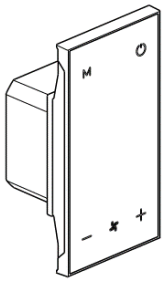
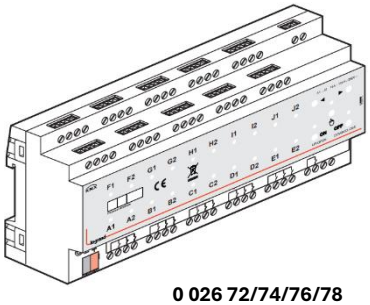
2-pipes temperature control
1-ON/OFF 3 points valve with manual change over
3-ON/OFF speed ventilation

Cat. No(s): KG4691KNX
0 026 72/74/76/78



KG4691F3



0 026 72/74/76/78

CONTENTS **PAGE**

1. USAGE SCENARIO

Meeting room, hotel, home

2.Description

The thermostat combined with an RCU actuator is used to control a fan coil equipped with 2 pipes, 3 points ON/OFF valve and 3 - ON/OFF fan.
T Change over to switch between Heating/Cooling mode

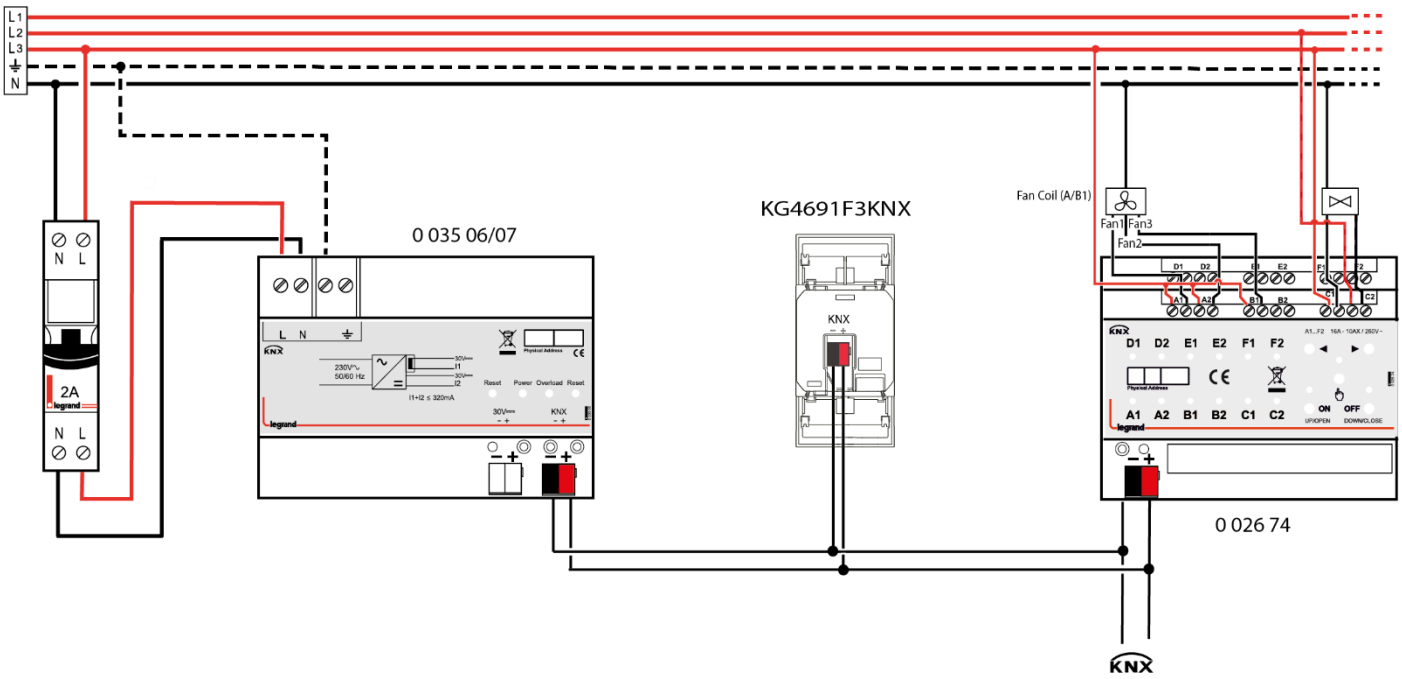
The system will regulate the temperature of an office around the set point.

Using the thermostat's touch-sensitive buttons, the user can:
- Change the temperature setpoint.
- Adjust the fan speed.

2-pipes temperature control
1-ON/OFF 3 points valve with manual change over
3-ON/OFF speed ventilation

Cat. No(s): KG4691KNX
0 026 72/74/76/78

3. WIRING DIAGRAM



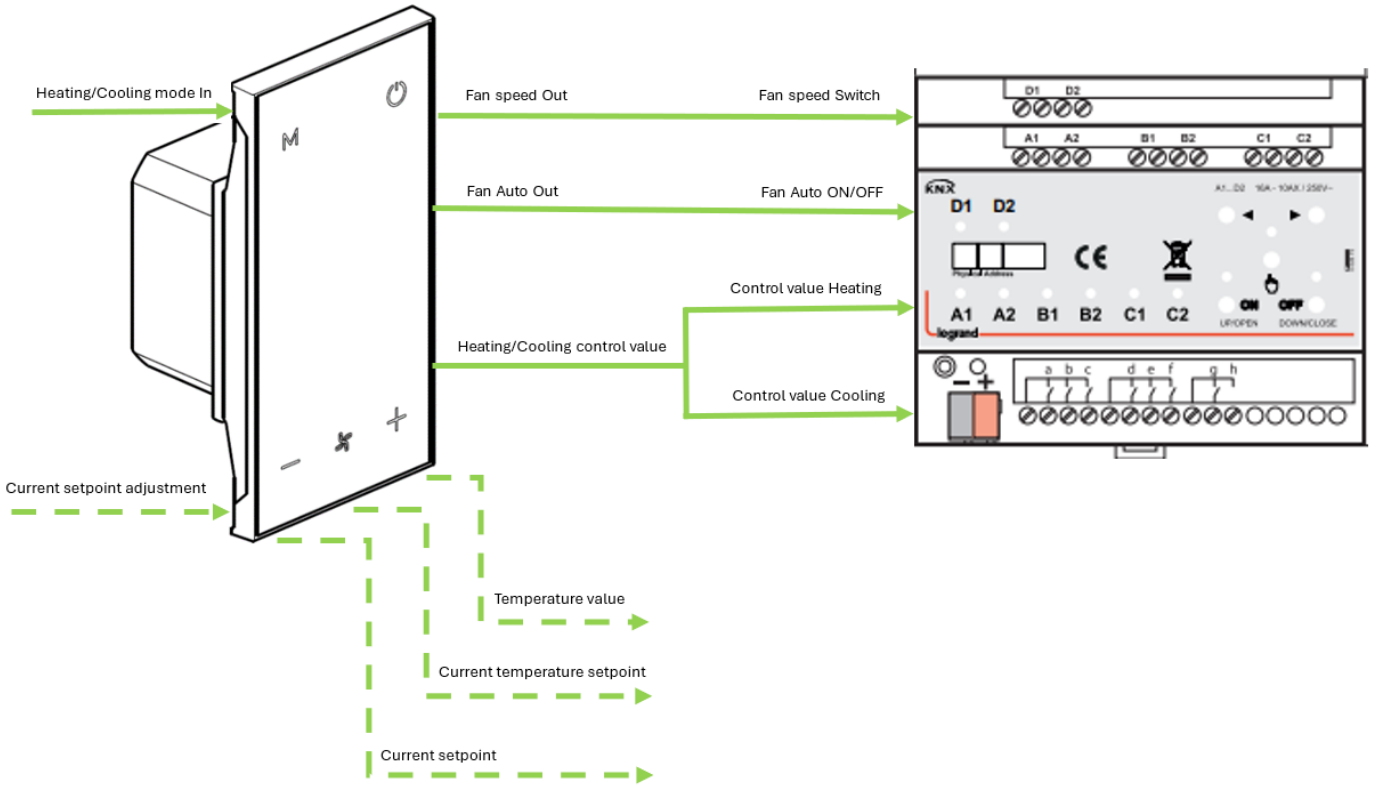
NB:
For more information about wiring each device, refer to the instructions on site.

www.legrand.com

2-pipes temperature control
1-ON/OFF 3 points valve with manual change over
3-ON/OFF speed ventilation

Cat. No(s): KG4691KNX
0 026 72/74/76/78

4. KNX DIAGRAM



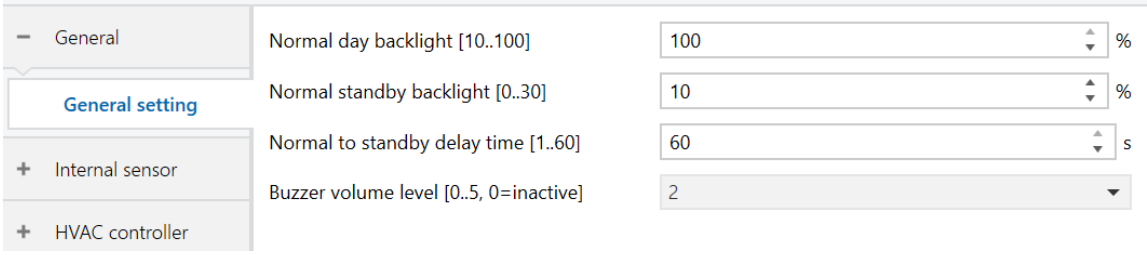
5. KNX PROJECT

This project **002674-LNow_Thermoregulation 2P ON-OFF 3 points** is available on www.legrand.com and can be imported into ETS5.

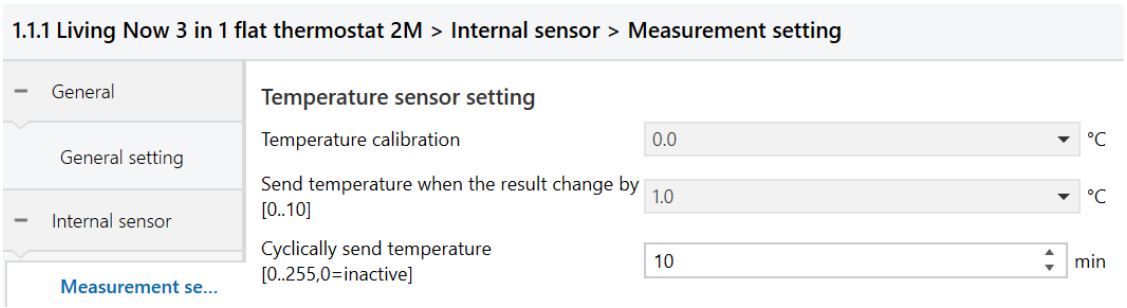
6. DEVICE PARAMETERS WITH ETS5

6.1 Thermostat KG4691KNX

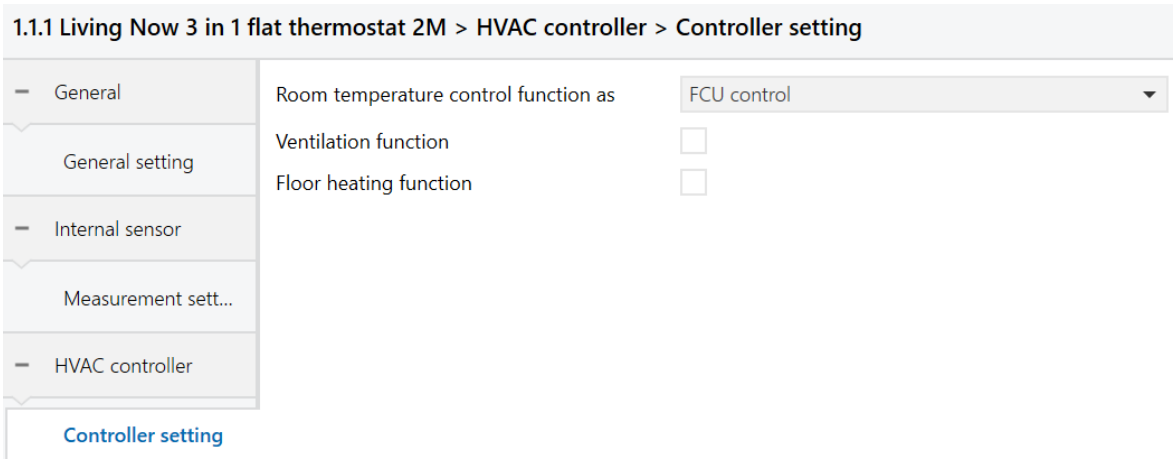
1.1.1 Living Now 3 in 1 flat thermostat 2M > General > General setting



1.1.1 Living Now 3 in 1 flat thermostat 2M > Internal sensor > Measurement setting



1.1.1 Living Now 3 in 1 flat thermostat 2M > HVAC controller > Controller setting



6. DEVICE PARAMETERS WITH ETS5 (continued)

6.1 Thermostat KG4691KNX (continued)

1.1.1 Living Now 3 in 1 flat thermostat 2M > HVAC controller > FCU setting

- General
  - General setting
- + Internal sensor
- HVAC controller
  - Controller setting
  - + FCU setting

Work mode	Master / Slave
Room temperature reference from	Internal sensor / External sensor
Control value after temp. error [0..100] (if 2-point control, set value '0'=0, set value '>0'=1)	0 %
Interface display temperature	Setpoint temperature / Actual temperature
Setpoint temperature adjustment step	0.5K / 1K
Min. setpoint temperature [5..37]	5 °C
Max. setpoint temperature [5..37]	37 °C
Power on/off status after download	OFF / ON
Power on/off status after voltage recovery	As before voltage failure
Low temperature protection when power off	✓
Temperature	10 °C
Room temperature control mode	Heating and Cooling
Heating/Cooling switchover	Via both button and object
Heating/Cooling status after download	Heating / Cooling
Heating/Cooling status after voltage recovery	As before voltage failure
Room temperature control system	2 pipes system / 4 pipes system
Initial setpoint temperature	20.0 °C
Fan	✓
Scene	☐

1.1.1 Living Now 3 in 1 flat thermostat 2M > HVAC controller > FCU setting > Heating/Cooling control

- General
  - General setting
- + Internal sensor
- HVAC controller
  - Controller setting
  - FCU setting
    - Heating/Cooling control
    - Fan

Type of heating/cooling control	Continuous control(use PI control)
Invert control value	☐
Heating speed	Hot water heating(5K/150min)
Cooling speed	Cooling ceiling(5K/240min)
Send control value on change by [0..100,0=inactive]	4 %
Cyclically send control value[0..255]	0 min

6. DEVICE PARAMETERS WITH ETS5 (continued)

6.2 Actuator 0 026 74

1.1.2 LG-002674 Room Control Unit, 12 Output > General

General	Enable manual operation	○ disable ◉ enable
Enable Output A...J	Reset manual operation to KNX operation	◉ via push button ○ automatically and via push button
A/B1 - Fan	Device alive operation active	○ yes ◉ no
A/B1 - Status Message	First telegram send time in s[2...255]	2
A/B1 - Automatic Operation	Telegram limit active	○ yes ◉ no
A/B1 - Direct Mode	Activate scene	◉ yes ○ no
C/D - Control Input	Weather alarm function	○ yes ◉ no

1.1.2 LG-002674 Room Control Unit, 12 Output > Enable Output A...J

General	Output group A and B	fan coil
Enable Output A...J	Output group C and D	valve control
A/B1 - Fan	Output group E and F	no function

1.1.2 LG-002674 Room Control Unit, 12 Output > Enable Output A...J

General	Output group A and B	fan coil
Enable Output A...J	Output group C and D	valve control
A/B1 - Fan	Output group E and F	individually
A/B1 - Status Message	Output group E	○ shutter/blind AC ◉ 2 x switch
	Output group F	○ shutter/blind AC ◉ 2 x switch

6. DEVICE PARAMETERS WITH ETS5 (continued)

6.2 Actuator 0 026 74

1.1.2 LG-002674 Room Control Unit, 12 Output > A/B1 - Fan

- General
- Enable Output A...J
- A/B1 - Fan
- A/B1 - Status Message
- A/B1 - Automatic Operation
- A/B1 - Direct Mode
- C/D - Control Input
- C - Valve General
- C - Function
- D - Valve General
- D - Function
- E1 - General

Select valve with working	valve C/D
Number of fan levels	3
Controlling the fan levels	only one fan output / fan hierarchically
Fan operation mode	changeover switch / step switch
Delay between fan speed switching in ms[50...5000]	500
Fan speed on bus voltage failure	fan off
Fan speed on bus voltage recovery	fan off
Enable forced operation	yes / no
Forced operation on object value	0 / 1
Limitation on forced operation	3, 2, 1, OFF
Enable automatic operation	yes / no
Enable direct operation	yes / no
Starting characteristic of fan	yes / no

1.1.2 LG-002674 Room Control Unit, 12 Output > A/B1 - Direct Mode

- General
- Enable Output A...J
- A/B1 - Fan
- A/B1 - Status Message
- A/B1 - Automatic Operation
- A/B1 - Direct Mode

Enable communication object "Switch speed "Â 1 bit	yes / no
Enable communication object "Fan speed UP/DOWN"Â 1 bit	yes / no
Enable communication object "Fan speed switch"Â 1 byte	yes / no

6. DEVICE PARAMETERS WITH ETS5 (continued)

6.2 Actuator 0 026 74

1.1.2 LG-002674 Room Control Unit, 12 Output > C/D - Control Input

- General
- Enable Output A...J
- A/B1 - Fan
- A/B1 - Status Message
- A/B1 - Automatic Operation
- A/B1 - Direct Mode
- C/D - Control Input

HVAC system	two control two pipe with switch
Operation HEATING/COOLING after bus voltage recovery	unchanged bus return
Object value for HEATING the object "Toggle HEATING/COOLING"	0 / 1
Monitoring control valves	yes / no

1.1.2 LG-002674 Room Control Unit, 12 Output > C - Valve General

- General
- Enable Output A...J
- A/B1 - Fan
- A/B1 - Status Message
- A/B1 - Automatic Operation
- A/B1 - Direct Mode
- C/D - Control Input
- C - Valve General

Valve control	two point on/off / three point open/close
Observe reversing time	no
Valve position after bus voltage return	unchanged / selected
Value control duration from 0...100% in s [10...6000]	180
Automatically adjust valve position	yes / no
Valve limitation	yes / no

1.1.2 LG-002674 Room Control Unit, 12 Output > E1 - Scene

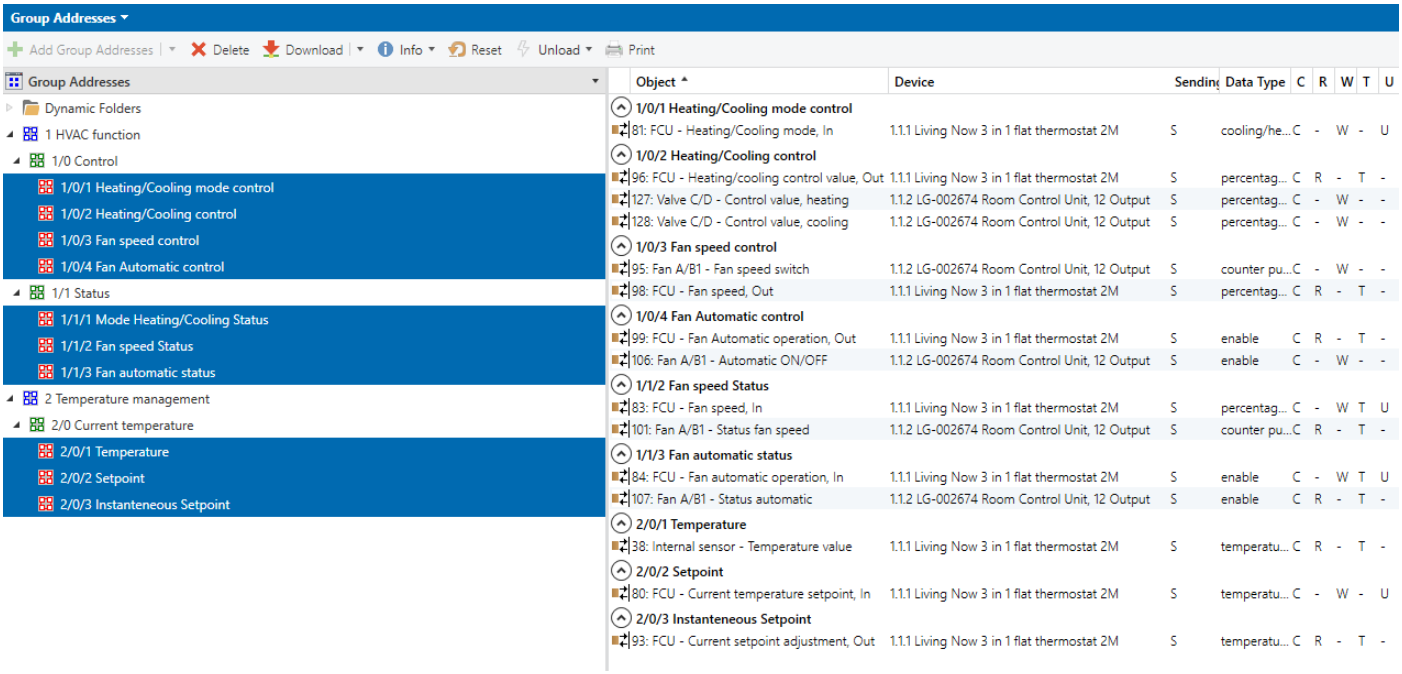
- General
- Enable Output A...J
- A/B1 - Fan
- A/B1 - Status Message
- A/B1 - Automatic Operation
- A/B1 - Direct Mode
- C/D - Control Input

Overwrite scene on download	yes / no
1...64 scene number (0 = no assignment)	1
Value	OFF / ON
1...64 scene number (0 = no assignment)	2
Value	OFF / ON
1...64 scene number (0 = no assignment)	3
Value	OFF / ON
1...64 scene number (0 = no assignment)	4

2-pipes temperature control
1-ON/OFF 3 points valve with manual change over
3-ON/OFF speed ventilation

Cat. No(s): KG4691KNX
0 026 72/74/76/78

7. GROUP ADDRESSES



8. NOTES

The whole HVAC system is managed by thermostat Living Now (heating/cooling regulation, setpoint, manual & automatic ventilation).

The HVAC and FAN valve is connected to controller 0 026 74 (A, B1, C and D connectors).
The room controller 0 026 74 provide ON/OFF to switch or shut valve.

The setpoint value can be altered on thermostat KG4691F3 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.

Unused actuator outputs can be configured for lighting or roller shutter control.