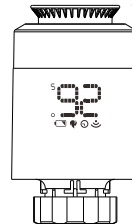


SEA802-Z30

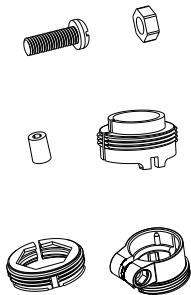
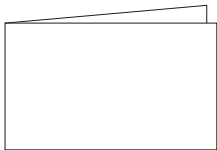
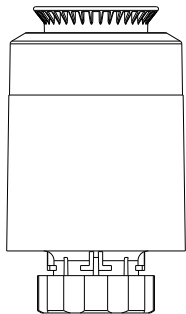
INSTRUCTION

OPERATING INSTRUCTION

SEA802-Z30



What is in the box?



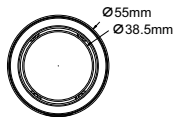
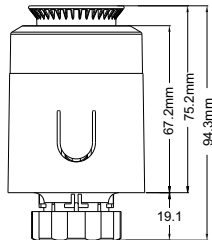
A2

Content

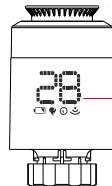
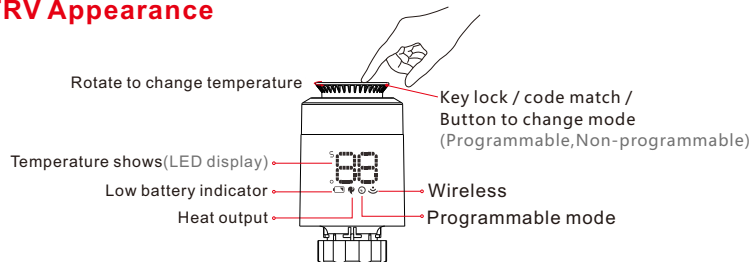
TRV Introduction	01
Adaptor Introduction	05
Notice For Use	08
Distribution network	10
Zigbee 3.0 standard protocol	11

TRV specifications

- * **Power source:** 2AA battery (Don't use the rechargeable battery)
- * **Battery lifetime:** 1year
- * **Temperature setting accuracy:** 0.5°C
- * **Room temperature display range:** 0°C~50°C
- * **Operation temperature range:** 5°C~30°C
- * **Shipping & storage temperature:** -10°C~60°C
- * **Frequency:** 2.4GHz
- * **Wireless transmit range:** Open distance 30M
- * **Display:** LED screen
- * **IP class:** IP21
- * **Connection:** M30x1.5mm



TRV Appearance



◆ IMPORTANT:

In "OF" state, press rotary plate 5 times continuously, the value display will be reversed, but the temperature symbol "°C" and "0.5°C" will not display.

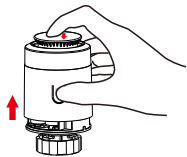
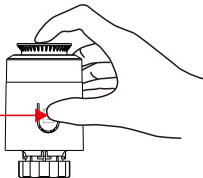
Schematic diagram of battery installation



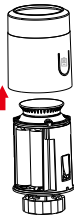
Warning

Do not unplug this rotary plate while installing the battery.

Thumbs lightly press here



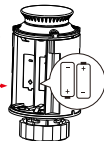
Gently pull up the housing cover while pressing down on the rotary plate with the index finger.



Attention:

* Insert the batteries checking the polarities (+ / -) are correctly aligned.

2AA battery



TRV Installation

- 1 Put battery in battery compartment



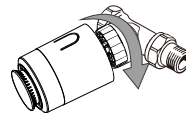
2AA battery



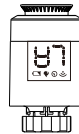
- 3 Once valve needle is flush with the base.



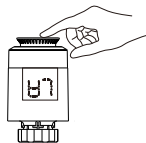
- 4 Install TRV with M30*1.5 screw thread Interface of valve .Tighten the copper ring.



- 2 Display show "LA" flashing.

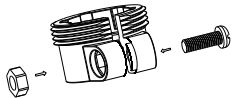
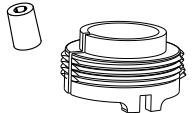


- 5 Press button on rotary plate lightly, it would flash "LA" TRV will match valve stroke, if match successfully, will active initial setting.



Adapter Selection

Pls confirm valve diameter

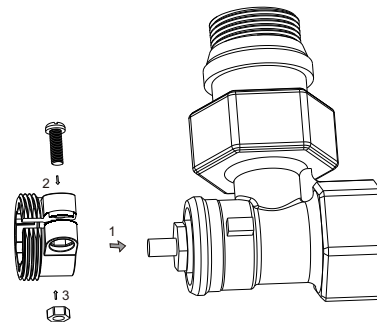
Danfoss	Caleffi	Giacomini
1/2 valve (RA)	1/2 valve	1/2 valve + short plunger
		

Adapter Installation

Danfoss

1/2 valve (RA)

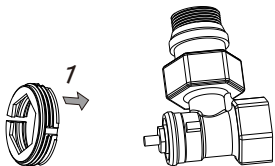
Please tighten the screws after fixing the valve connector



Caleffi

1/2 valve

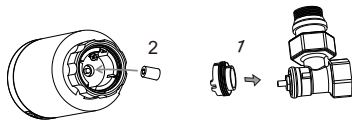
Adapter, please put directly on the valve.



Giacomini

1/2 valve

Giacomini 1/2 valve need install short plunger at button of TRV .
Accessories, please put directly on the valve.



Notice for use

⏻ ON / OFF

The temperature $< 5^{\circ}\text{C}$, display "0F" . The temperature $> 30^{\circ}\text{C}$, display "0n"

🪟 Open window function

When use radiator to heating , the window is opened ,when room temperature drop 6°C in 4 minutes , TRV will close valve automatic, display will show "0P" , When window is closed , meanwhile room temperature increase 2°C , TRV will open valve automatic , back to operation mode .

🚫 Anti-scale function

If radiator not open within two weeks or long time not open will let valve clogged as scale , radiator will be damaged. In order to let radiator to use normally , TRV will open valve running 30 seconds every two weeks , display will show "R3" , when run finished will recovery running condition .

🔒 Child lock function

In order to prevent TRV setting from children, it could activate child lock function by long press rotary plate until display show "L3" . Long press rotary plate again over 10s to unlock.



Anti-freezing function

In the power off state, the screen show "❄"

Anti-freezing function: the valve will be opened when the temperature is below 5°C , when the temperature rises to 8°C , the valve will be closed.



Alarm

In the normal operation range:

NTC sensor damage , display: E7



Low power alarm

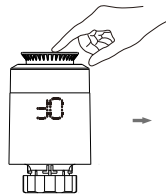
When the battery voltage is extremely low , display the alarm symbol  , which remind that the user shall replace battery.



Temporarily override

When in programming mode , if you want to change the current programming temperature manually , please rotate the rotary plate to adjust the temperature you want to set , and the temperature will remain until the current programming time end of the period.

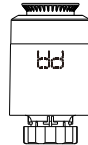
Distribution network



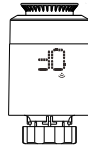
① In "OFF" state, long press rotary plate.



② The screen show "PR"



③ Display "PR", it means the TRV added successfully.



④ After added successfully, back to "OFF" automatically.

* Tips

Gateway must be added before adding TRV.

- Before binding the gateway, you need to power on the gateway.
When binding a gateway, the mobile phone and the gateway must connect to the same network.

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note
Programming data (Monday-Sunday) (Report)	HVAC	Thermostat (0x0201)	Current Weekly Schedule	Cluster	0x00	/	/	Server→Client	Server	Number of Transitions for Sequence value 4 ; Mode for Sequence value:1
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Programming data (Monday-Sunday) (Write)			Set Weekly Schedule	Cluster	0x01	/	/	Client→Server		
			Default Response	GLOBAL	0x0B	/	/	Server→Client		
Programming data (Monday-Sunday) (Read)			Get Weekly Schedule	Cluster	0x02	/	/	Client→Server		
			Current Weekly Schedule	Cluster	0x00	/	/	Server→Client		
Programming Switch (on/off)(Report)			Report attributes	GLOBAL	0x0A	Thermostat programming operation mode	0x0025	Server→Client	Server	bit0 0:OFF, 1:ON
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Programming Switch (on/off)(WRITE)			Write Attributes	GLOBAL	0x02	Thermostat programming operation mode	0x0025	Client→Server		
			Default Response	GLOBAL	0x0B	/	/	Server→Client		
Programming Mode Switch(on/off)(Read)			Read Attributes	GLOBAL	0x00	Thermostat programming operation mode	0x0025	Client→Server		
			Read Attributes Response	GLOBAL	0x01	Thermostat programming operation mode	0x0025	Server→Client		

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note
VALVE OUTPUT Percentage(Report)	HVAC	Thermostat (0x0201)	Report attributes	GLOBAL	0x0A	pi heating demand	0x0008	Server→Client	Server	None
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
VALVE OUTPUT Percentage(Read)			Read Attributes	GLOBAL	0x00	pi heating demand	0x0008	Client→Server		
			Read Attributes Response	GLOBAL	0x01	Pi heating demand	0x0008	Server→Client		
Current Temperature (Report)			Report attributes	GLOBAL	0x0A	Local temperature	0x0000	Server→Client		
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Current Temperature (Read)			Report attributes	GLOBAL	0x00	Local temperature	0x0000	Client→Server	Server	
			Read Attributes Response	GLOBAL	0x01	Local temperature	0x0000	Server→Client		
Setting Temperature (Report)			Report attributes	GLOBAL	0x0A	occupied heating setpoint unoccupied heating setpoint	0x0012 0x0014	Server→Client		
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Setting Temperature (Write)			Write Attributes	GLOBAL	0x02	occupied heating setpoint unoccupied heating setpoint	0x0012 0x0014	Client→Server		
			Default Response	GLOBAL	0x0B	/	/	Server→Client		

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note	
Setting Temperature (Read)	HVAC	Thermostat (0x0201)	Read Attributes	GLOBAL	0x00	Occupied heating setpoint unoccupied heating setpoint	0x0012 0x0014	Client→Server	Server	Number of Transitions for Sequence value 4 ; Mode for Sequence value:1	
			Read Attributes Response	GLOBAL	0x01			Server→Client			
Temperature Calibration(Report)			Report attributes	GLOBAL	0x0A	Local temperature calibration	0x0010	Server→Client			
			Default Response	GLOBAL	0x0B	/	/	Client→Server			
Temperature Calibration(Write)			Write Attributes	GLOBAL	0x02	Local temperature calibration	0x0010	Client→Server			
			Default Response	GLOBAL	0x0B	/	/	Server→Client			
Temperature Calibration(Read)			Read attributes	GLOBAL	0x00	Local temperature calibration	0x0010	Client→Server			
			Read Attributes Response	GLOBAL	0x01			Server→Client			
Away Mode(Report)			Report attributes	GLOBAL	0x0A	Thermostat programming operation mode	0x0025	Server→Client	Server	bit2: 0 OFF, 1 ON	
			Default Response	GLOBAL	0x0B	/	/	Client→Server			
Away Mode(Write)			Write Attributes	GLOBAL	0x02	Thermostat programming operation mode	0x0025	Client→Server			
			Default Response	GLOBAL	0x0B	/	/	Server→Client			

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note
Away Mode (Read)	HVAC	Thermostat (0x0201)	Read Attributes	GLOBAL	0x00	thermostat programming operation mode	0x0025	Client→Server	Server	bit2: 0 OFF, 1 ON
			Read Attributes Response	GLOBAL	0x01			Server→Client		
ON State(100% valve open)(Report)			Report attributes	GLOBAL	0x0A	system mode	0x001C	Server→Client		0x00OFF ; 0x05 ON; TRV displays ON
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
ON State(100% valve open)(Write)			Write Attributes	GLOBAL	0x02	system mode	0x001C	Client→Server		
			Default Response	GLOBAL	0x0B	/	/	Server→Client		
ON State(100% valve open)(Read)		Thermostat User Interface Configuration (0x0204)	Read Attributes	GLOBAL	0x00	system mode	0x001C	Client→Server		None
			Read Attributes Response	GLOBAL	0x01			Server→Client		
Child Lock(Report)			Report attributes	GLOBAL	0x0A	kaypad lockout	0x0001	Server→Client		
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Child Lock(Write)			Write Attributes	GLOBAL	0x02	kaypad lockout	0x0001	Client→Server		
			Default Response	GLOBAL	0x0B	/	/	Server→Client		

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note
Child Lock(Read)	HVAC	Thermostat User Interface Configuration (0x0204)	Read Attributes	GLOBAL	0x00	keypads lockout	0x0001	Client→Server		
			Read Attributes Response	GLOBAL	0x01			Server→Client		
on/off(Report)	General	On/off (0x0006)	Report attributes	GLOBAL	0x0A	on/off	0x0000	Server→Client	Server	None
on/off(Write)			Default Response	GLOBAL	0x0B	/	/	Client→Server		
			On Off	Cluster	0x01 0x00	/	/	Client→Server		
			Default Response	GLOBAL	0x0A	/	/	Server→Client		
			on/off(Read)	Read Attributes	GLOBAL	0x00	on/off	0x0000		
Read Attributes Response				GLOBAL	0x01	Server→Client				
Battery Power Percentage(Report)		Power Configuration (0x0001)	Report attributes	GLOBAL	0x0A	battery percentage remaining	0x0021	Server→Client	Server	
			Default Response	GLOBAL	0x0B	/	/	Client→Server		
Battery Power Percentage(Read)			Read Attributes	GLOBAL	0x00	battery percentage remaining	0x0021	Client→Server		
			Read Attributes Response	GLOBAL	0x01			Server→Client		

Mode	Cluster name	Cluster ID	Commands name	Commands type	Commands ID	Attribute name	Attribute ID	Data Transfer	zigbee Module	Note
Battery Power Alarm (Report)	General	Power Configuration (0x0001)	Report attributes	GLOBAL	0x0A	Battery alarm mask	0x0035	Server→Client	Server	None
Batter Power Alarm (Read)			Default Response	GLOBAL	0x0B	/	/	Client→Server		
			Read Attributes	GLOBAL	0x00	Battery alarm mask	0x0035	Client→Server		
			Read Attributes Response	GLOBAL	0x01			Server→Client		
		System Time Sync (Report)	Time (0x000A)	Report attributes	GLOBAL	0x0A	Local time	0x0007		
Write Attributes				GLOBAL	0x02	Local time	0x0007	Client→Server		
System Time Sync (Read)		Read Attributes		GLOBAL	0x00	Local time	0x0007	Client→Server		
		Read Attributes Response		GLOBAL	0x01			Server→Client		

Endpoint : 0x01 , device id : 0x0301
Protocol : zigbee 3.0 standard protocol