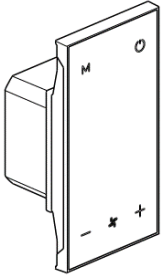
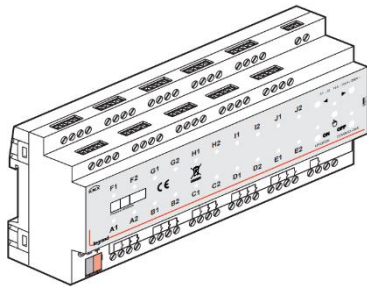


**4-pipes temperature control
2-ON/OFF 3 Points valves with automatic change over
3-ON/OFF speed ventilation**

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



KG4691F3



0 026 72/74/76/78

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1. USAGE SCENARIO

Meeting room, hotel, home



2. Description

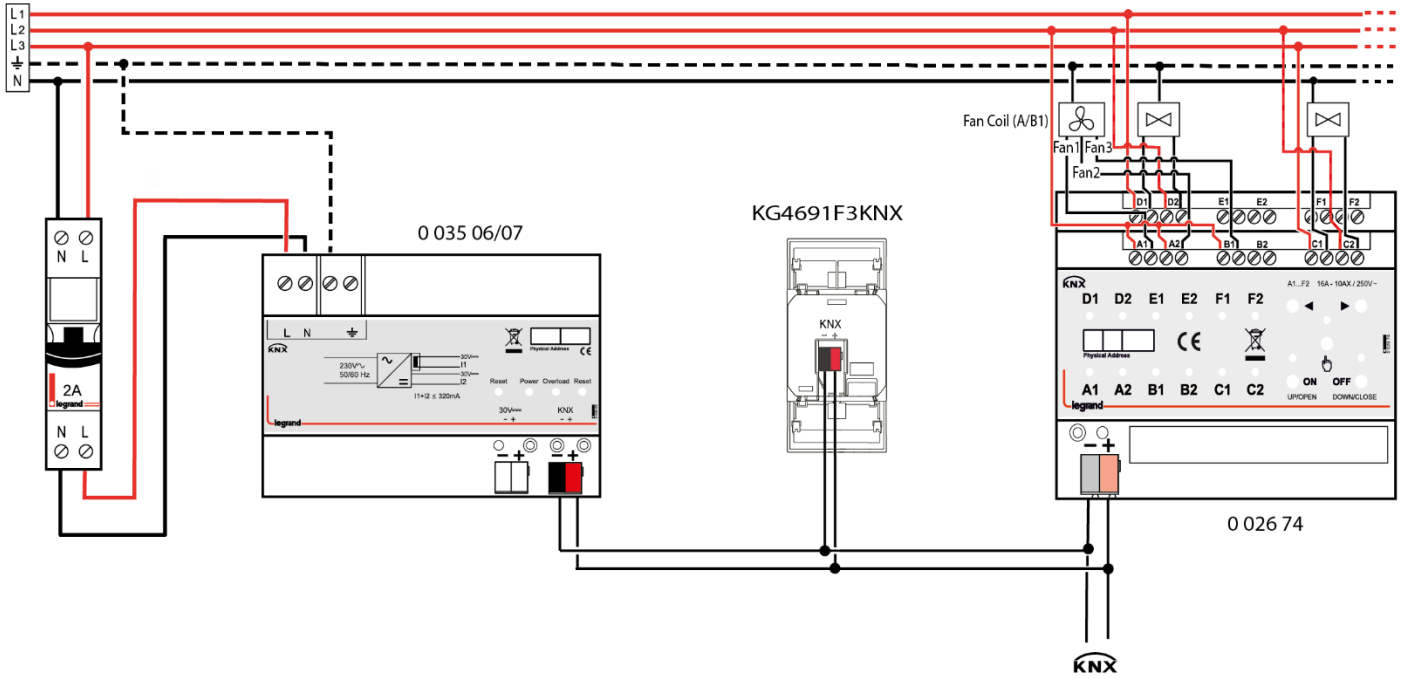
The thermostat combined with an RCU actuator is used to control a fan coil equipped with 4 pipes, 3 points ON/OFF valves and 3 - ON/OFF fan. T Automatic change over to switch between Heating/Cooling mode

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.

3. WIRING DIAGRAM



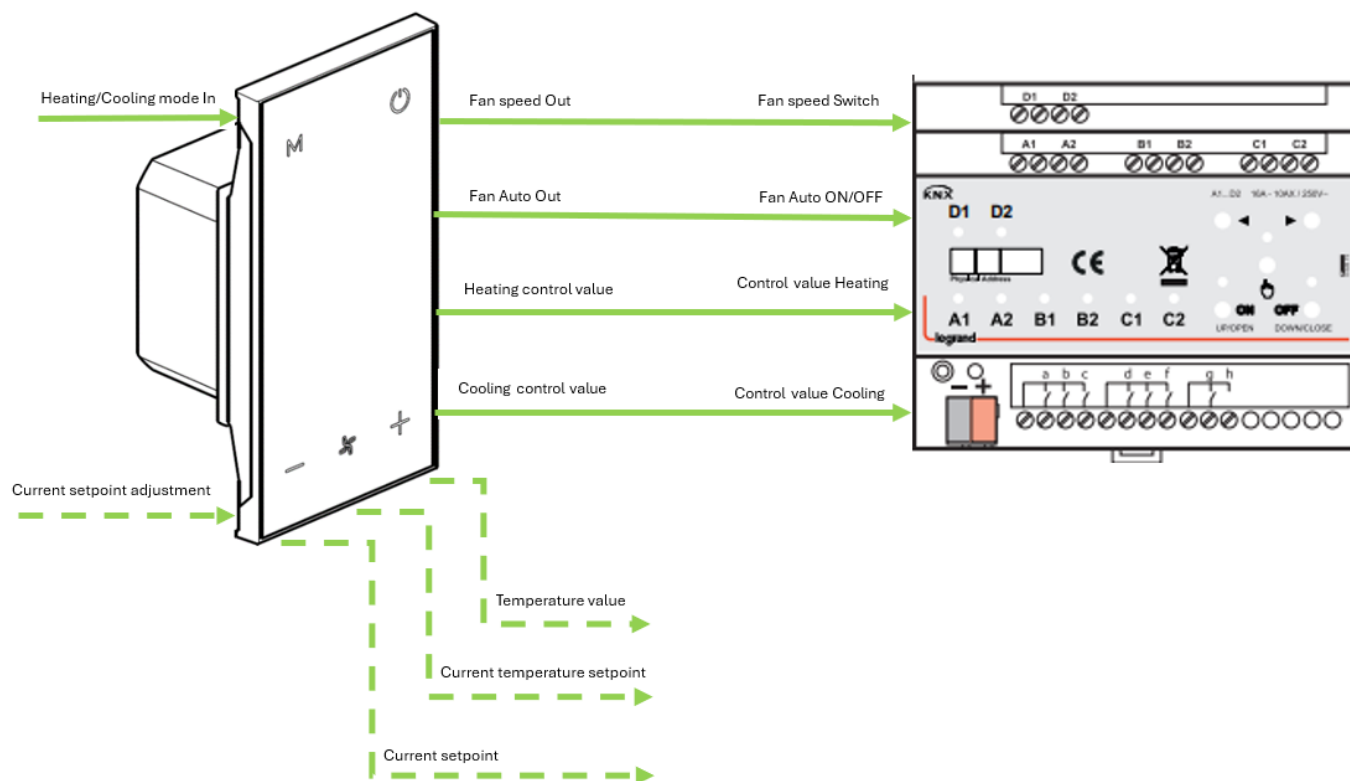
NOTE:

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



www.legrand.com

4. KNX DIAGRAM



5. KNX PROJECT

This project **002674-LNow_Thermoregulation 4P ON-OFF 3 points** is available on www.legrand.com and can be imported into ETSS.

6. DEVICE PARAMETERS WITH ETS5 (continued)

6.1 Thermostat KG4691KNX (continued)

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

- General	Normal day backlight [10..100]	100	%
General setting	Normal standby backlight [0..30]	10	%
+ Internal sensor	Normal to standby delay time [1..60]	60	s
+ HVAC controller	Buzzer volume level [0..5, 0=inactive]	2	

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

- General	Temperature sensor setting		
General setting	Temperature calibration	0.0	°C
- Internal sensor	Send temperature when the result change by [0..10]	1.0	°C
Measurement se...	Cyclically send temperature [0..255,0=inactive]	10	min

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

- General	Room temperature control function as	FCU control
General setting	Ventilation function	<input type="checkbox"/>
- Internal sensor	Floor heating function	<input type="checkbox"/>
Measurement sett...		
- 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	Work mode	<input checked="" type="radio"/> Master <input type="radio"/> Slave
General setting	Room temperature reference from	<input checked="" type="radio"/> Internal sensor <input type="radio"/> External sensor
+ Internal sensor	Control value after temp. error [0..100] (if 2-point control, set value '0'=0, set value '>0'=1)	<input type="text" value="0"/> %
- HVAC controller	Interface display temperature	<input type="radio"/> Setpoint temperature <input checked="" type="radio"/> Actual temperature
Controller setting	Setpoint temperature adjustment step	<input checked="" type="radio"/> 0.5K <input type="radio"/> 1K
- FCU setting	Min. setpoint temperature [5..37]	<input type="text" value="5"/> °C
Heating/Cooling control	Max. setpoint temperature [5..37]	<input type="text" value="37"/> °C
Fan	Power on/off status after download	<input type="radio"/> OFF <input checked="" type="radio"/> ON
	Power on/off status after voltage recovery	<input type="text" value="As before voltage failure"/>
	Low temperature protection when power off <input checked="" type="checkbox"/>	Temperature <input type="text" value="10"/> °C
	Room temperature control mode	<input type="text" value="Heating and Cooling"/>
	Heating/Cooling switchover	<input type="text" value="Automatic changeover"/>
	Heating/Cooling status after download	<input type="radio"/> Heating <input checked="" type="radio"/> Cooling
	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
	Initial setpoint temperature	<input type="text" value="20.0"/> °C
	Automatic H/C mode changeover dead zone	
	Upper dead zone	<input type="text" value="2.0"/> K
	Lower dead zone	<input type="text" value="2.0"/> K
	Fan <input checked="" type="checkbox"/>	

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 > Heating/Cooling control

- General		Type of heating control	Continuous control(use PI control) ▼
General setting		Invert control value	<input type="checkbox"/>
+ Internal sensor		Heating speed	Hot water heating(5K/150min) ▼
- HVAC controller		Send control value on change by [0..100,0=inactive]	4 ▲▼ %
Controller setting		Type of cooling control	Continuous control(use PI control) ▼
- FCU setting		Invert control value	<input type="checkbox"/>
Heating/Cooling control		Cooling speed	Cooling ceiling(5K/240min) ▼
Fan		Send control value on change by [0..100,0=inactive]	4 ▲▼ %
		Cyclically send control value[0..255]	0 ▲▼ min

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

- General		Type of heating/cooling control	Continuous control(use PI control) ▼
General setting		Invert control value	<input type="checkbox"/>
Proximity setting		Heating speed	Hot water heating(5K/150min) ▼
- Button		Cooling speed	Cooling ceiling(5K/240min) ▼
Button setting		Send control value on change by [0..100,0=inactive]	4 ▲▼ %
Button 1		Cyclically send control value[0..255]	0 ▲▼ min
Button 2			

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	<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
A/B1 - Fan	Device alive operation active	<input type="radio"/> yes <input checked="" type="radio"/> no
A/B1 - Status Message	First telegram send time in s[2...255]	2
A/B1 - Automatic Operation	Telegram limit active	<input type="radio"/> yes <input checked="" type="radio"/> no
A/B1 - Direct Mode	Activate scene	<input checked="" type="radio"/> yes <input type="radio"/> no
C/D - Control Input	Weather alarm function	<input type="radio"/> yes <input checked="" type="radio"/> 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	<input type="radio"/> shutter/blind AC <input checked="" type="radio"/> 2 x switch
	Output group F	<input type="radio"/> shutter/blind AC <input checked="" type="radio"/> 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	Select valve with working	valve C/D
Enable Output A...J	Number of fan levels	3
A/B1 - Fan	Controlling the fan levels	<input type="radio"/> only one fan output <input checked="" type="radio"/> fan hierarchically
A/B1 - Status Message	Fan operation mode	<input checked="" type="radio"/> changeover switch <input type="radio"/> step switch
A/B1 - Automatic Operation	Delay between fan speed switching in ms[50...5000]	500
A/B1 - Direct Mode	Fan speed on bus voltage failure	fan off
C/D - Control Input	Fan speed on bus voltage recovery	fan off
C - Valve General	Enable forced operation	<input checked="" type="radio"/> yes <input type="radio"/> no
C - Function	Forced operation on object value	<input checked="" type="radio"/> 0 <input type="radio"/> 1
D - Valve General	Limitation on forced operation	3, 2, 1, OFF
D - Function	Enable automatic operation	<input checked="" type="radio"/> yes <input type="radio"/> no
E1 - General	Enable direct operation	<input checked="" type="radio"/> yes <input type="radio"/> no
	Starting characteristic of fan	<input type="radio"/> yes <input checked="" type="radio"/> no

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

General	Enable communication object "Switch speed" Å 1 bit	<input type="radio"/> yes <input checked="" type="radio"/> no
Enable Output A...J	Enable communication object "Fan speed UP/DOWN" Å 1 bit	<input type="radio"/> yes <input checked="" type="radio"/> no
A/B1 - Fan	Enable communication object "Fan speed switch" Å 1 byte	<input checked="" type="radio"/> yes <input type="radio"/> no
A/B1 - Status Message		
A/B1 - Automatic Operation		
A/B1 - Direct Mode		

6. DEVICE PARAMETERS WITH ETSS (continued)

6.2 Actuator 0 026 74

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

General	HVAC system	two control four pipe
Enable Output A...J	Monitoring control valves	<input type="radio"/> yes <input checked="" type="radio"/> no
A/B1 - Fan		
A/B1 - Status Message		
A/B1 - Automatic Operation		
A/B1 - Direct Mode		

C/D - Control Input

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

General	Valve control	<input type="radio"/> two point on/off <input checked="" type="radio"/> three point open/close
Enable Output A...J	Observe reversing time	no
A/B1 - Fan	Valve position after bus voltage return	<input checked="" type="radio"/> unchanged <input type="radio"/> selected
A/B1 - Status Message	Value control duration from 0...100% in s [10...6000]	180
A/B1 - Automatic Operation	Automatically adjust valve position	<input type="radio"/> yes <input checked="" type="radio"/> no
A/B1 - Direct Mode	Valve limitation	<input type="radio"/> yes <input checked="" type="radio"/> no
C/D - Control Input		

C - Valve General

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

General	Overwrite scene on download	<input checked="" type="radio"/> yes <input type="radio"/> no
Enable Output A...J	1...64 scene number (0 = no assignment)	1
A/B1 - Fan	Value	<input type="radio"/> OFF <input checked="" type="radio"/> ON
A/B1 - Status Message	1...64 scene number (0 = no assignment)	2
A/B1 - Automatic Operation	Value	<input checked="" type="radio"/> OFF <input type="radio"/> ON
A/B1 - Direct Mode	1...64 scene number (0 = no assignment)	3
C/D - Control Input	Value	<input type="radio"/> OFF <input checked="" type="radio"/> ON
	1...64 scene number (0 = no assignment)	4

**4-pipes temperature control
2-ON/OFF 3 Points valves with automatic change over
3-ON/OFF speed ventilation**

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

7. GROUP ADDRESSES

Group Addresses					
+ Add Main Groups ✗ Delete ↓ Download i Info ↺ Reset ↻ Unload 🖨 Print					
Group Addresses	Object	Device	Sendin	Data Type *	C R W T U
Dynamic Folders	1/0/1 Heating control value				
1 HVAC function	1/0/1 Heating control value				
1/0 Control	1/0/1 Heating control value				
1/0/1 Heating control value	1/0/1 Heating control value				
1/0/2 Cooling control value	1/0/2 Cooling control value				
1/0/3 Fan speed control	1/0/3 Fan speed control				
1/0/4 Fan Automatic control	1/0/4 Fan Automatic control				
1/0/5 Scenes	1/0/5 Scenes				
1/1 Status	1/1/1 Mode Heating/Cooling Status				
1/1/1 Mode Heating/Cooling Status	1/1/1 Mode Heating/Cooling Status				
1/1/2 Fan speed Status	1/1/2 Fan speed Status				
1/1/3 Fan automatic status	1/1/3 Fan automatic status				
2 Temperature management	2/0 Current temperature				
2/0 Current temperature	2/0/1 Temperature				
2/0/1 Temperature	2/0/1 Temperature				
2/0/2 Setpoint	2/0/2 Setpoint				
2/0/3 Instantaneous Setpoint	2/0/3 Instantaneous Setpoint				
1/0/1 Heating control value	1/0/1 Heating control value				
1/0/2 Cooling control value	1/0/2 Cooling control value				
1/0/3 Fan speed control	1/0/3 Fan speed control				
1/0/4 Fan Automatic control	1/0/4 Fan Automatic control				
1/0/5 Scenes	1/0/5 Scenes				
1/1/1 Mode Heating/Cooling Status	1/1/1 Mode Heating/Cooling Status				
1/1/2 Fan speed Status	1/1/2 Fan speed Status				
1/1/3 Fan automatic status	1/1/3 Fan automatic status				
2/0 Current temperature	2/0 Current temperature				
2/0/1 Temperature	2/0/1 Temperature				
2/0/2 Setpoint	2/0/2 Setpoint				
2/0/3 Instantaneous Setpoint	2/0/3 Instantaneous Setpoint				

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 and C connector), 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.