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.