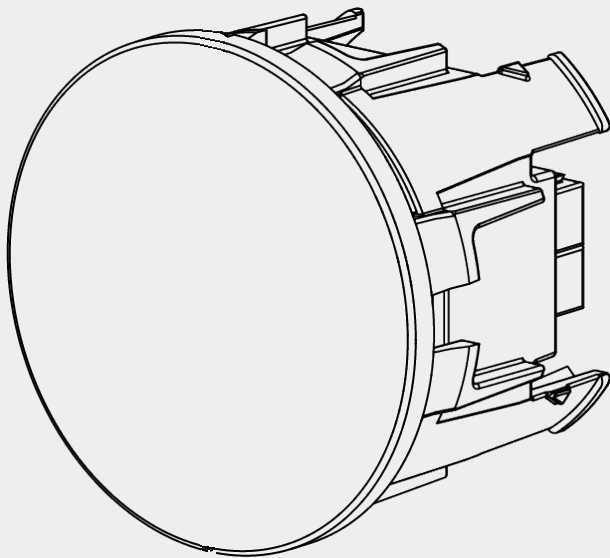
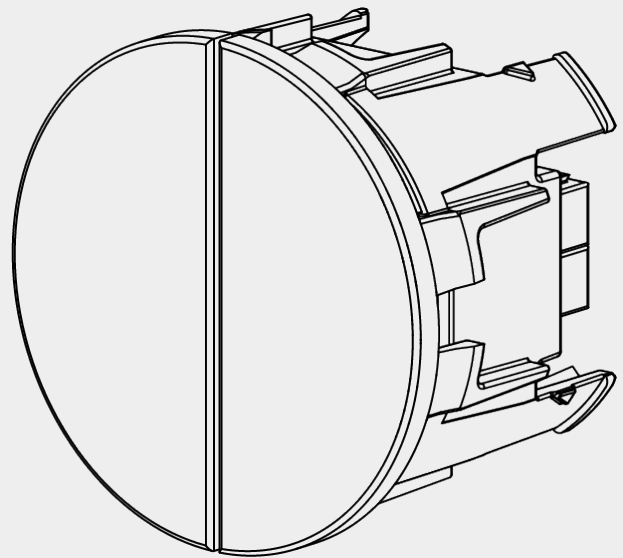


rond KNX push button

software manual



2-fold



4-fold

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1 Introduction

rond KNX push button, 2- or 4-fold

Product	rond KNX push button
Catalog Name	rond KNX push button
Order Number	NA
Application Version	1.0
Mask Version	MV-07B0
Bus Current	10 mA

The ETS product file (.knxprod) to import is listed in the ETS catalog under the manufacturer prado europe bv, in the rond by prado section, as rond KNX push button.

2 Installation

Install the rond pushbutton following the rond installation instructions. Connect the KNX bus cable to the terminal block on the rear side.

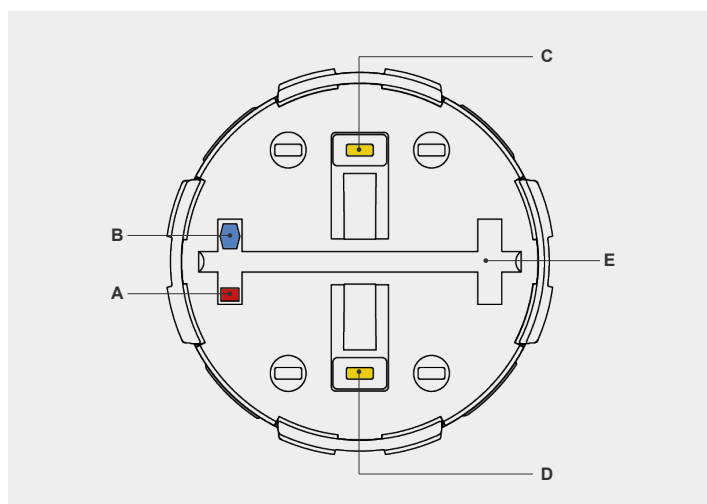
To factory-reset the device, press and hold the programming button (B) for 10 seconds.

2.1 Identifying the parts

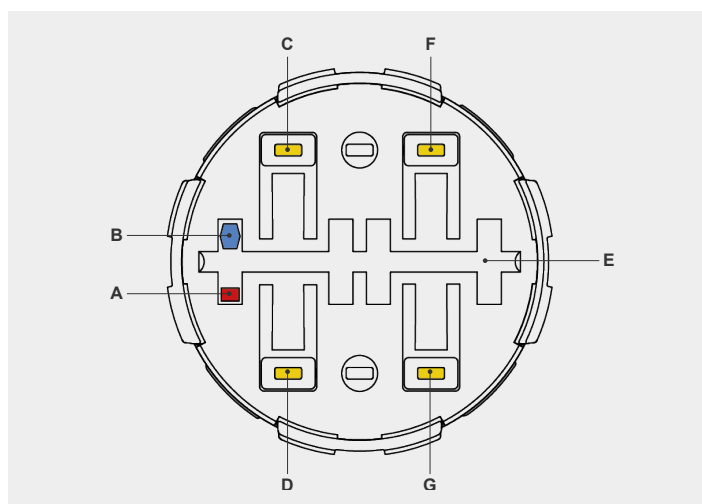
2.1.1 Front view

- A Programming LED
- B Programming button
- C Button 1 (Rocker 1)
- D Button 2 (Rocker 1)
- E Temperature and humidity sensor
- F Button 3 (Rocker 2)
- G Button 4 (Rocker 2)

2-fold

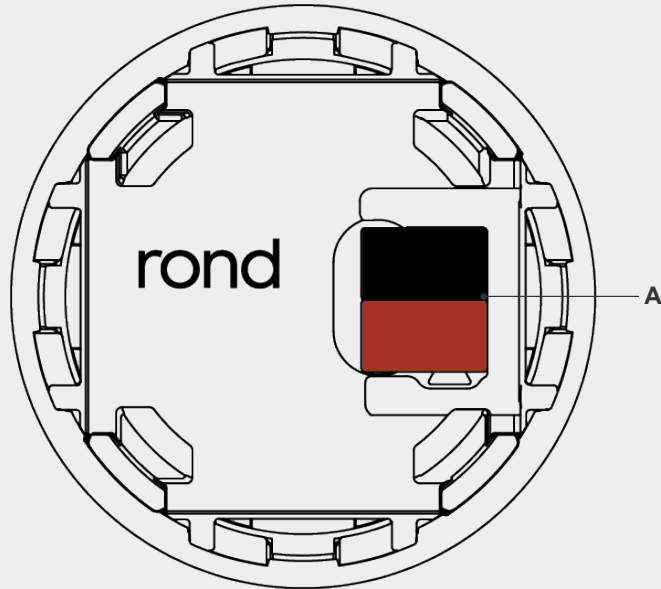


4-fold



2.1.2 Rear view

A KNX connector



3 Layout

Layout

General

+ Button 1

+ Button 2

+ Button 3

+ Button 4

+ Temperature sensor

Mounting orientation

Mounting orientation0° – standard · Left / Right rockers

Function

Number of buttons

2-fold

4-fold

Left

Individual

Rocker

Right

Individual

Rocker

1

2

3

4

The blue square is the programming button.

3.1 Mounting orientation

Compensates for how the device is physically mounted by remapping the touch pads to Button 1..4 in firmware. The group-address links stay on Button 1..4, so no re-linking is needed. The programming LED/button (on the left when mounted right-up) is the orientation reference.

Parameter	Description
Mounting orientation	Physical mounting orientation. Remaps pad->button in firmware; group-address links stay on Button 1..4. Reference feature = programming LED/button (left when right-up). Settings: 0° – standard · Left / Right rockers (default) 90° clockwise · Top / Bottom rockers 180° – inverted · Left / Right rockers 270° (90° anti-clockwise) · Top / Bottom rockers

3.2 Function

The push button can be configured as 2-fold or 4-fold. In 2-fold mode, two buttons form a single rocker (Left uses buttons 1 and 2). In 4-fold mode, two rockers are available (Left: buttons 1–2, Right: buttons 3–4). Each rocker can operate in Rocker mode (both buttons act as a pair, e.g. for dimming or blind control) or Individual mode (each button operates independently with its own function).

rond KNX push button

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Parameter	Description
Number of buttons	Limit of enums for rond that only supports up to 4 buttons <u>Settings:</u> • 2-fold (default) • 4-fold
Button	To select if 2 buttons integrated into a toggle switch <u>Settings:</u> • Individual (default) • Rocker
Left	To select if 2 buttons integrated into a toggle switch <u>Settings:</u> • Individual (default) • Rocker Remark: Only visible for "4-fold" configuration.
Right	To select if 2 buttons integrated into a toggle switch <u>Settings:</u> • Individual (default) • Rocker Remark: Only visible for "4-fold" configuration.

4 General

Layout

General

+ Button 1

+ Button 2

+ Button 3

+ Button 4

+ Temperature sensor

Temperature and humidity sensor

Temperature and humidity sensor ☒ disable ☐ enable

Controllers

Thermostat ☒ disable ☐ enable

Scene controller ☒ disable ☐ enable

Program mode

Enable all buttons to activate program mode ☒ no ☐ yes

i

Only dedicated programming button available.

Parameter	Description
Temperature and humidity sensor	Enable or disable <u>Settings:</u> • disable (default) • enable
Thermostat	Enable or disable <u>Settings:</u> • disable (default) • enable
Scene controller	Enable or disable <u>Settings:</u> • disable (default) • enable
Enable all buttons to activate program mode	Allow pushing a normal button 7 times within 3 s to activate programming mode. Each press also sends its configured telegram. A different button press while programming mode is active deactivates it. <u>Settings:</u> • no (default) • yes

5 Functions

5.1 Function Modes

5.1.1 No action

Button press is ignored. No telegram is sent.

5.1.2 Edge

Sends a configurable value on both the rising and falling edge of the button press. Useful for direct binary control.

5.1.3 Switching

Sends an on, off, or toggle command (DPT 1.001). Used for controlling switching actuators.

5.1.4 Dimming

Sends a relative dimming command (DPT 3.007) on long press. Direction is configurable. A stop command is sent on button release.

5.1.5 Motor control

Sends a single MoveUpDown telegram on Output1 to start a full-travel move on a blind or shutter actuator (DPT 1.008 MoveUpDown, dpa.801.61 per KNX Vol.7 fb.801). The actuator runs to its limit switch or until something else stops it; no STOP is sent by the firmware. Direction is configurable (Up, Down, or Toggle). To enable mid-travel STOP, combine this Long press function with 'Single press motor control' on Short press — the canonical KNX rocker pattern.

5.1.6 Single press motor control

One-button blind/shutter control. The first press sends a MoveUpDown telegram (DPT 1.008, dpa.801.61) on Output1; subsequent presses while the motor is running send a STOP telegram on Output2. The STOP wire format depends on the per-button 'Motor type' parameter — see 'blinds' and 'shutter' below. The motor's running state is also set by Long press 'Motor control', so a long-press start followed by a short-press stop works as a standard KNX rocker. Position feedback on the per-button motor input (if linked) clears the running state. After the configured travel time, the internal state resets automatically.

5.1.7 Scenes

Sends a scene number (DPT 17.001) to recall or store a preconfigured scene on the bus.

5.1.8 1 byte (integer)

The available logic functions on a short press

5.1.9 1 byte (%)

The available logic functions on a short press

5.1.10 2 byte (unsigned integer)

The available logic functions on a short press

5.1.11 2 byte (signed integer)

The available logic functions on a short press

5.1.12 2 byte (float)

The available logic functions on a short press

5.1.13 Save scene (double press stores)

The available logic functions on a double press

5.1.14 Save scene (long press stores)

Long press emits a DPT 18.001 scene-control telegram with the learn flag set (bit 7), instructing the addressed scene receivers to store their current state into the configured scene number. Short press behaviour is set independently via the Short press function — typically 'Scenes' so the same button recalls a scene on short press and stores it on long press.

5.1.15 Scenes+Store

Combined rocker preset: short press emits a DPT 18.001 scene-control telegram to recall the configured scene; long press emits the same telegram with the learn flag set (bit 7) to store the addressed receivers' current state into the same scene. The two buttons of the rocker share the function — configure the scene number on the rocker's parameter page.

5.2 Combined Rocker Function

In Combined mode, both buttons of a rocker share a common function (e.g. up/down for dimming or blind control). The parameters below apply identically to each rocker. Rocker 1 is always available. Rocker 2 requires 4-fold configuration.

Layout

General

– Button A

Button A - Function

+ Button 3

+ Button 4

+ Temperature sensor

Function

Blocking object

Long press enable

Time between short and long

Switching

no blocking object

only short press

short and long press

5

x 0.1 s

Parameter	Description
Function	The available logic functions when 2 buttons are mechanically connected Settings: • No action • Switching (default) • Dimming • Motor control • Single press motor control • Scenes • Scenes+Store
Blocking object	Enables a 1-bit blocking input object. When the blocking object receives the configured value (1 or 0, depending on polarity), button presses on this channel are ignored and no telegrams are

Parameter	Description
	sent to the bus. Useful for child safety, timed lockout, or preventing manual override during automated control. <u>Settings:</u> • no blocking object (default) • blocking object = 1 • blocking object = 0 <u>Communication objects:</u> • 5: Button A - blocking – blocking (input) • 19: Button B - blocking – blocking (input) Remark: Only visible for "Function" is not "No action".
Long press enable	Select to enable long press for this button <u>Settings:</u> • only short press (default) • short and long press Remark: Only visible for "Function" is "Switching" or "Scenes".
Time between short and long	Time to pass to detect a long press [0.1s] <u>Range:</u> 5 – 50 <u>Default:</u> 5 × 0.1 s <u>Communication objects:</u> • 1: Button - short press – on/off (output) • 6: Button A - long press – on/off (output) • 15: Button B - short press – on/off (output) • 20: Button B - long press – on/off (output) Remark: Only visible for "Function" is "Switching" or "Scenes" and "Long press enable" is "short and long press".
Time from open to close	Expected motor travel time in seconds. Used by single press motor control to track whether the motor is still running. After this time, the pushbutton assumes the motor has reached its end position and resets its internal state. No Stop command is sent — the actuator handles its own runtime limit. <u>Range:</u> 0 – 255 (Seconds) <u>Default:</u> 10 <u>Communication objects:</u> • 1: Button A - short press – motor up/down (output) • 15: Button B - short press – motor up/down (output) Remark: Only visible for "Function" is "Single press motor control".
Motor type	Motor type: blinds (SSUD, DPT 1.007 dpa.801.62) or shutter (DedicatedStop, DPT 1.017 dpa.801.63) <u>Settings:</u> • blinds (default) • shutter <u>Communication objects:</u> • 2: Button A - short press – motor step/stop (output) • 16: Button B - short press – motor step/stop (output) Remark: Only visible for "Function" is "Single press motor control".
Scene number	The scene number <u>Range:</u> 1 – 64 <u>Default:</u> 1

Parameter	Description
	<u>Communication objects:</u> • 1: Button A - short press – scene recall (output) • 6: Button - long press – scene store (output) • 15: Button B - short press – scene recall (output) • 20: Button B - long press – scene store (output) Remark: Only visible for "Function" is "Scenes" or "Scenes+Store".

Button A - Function through Button B - Function all share the same parameter structure.

5.3 Individual Button Function

In Individual mode, each button of a rocker operates independently with its own function. The parameters below apply identically to each button. The number of available buttons depends on the fold configuration: 2-fold provides buttons 1–2, 4-fold provides buttons 1–4.

Layout	Function on short press	Switching
General	Function on long press	No action
– Button 1	Function on double press	No action
Button 1 - Function	Blocking object	no blocking object
+ Button 2	Short press	
+ Button 3	Output	toggle
+ Button 4		
+ Temperature sensor		

Parameter	Description
Function on short press	The available logic functions on a short press <u>Settings:</u> • No action • Edge • Switching (default) • Dimming • Motor control • Single press motor control • Scenes • 1 byte (integer) • 1 byte (%) • 2 byte (unsigned integer) • 2 byte (signed integer) • 2 byte (float)
Function on long press	The available logic functions on a long press <u>Settings:</u> • No action (default) • Switching • Dimming • Motor control • Scenes • Save scene (long press stores) • 1 byte (integer) • 1 byte (%) • 2 byte (unsigned integer) • 2 byte (signed integer) • 2 byte (float) Remark: Only visible for "Function on short press" is not "Edge".
Function on double press	Enabling double press adds latency to the single (short) press: a short press is only reported after the double-press window (Max time between presses) elapses without a second press. <u>Settings:</u> • No action (default) • Switching • Dimming • Motor control • Scenes

Parameter	Description
	• Save scene (double press stores) • 1 byte (integer) • 1 byte (%) • 2 byte (unsigned integer) • 2 byte (signed integer) • 2 byte (float) Remark: Only visible for "Function on short press" is not "Edge".
Blocking object	Enables a 1-bit blocking input object. When the blocking object receives the configured value (1 or 0, depending on polarity), button presses on this channel are ignored and no telegrams are sent to the bus. Useful for child safety, timed lockout, or preventing manual override during automated control. <u>Settings:</u> • no blocking object (default) • blocking object = 1 • blocking object = 0 <u>Communication objects:</u> • 5: Button 1 - blocking – blocking (input) • 12: Button 2 - blocking – blocking (input) • 19: Button 3 - blocking – blocking (input) • 26: Button 4 - blocking – blocking (input) Remark: Only visible for "Function on short press" is "Edge" or higher.
Action on rising edge	Simple 1-bit configuration <u>Settings:</u> • no function • send 1 (default) • send 0 • toggle <u>Communication objects:</u> • 1: Button 1 - short press – on/off (output) • 8: Button 2 - short press – on/off (output) • 15: Button 3 - short press – on/off (output) • 22: Button 4 - short press – on/off (output) Remark: Only visible for "Function on short press" is "Edge".
Action on falling edge	Simple 1-bit configuration <u>Settings:</u> • no function • send 1 • send 0 (default) • toggle Remark: Only visible for "Function on short press" is "Edge".
Minimum time between rising and falling edge	Minimum delay between rising-edge and falling-edge telegrams [0.1s] <u>Range:</u> 1 – 20 <u>Default:</u> 1 × 0.1 s Remark: Only visible for "Function on short press" is "Edge".
Output	Simple 1-bit configuration <u>Settings:</u> • no function • send 1 • send 0 • toggle (default)

Parameter	Description
	<u>Communication objects:</u> • 1: Button 1 - short press – on/off (output) • 8: Button 2 - short press – on/off (output) • 15: Button 3 - short press – on/off (output) • 22: Button 4 - short press – on/off (output) Remark: Only visible for "Function on short press" is "Switching" or "Dimming".
Motor direction	Configuration for motor control <u>Settings:</u> • up (default) • down • toggle <u>Communication objects:</u> • 1: Button 1 - short press – motor up/down (output) • 8: Button 2 - short press – motor up/down (output) • 10: Button 2 - feedback input – motor feedback (input) • 11: Button 2 - motor direction feedback – up/down (input) • 15: Button 3 - short press – motor up/down (output) • 17: Button 3 - feedback input – motor feedback (input) • 18: Button 3 - motor direction feedback – up/down (input) • 22: Button 4 - short press – motor up/down (output) • 24: Button 4 - feedback input – motor feedback (input) • 25: Button 4 - motor direction feedback – up/down (input) Remark: Only visible for "Function on short press" is "Motor control" or "Single press motor control".
Time from open to close	Expected motor travel time in seconds. Used by single press motor control to track whether the motor is still running. After this time, the pushbutton assumes the motor has reached its end position and resets its internal state. No Stop command is sent — the actuator handles its own runtime limit. <u>Range:</u> 0 – 255 (Seconds) <u>Default:</u> 10 <u>Communication objects:</u> • 1: Button 1 - short press – motor up/down (output) • 8: Button 2 - short press – motor up/down (output) • 15: Button 3 - short press – motor up/down (output) • 22: Button 4 - short press – motor up/down (output) Remark: Only visible for "Function on short press" is "Single press motor control".
Motor type	Motor type: blinds (SSUD, DPT 1.007 dpa.801.62) or shutter (DedicatedStop, DPT 1.017 dpa.801.63) <u>Settings:</u> • blinds (default) • shutter <u>Communication objects:</u> • 2: Button 1 - short press – motor step/stop (output) • 9: Button 2 - short press – motor step/stop (output) • 16: Button 3 - short press – motor step/stop (output) • 23: Button 4 - short press – motor step/stop (output) Remark: Only visible for "Function on short press" is "Single press motor control".
Scene number	The scene number <u>Range:</u> 1 – 64 <u>Default:</u> 1 <u>Communication objects:</u>

Parameter	Description
	• 1: Button 1 - short press – scene recall (output) • 8: Button 2 - short press – scene recall (output) • 15: Button 3 - short press – scene recall (output) • 22: Button 4 - short press – scene recall (output) Remark: Only visible for "Function on short press" is "Scenes".
Value (0 - 255)	Value for 1 byte <u>Range:</u> 0 – 255 <u>Default:</u> 0 <u>Communication objects:</u> • 1: Button 1 - short press – 1 byte value (output) • 8: Button 2 - short press – 1 byte value (output) • 15: Button 3 - short press – 1 byte value (output) • 22: Button 4 - short press – 1 byte value (output) Remark: Only visible for "Function on short press" is "1 byte (integer)".
Value (0 - 65535)	Value for 2 bytes <u>Range:</u> 0 – 65535 <u>Default:</u> 0 <u>Communication objects:</u> • 1: Button 1 - short press – 2 bytes value (output) • 8: Button 2 - short press – 2 bytes value (output) • 15: Button 3 - short press – 2 bytes value (output) • 22: Button 4 - short press – 2 bytes value (output) Remark: Only visible for "Function on short press" is "2 byte (unsigned integer)".
Value (0 - 100 %)	Percentage value 0-100% (sent as DPT 5.001) <u>Range:</u> 0 – 100 <u>Default:</u> 0 <u>Communication objects:</u> • 1: Button 1 - short press – 1 byte (%) value (output) • 8: Button 2 - short press – 1 byte (%) value (output) • 15: Button 3 - short press – 1 byte (%) value (output) • 22: Button 4 - short press – 1 byte (%) value (output) Remark: Only visible for "Function on short press" is "1 byte (%)".
Value (-32768 - 32767)	Signed integer value for 2 bytes (DPT 8.001) <u>Range:</u> -32768 – 32767 <u>Default:</u> 0 <u>Communication objects:</u> • 1: Button 1 - short press – 2 byte (signed) value (output) • 8: Button 2 - short press – 2 byte (signed) value (output) • 15: Button 3 - short press – 2 byte (signed) value (output) • 22: Button 4 - short press – 2 byte (signed) value (output) Remark: Only visible for "Function on short press" is "2 byte (signed integer)".
Float value (DPT 9.x)	2-byte floating point value (DPT 9.x) <u>Communication objects:</u> • 1: Button 1 - short press – 2 byte (float) value (output) • 8: Button 2 - short press – 2 byte (float) value (output) • 15: Button 3 - short press – 2 byte (float) value (output) • 22: Button 4 - short press – 2 byte (float) value (output) Remark: Only visible for "Function on short press" is "2 byte (float)".

Parameter	Description
Output	Simple 1-bit configuration <u>Settings:</u> • no function • send 1 (default) • send 0 • toggle <u>Communication objects:</u> • 6: Button 1 - long press – on/off (output) • 13: Button 2 - long press – on/off (output) • 20: Button 3 - long press – on/off (output) • 27: Button 4 - long press – on/off (output) Remark: Only visible for "Function on long press" is "Switching".
Dim direction	Configuration for dimming <u>Settings:</u> • dim up • dim down • toggle (default) <u>Communication objects:</u> • 6: Button 1 - long press – up/down (output) • 13: Button 2 - long press – up/down (output) • 20: Button 3 - long press – up/down (output) • 27: Button 4 - long press – up/down (output) Remark: Only visible for "Function on long press" is "Dimming".
Motor direction	Configuration for motor control <u>Settings:</u> • up (default) • down • toggle <u>Communication objects:</u> • 6: Button 1 - long press – motor up/down (output) • 13: Button 2 - long press – motor up/down (output) • 20: Button 3 - long press – motor up/down (output) • 27: Button 4 - long press – motor up/down (output) Remark: Only visible for "Function on long press" is "Motor control".
Value (0 - 255)	Value for 1 byte <u>Range:</u> 0 – 255 <u>Default:</u> 0 <u>Communication objects:</u> • 6: Button 1 - long press – 1 byte value (output) • 13: Button 2 - long press – 1 byte value (output) • 20: Button 3 - long press – 1 byte value (output) • 27: Button 4 - long press – 1 byte value (output) Remark: Only visible for "Function on long press" is "1 byte (integer)".
Value (0 - 65535)	Value for 2 bytes <u>Range:</u> 0 – 65535 <u>Default:</u> 0 <u>Communication objects:</u> • 6: Button 1 - long press – 2 bytes value (output) • 13: Button 2 - long press – 2 bytes value (output)

Parameter	Description
	• 20: Button 3 - long press – 2 bytes value (output) • 27: Button 4 - long press – 2 bytes value (output) Remark: Only visible for "Function on long press" is "2 byte (unsigned integer)".
Value (0 - 100 %)	Percentage value 0-100% (sent as DPT 5.001) <u>Range:</u> 0 – 100 <u>Default:</u> 0 <u>Communication objects:</u> • 6: Button 1 - long press – 1 byte (%) value (output) • 13: Button 2 - long press – 1 byte (%) value (output) • 20: Button 3 - long press – 1 byte (%) value (output) • 27: Button 4 - long press – 1 byte (%) value (output) Remark: Only visible for "Function on long press" is "1 byte (%)".
Value (-32768 - 32767)	Signed integer value for 2 bytes (DPT 8.001) <u>Range:</u> -32768 – 32767 <u>Default:</u> 0 <u>Communication objects:</u> • 6: Button 1 - long press – 2 byte (signed) value (output) • 13: Button 2 - long press – 2 byte (signed) value (output) • 20: Button 3 - long press – 2 byte (signed) value (output) • 27: Button 4 - long press – 2 byte (signed) value (output) Remark: Only visible for "Function on long press" is "2 byte (signed integer)".
Float value (DPT 9.x)	2-byte floating point value (DPT 9.x) <u>Communication objects:</u> • 6: Button 1 - long press – 2 byte (float) value (output) • 13: Button 2 - long press – 2 byte (float) value (output) • 20: Button 3 - long press – 2 byte (float) value (output) • 27: Button 4 - long press – 2 byte (float) value (output) Remark: Only visible for "Function on long press" is "2 byte (float)".
Time between short and long	Time to pass to detect a long press [0.1s] <u>Range:</u> 5 – 50 <u>Default:</u> 5 × 0.1 s Remark: Only visible for "Function on long press" is not "No action".
Output	Simple 1-bit configuration <u>Settings:</u> • no function • send 1 • send 0 • toggle (default) <u>Communication objects:</u> • 7: Button 1 - double press – on/off (output) • 14: Button 2 - double press – on/off (output) • 21: Button 3 - double press – on/off (output) • 28: Button 4 - double press – on/off (output) Remark: Only visible for "Function on double press" is "Switching" or "Dimming".
Motor direction	Configuration for motor control <u>Settings:</u> • up (default)

Parameter	Description
	• down • toggle <u>Communication objects:</u> • 7: Button 1 - double press – motor up/down (output) • 14: Button 2 - double press – motor up/down (output) • 21: Button 3 - double press – motor up/down (output) • 28: Button 4 - double press – motor up/down (output) Remark: Only visible for "Function on double press" is "Motor control".
Scene number	The scene number <u>Range:</u> 1 – 64 <u>Default:</u> 1 <u>Communication objects:</u> • 7: Button 1 - double press – scene recall (output) • 14: Button 2 - double press – scene recall (output) • 21: Button 3 - double press – scene recall (output) • 28: Button 4 - double press – scene recall (output) Remark: Only visible for "Function on double press" is "Scenes" or "Save scene (double press stores)".
Value (0 - 255)	Value for 1 byte <u>Range:</u> 0 – 255 <u>Default:</u> 0 <u>Communication objects:</u> • 7: Button 1 - double press – 1 byte value (output) • 14: Button 2 - double press – 1 byte value (output) • 21: Button 3 - double press – 1 byte value (output) • 28: Button 4 - double press – 1 byte value (output) Remark: Only visible for "Function on double press" is "1 byte (integer)".
Value (0 - 100 %)	Percentage value 0-100% (sent as DPT 5.001) <u>Range:</u> 0 – 100 <u>Default:</u> 0 <u>Communication objects:</u> • 7: Button 1 - double press – 1 byte (%) value (output) • 14: Button 2 - double press – 1 byte (%) value (output) • 21: Button 3 - double press – 1 byte (%) value (output) • 28: Button 4 - double press – 1 byte (%) value (output) Remark: Only visible for "Function on double press" is "1 byte (%)".
Value (0 - 65535)	Value for 2 bytes <u>Range:</u> 0 – 65535 <u>Default:</u> 0 <u>Communication objects:</u> • 7: Button 1 - double press – 2 bytes value (output) • 14: Button 2 - double press – 2 bytes value (output) • 21: Button 3 - double press – 2 bytes value (output) • 28: Button 4 - double press – 2 bytes value (output) Remark: Only visible for "Function on double press" is "2 byte (unsigned integer)".
Value (-32768 - 32767)	Signed integer value for 2 bytes (DPT 8.001) <u>Range:</u> -32768 – 32767 <u>Default:</u> 0

Parameter	Description
	<u>Communication objects:</u> • 7: Button 1 - double press – 2 byte (signed) value (output) • 14: Button 2 - double press – 2 byte (signed) value (output) • 21: Button 3 - double press – 2 byte (signed) value (output) • 28: Button 4 - double press – 2 byte (signed) value (output) Remark: Only visible for "Function on double press" is "2 byte (signed integer)".
Float value (DPT 9.x)	2-byte floating point value (DPT 9.x) <u>Communication objects:</u> • 7: Button 1 - double press – 2 byte (float) value (output) • 14: Button 2 - double press – 2 byte (float) value (output) • 21: Button 3 - double press – 2 byte (float) value (output) • 28: Button 4 - double press – 2 byte (float) value (output) Remark: Only visible for "Function on double press" is "2 byte (float)".
Max time between presses	Maximum time between the two presses of a double press [0.1s] <u>Range:</u> 2 – 20 <u>Default:</u> 4 × 0.1 s Remark: Only visible for "Function on double press" is not "No action".

Button 1 - Function through Button 4 - Function all share the same parameter structure.

6 Temperature Sensor

Layout	Unit	
General	Temperature unit	☒ Celsius (°C) ☐ Fahrenheit (°F)
+ Button 1	Room temperature	
+ Button 2	Use internal / external temperature	internal sensor ▼
+ Button 3	Send temperature	cyclic ▼
+ Button 4	Cyclic time	20 Seconds
– Temperature sensor	Internal temperature sensor	
Temperature sensor	Temperature compensation	25 x 0.1°C
+ Humidity sensor	Alarm	
	Temperature alarm	Off ▼

Parameter	Description
Temperature unit	Temperature display and transmission unit <u>Settings:</u> • Celsius (°C) (default) • Fahrenheit (°F)
Use internal / external temperature	Determine the temperature value based on internal and external readings <u>Settings:</u> • internal sensor (default) • 80% internal + 20% external • 60% internal + 40% external • 50% internal + 50% external • 40% internal + 60% external • 20% internal + 80% external • external sensor
Send temperature	How to send the value: disabled, cyclic, on delta, or both <u>Settings:</u> • disable (default) • cyclic • delta • cyclic + delta
Cyclic time	The time [s] to send temperature value <u>Range:</u> 5 – 3600 <u>Default:</u> 60 Seconds Remark: Only visible for "Send temperature" is "cyclic" or "cyclic + delta".
Delta temperature	Delta on temperature [0.1°C] to send <u>Range:</u> 1 – 100 <u>Default:</u> 2 × 0.1 °C <u>Communication object:</u> • 29: Internal temperature – Internal temperature (output)

Parameter	Description
	Remark: Only visible for "Send temperature" is "delta" or "cyclic + delta" and "Temperature unit" is "Celsius (°C)".
Delta temperature	Temperature delta threshold in 0.1°F steps. Temperature is sent when the change since last transmission exceeds this value. <u>Range:</u> 1 – 90 <u>Default:</u> 18 × 0.1 °F <u>Communication object:</u> • 29: Internal temperature – Internal temperature (output) Remark: Only visible for "Send temperature" is "delta" or "cyclic + delta" and "Temperature unit" is "Fahrenheit (°F)".
Temperature compensation	Calibration (offset) for the temperature measurement <u>Range:</u> -100 – 100 <u>Default:</u> 0 × 0.1°C Remark: Only visible for "Use internal / external temperature" is not "external sensor" and "Temperature unit" is "Celsius (°C)".
Temperature compensation	Temperature compensation offset in 0.1°F steps. Applied to the measured value before transmission. <u>Range:</u> -18 – 18 <u>Default:</u> 0 × 0.1 °F Remark: Only visible for "Use internal / external temperature" is not "external sensor" and "Temperature unit" is "Fahrenheit (°F)".
Temperature alarm	Alarm direction: Off disables the alarm; Above triggers above the high threshold; Below triggers below the low threshold; Both enables independent high and low alarms. <u>Settings:</u> • Off (default) • Above • Below • Both
Alarm threshold	Temperature alarm threshold in 0.1 °C steps. Alarm triggers when measured temperature exceeds this value. <u>Range:</u> 0 – 800 <u>Default:</u> 400 × 0.1 °C Remark: Only visible for "Temperature alarm" is "Above" or "Both" and "Temperature unit" is "Celsius (°C)".
Alarm hysteresis	Temperature alarm hysteresis in 0.1°C steps. Alarm clears when temperature drops below threshold minus hysteresis. <u>Range:</u> 0 – 50 <u>Default:</u> 10 × 0.1 °C Remark: Only visible for "Temperature alarm" is "Above" or "Both" and "Temperature unit" is "Celsius (°C)".
Alarm threshold	Temperature alarm threshold in 0.1 °F steps. Alarm triggers when measured temperature exceeds this value. <u>Range:</u> 320 – 1760 <u>Default:</u> 1040 × 0.1 °F Remark: Only visible for "Temperature alarm" is "Above" or "Both" and "Temperature unit" is "Fahrenheit (°F)".

Parameter	Description
Alarm hysteresis	Temperature alarm hysteresis in 0.1°F steps. Alarm clears when temperature drops below threshold minus hysteresis. <u>Range:</u> 0 – 90 <u>Default:</u> 18 × 0.1 °F Remark: Only visible for "Temperature alarm" is "Above" or "Both" and "Temperature unit" is "Fahrenheit (°F)".
Alarm resend interval	Interval in seconds for cyclically resending the alarm telegram while the alarm condition persists. Set to 0 to disable resending. <u>Range:</u> 0 – 255 <u>Default:</u> 10 Seconds <u>Communication object:</u> • 33: Temperature alarm (high) – Temperature high alarm (output) Remark: Only visible for "Temperature alarm" is not "Off".
Low alarm threshold	Temperature low alarm threshold in 0.1 °C steps. Alarm triggers when measured temperature drops below this value. <u>Range:</u> 0 – 800 <u>Default:</u> 160 × 0.1 °C Remark: Only visible for "Temperature alarm" is "Below" or "Both" and "Temperature unit" is "Celsius (°C)".
Low alarm hysteresis	Temperature low alarm hysteresis in 0.1°C steps. Alarm clears when temperature rises above threshold plus hysteresis. <u>Range:</u> 0 – 50 <u>Default:</u> 10 × 0.1 °C Remark: Only visible for "Temperature alarm" is "Below" or "Both" and "Temperature unit" is "Celsius (°C)".
Low alarm threshold	Temperature low alarm threshold in 0.1 °F steps. Alarm triggers when measured temperature drops below this value. <u>Range:</u> 320 – 1760 <u>Default:</u> 608 × 0.1 °F Remark: Only visible for "Temperature alarm" is "Below" or "Both" and "Temperature unit" is "Fahrenheit (°F)".
Low alarm hysteresis	Temperature low alarm hysteresis in 0.1°F steps. Alarm clears when temperature rises above threshold plus hysteresis. <u>Range:</u> 0 – 90 <u>Default:</u> 18 × 0.1 °F Remark: Only visible for "Temperature alarm" is "Below" or "Both" and "Temperature unit" is "Fahrenheit (°F)".

7 Humidity Sensor

Layout	Relative humidity	
General	Use internal / external humidity	internal sensor ▼
+ Button 1	Send humidity	cyclic ▼
+ Button 2	Cyclic time	20 Seconds
+ Button 3	Alarm	
+ Button 4	Humidity alarm	Off ▼
+ Temperature sensor		
- Humidity sensor		
Humidity sensor		

Parameter	Description
Use internal / external humidity	Determine the temperature value based on internal and external readings <u>Settings:</u> • internal sensor (default) • 80% internal + 20% external • 60% internal + 40% external • 50% internal + 50% external • 40% internal + 60% external • 20% internal + 80% external • external sensor <u>Communication object:</u> • 32: External humidity – External humidity (input)
Send humidity	How to send the value: disabled, cyclic, on delta, or both <u>Settings:</u> • disable (default) • cyclic • delta • cyclic + delta
Cyclic time	The time [s] to send temperature value <u>Range:</u> 5 – 3600 <u>Default:</u> 60 Seconds <u>Communication object:</u> • 31: Internal humidity – Internal humidity (output) Remark: Only visible for "Send humidity" is "cyclic" or "cyclic + delta".
Delta threshold	Humidity delta threshold in 0.1% steps. Humidity is sent when the change since last transmission exceeds this value. <u>Range:</u> 1 – 50 <u>Default:</u> 10 × 0.1 % <u>Communication object:</u> • 31: Internal humidity – Internal humidity (output) Remark: Only visible for "Send humidity" is "delta" or "cyclic + delta".
Humidity alarm	Alarm direction: Off disables the alarm; Above triggers above the high threshold; Below triggers below the low threshold; Both enables independent high and low alarms.

Parameter	Description
	<u>Settings:</u> • Off (default) • Above • Below • Both
Alarm threshold	Humidity alarm threshold in percent. Alarm triggers when measured humidity exceeds this value. <u>Range:</u> 0 – 100 <u>Default:</u> 70 % <u>Communication object:</u> • 35: Humidity alarm (high) – Humidity high alarm (output) Remark: Only visible for "Humidity alarm" is "Above" or "Both".
Alarm hysteresis	Humidity alarm hysteresis in percent. Alarm clears when humidity drops below threshold minus hysteresis. <u>Range:</u> 0 – 20 <u>Default:</u> 2 % Remark: Only visible for "Humidity alarm" is "Above" or "Both".
Alarm resend interval	Interval in seconds for cyclically resending the alarm telegram while the alarm condition persists. Set to 0 to disable resending. <u>Range:</u> 0 – 255 <u>Default:</u> 10 Seconds Remark: Only visible for "Humidity alarm" is not "Off".
Low alarm threshold	Humidity low alarm threshold in percent. Alarm triggers when measured humidity drops below this value. <u>Range:</u> 0 – 100 <u>Default:</u> 30 % <u>Communication object:</u> • 36: Humidity alarm (low) – Humidity low alarm (output) Remark: Only visible for "Humidity alarm" is "Below" or "Both".
Low alarm hysteresis	Humidity low alarm hysteresis in percent. Alarm clears when humidity rises above threshold plus hysteresis. <u>Range:</u> 0 – 20 <u>Default:</u> 2 % Remark: Only visible for "Humidity alarm" is "Below" or "Both".

8 Thermostat

Layout	General	
General	Mode	Heating only ▼
+ Button 1	Startup HVAC mode	Comfort ▼
+ Button 2	User adjust and cyclic transmission	
+ Button 3	Setpoint adjust range	30 ± x 0.1 K
+ Button 4	Send actual temperature	cyclic ▼
+ Temperature sensor	Actual temperature cyclic period	60 Seconds
– Thermostat	Send setpoint	cyclic + delta ▼
Thermostat	Setpoint cyclic period	60 Seconds
Heating	Setpoint delta	2 x 0.1 K
	Output cyclic period (0 = on change only)	0 Seconds
	Window contact	
	Window object	disable ▼
	Presence	
	Presence object	disable ▼

Parameter	Description
Mode	Thermostat mode: heating only, cooling only, or both. <u>Settings:</u> • Heating only (default) • Cooling only • Heating + Cooling
Startup HVAC mode	HVAC mode applied at boot. <u>Settings:</u> • Comfort (default) • Standby • Economy • Building Protection <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output)
Setpoint adjust range	Maximum bus-driven setpoint shift, ± in 0.1 K (0–10.0 K). <u>Range:</u> 0 – 100 <u>Default:</u> 30 ± x 0.1 K <u>Communication object:</u> • 37: Thermostat actual temperature – Thermostat actual temperature (output) Remark: Only visible for "Temperature unit" is "Celsius (°C)".

Parameter	Description
Setpoint adjust range	Maximum bus-driven setpoint shift, $\pm$ in 0.1 °F (0–18.0 °F). <u>Range:</u> 0 – 180 <u>Default:</u> 54 $\pm$ x 0.1 °F <u>Communication object:</u> • 37: Thermostat actual temperature – Thermostat actual temperature (output) Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Send actual temperature	How to send the value: disabled, cyclic, on delta, or both <u>Settings:</u> • disable • cyclic (default) • delta • cyclic + delta
Actual temperature cyclic period	Cyclic publish period in seconds (0 disables cyclic publish). <u>Range:</u> 0 – 3600 <u>Default:</u> 60 Seconds Remark: Only visible for "Send actual temperature" is "cyclic" or "cyclic + delta".
Actual temperature delta	Delta on temperature [0.1°C] to send <u>Range:</u> 1 – 100 <u>Default:</u> 2 $\times$ 0.1 K Remark: Only visible for "Send actual temperature" is "delta" or "cyclic + delta".
Send setpoint	How to send the value: disabled, cyclic, on delta, or both <u>Settings:</u> • disable • cyclic • delta • cyclic + delta (default)
Setpoint cyclic period	Cyclic publish period in seconds (0 disables cyclic publish). <u>Range:</u> 0 – 3600 <u>Default:</u> 60 Seconds Remark: Only visible for "Send setpoint" is "cyclic" or "cyclic + delta".
Setpoint delta	Delta on temperature [0.1°C] to send <u>Range:</u> 1 – 100 <u>Default:</u> 2 $\times$ 0.1 K Remark: Only visible for "Send setpoint" is "delta" or "cyclic + delta".
Output cyclic period (0 = on change only)	Cyclic publish period in seconds (0 disables cyclic publish). <u>Range:</u> 0 – 3600 <u>Default:</u> 0 Seconds
Window object	Window contact object: disabled (no object, no effect), or enabled with contact polarity — open = 1 (bus value 1 = open) / open = 0 (inverted, value 0 = open). When enabled, an open window switches to Building Protection. <u>Settings:</u> • disable (default) • open = 1 • open = 0

Parameter	Description
	<u>Communication object:</u> • 49: Thermostat window contact – Thermostat window contact (input)
Presence object	Presence object mode: absent state target <u>Settings:</u> • disable (default) • switch between comfort and standby • switch between comfort and economy <u>Communication object:</u> • 50: Thermostat presence – Thermostat presence (input)
Heating/cooling changeover	Enable or disable <u>Settings:</u> • disable (default) • enable <u>Communication object:</u> • 51: Thermostat heating/cooling changeover – Thermostat heating/cooling changeover (input) Remark: Only visible for "Mode" is "Heating + Cooling".

9 Heating

Layout	Heating control	
General	Heating control type	2-point ▼
+ Button 1	Heating hysteresis	5 x 0.1 K
+ Button 2	Setpoints	
+ Button 3	Comfort heating setpoint	210 x 0.1 °C
+ Button 4	Standby heating offset	-20 x 0.1 K
+ Temperature sensor	Economy heating offset	-50 x 0.1 K
- Thermostat	Building Protection heating setpoint	70 x 0.1 °C
Thermostat		
Heating		

Parameter	Description
Heating control type	Per-direction control: 2-point hysteresis (1-bit), continuous PI (1-byte 0–100 %), or PI with PWM (1-bit). <u>Settings:</u> • 2-point (default) • PI continuous • PI PWM
Heating hysteresis	2-point hysteresis band in 0.1 K (0.1–5.0 K). <u>Range:</u> 1 – 50 <u>Default:</u> 5 × 0.1 K <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Heating control type" is "2-point" and "Temperature unit" is "Celsius (°C)".
Heating hysteresis	2-point hysteresis band in 0.1 °F (0.1–9.0 °F). <u>Range:</u> 1 – 90 <u>Default:</u> 9 × 0.1 °F <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Heating control type" is "2-point" and "Temperature unit" is "Fahrenheit (°F)".
Heating PI preset	Pre-tuned PI parameters per heating system, or Advanced for custom Kp/Ti. <u>Settings:</u> • Warm Water (5K/150min) (default) • Floor Heating (5K/240min) • Electric Heating (4K/100min) • Blow Convector (4K/90min) • A/C Split (4K/90min)

Parameter	Description
	• Advanced Remark: Only visible for "Heating control type" is not "2-point".
Heating Kp band	PI proportional band in K (Advanced PI tuning). <u>Range:</u> 1 – 15 <u>Default:</u> 5 K <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Heating control type" is not "2-point" and "Heating PI preset" is "Advanced".
Heating Ti	PI integral time in minutes (Advanced PI tuning). <u>Range:</u> 5 – 255 <u>Default:</u> 150 Minutes Remark: Only visible for "Heating control type" is not "2-point" and "Heating PI preset" is "Advanced".
PWM period	PWM period in minutes (1–60). <u>Range:</u> 1 – 60 <u>Default:</u> 10 Minutes <u>Communication object:</u> • 43: Thermostat heating – on/off (output) Remark: Only visible for "Heating control type" is "PI PWM".
Comfort heating setpoint	Heating setpoint in 0.1 °C steps (5.0–35.0 °C). <u>Range:</u> 50 – 350 <u>Default:</u> 210 × 0.1 °C <u>Communication objects:</u> • 38: Thermostat heat setpoint – Thermostat heat setpoint (output) • 39: Thermostat comfort heat setpoint – Comfort heating setpoint (input) Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Standby heating offset	Standby heating offset (relative mode) in 0.1 K (-5.0–0 K). <u>Range:</u> -50 – 0 <u>Default:</u> -20 × 0.1 K Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Economy heating offset	Economy heating offset (relative mode) in 0.1 K (-10.0–0 K). <u>Range:</u> -100 – 0 <u>Default:</u> -50 × 0.1 K Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Building Protection heating setpoint	Heating Building Protection (frost) setpoint in 0.1 °C steps (4.0–15.0 °C). <u>Range:</u> 40 – 150 <u>Default:</u> 70 × 0.1 °C Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Comfort heating setpoint	Heating setpoint in 0.1 °F steps (41.0–95.0 °F).

Parameter	Description
	<u>Range:</u> 410 – 950 <u>Default:</u> 698 × 0.1 °F <u>Communication objects:</u> • 38: Thermostat heat setpoint – Thermostat heat setpoint (output) • 39: Thermostat comfort heat setpoint – Comfort heating setpoint (input) Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Standby heating offset	Standby heating offset (relative mode) in 0.1 °F (-9.0–0 °F). <u>Range:</u> -90 – 0 <u>Default:</u> -36 × 0.1 °F Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Economy heating offset	Economy heating offset (relative mode) in 0.1 °F (-18.0–0 °F). <u>Range:</u> -180 – 0 <u>Default:</u> -90 × 0.1 °F Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Building Protection heating setpoint	Heating Building Protection (frost) setpoint in 0.1 °F steps (39.0–59.0 °F). <u>Range:</u> 390 – 590 <u>Default:</u> 446 × 0.1 °F Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".

10 Cooling

Layout	Cooling control	
General	Cooling control type	2-point ▼
+ Button 1	Cooling hysteresis	5 x 0.1 K
+ Button 2	Setpoints	
+ Button 3	Comfort cooling setpoint	240 x 0.1 °C
+ Button 4	Standby cooling offset	20 x 0.1 K
+ Temperature sensor	Economy cooling offset	50 x 0.1 K
– Thermostat	Building Protection cooling setpoint	350 x 0.1 °C
Thermostat		
Cooling		

Parameter	Description
Cooling control type	Per-direction control: 2-point hysteresis (1-bit), continuous PI (1-byte 0–100 %), or PI with PWM (1-bit). <u>Settings:</u> • 2-point (default) • PI continuous • PI PWM
Cooling hysteresis	2-point hysteresis band in 0.1 K (0.1–5.0 K). <u>Range:</u> 1 – 50 <u>Default:</u> 5 × 0.1 K <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Cooling control type" is "2-point" and "Temperature unit" is "Celsius (°C)".
Cooling hysteresis	2-point hysteresis band in 0.1 °F (0.1–9.0 °F). <u>Range:</u> 1 – 90 <u>Default:</u> 9 × 0.1 °F <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Cooling control type" is "2-point" and "Temperature unit" is "Fahrenheit (°F)".
Cooling PI preset	Pre-tuned PI parameters per cooling system, or Advanced for custom Kp/Ti. <u>Settings:</u> • Cooling Ceiling (5K/240min) (default) • Blow Convector (4K/90min) • A/C Split (4K/90min) • Advanced

Parameter	Description
	Remark: Only visible for "Cooling control type" is not "2-point".
Cooling Kp band	PI proportional band in K (Advanced PI tuning). <u>Range:</u> 1 – 15 <u>Default:</u> 4 K <u>Communication objects:</u> • 40: Thermostat setpoint shift – Thermostat setpoint shift (input) • 41: Thermostat HVAC mode – Thermostat HVAC mode (input) • 42: Thermostat HVAC mode status – Thermostat HVAC mode (output) Remark: Only visible for "Cooling control type" is not "2-point" and "Cooling PI preset" is "Advanced".
Cooling Ti	PI integral time in minutes (Advanced PI tuning). <u>Range:</u> 5 – 255 <u>Default:</u> 90 Minutes Remark: Only visible for "Cooling control type" is not "2-point" and "Cooling PI preset" is "Advanced".
PWM period	PWM period in minutes (1–60). <u>Range:</u> 1 – 60 <u>Default:</u> 10 Minutes <u>Communication object:</u> • 47: Thermostat cooling – on/off (output) Remark: Only visible for "Cooling control type" is "PI PWM".
Comfort cooling setpoint	Cooling setpoint in 0.1 °C steps (15.0–35.0 °C). <u>Range:</u> 150 – 350 <u>Default:</u> 240 × 0.1 °C <u>Communication objects:</u> • 45: Thermostat cool setpoint – Thermostat cool setpoint (output) • 46: Thermostat comfort cool setpoint – Comfort cooling setpoint (input) Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Standby cooling offset	Standby cooling offset (relative mode) in 0.1 K (0–5.0 K). <u>Range:</u> 0 – 50 <u>Default:</u> 20 × 0.1 K Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Economy cooling offset	Economy cooling offset (relative mode) in 0.1 K (0–10.0 K). <u>Range:</u> 0 – 100 <u>Default:</u> 50 × 0.1 K Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Building Protection cooling setpoint	Cooling Building Protection (heat) setpoint in 0.1 °C steps (25.0–45.0 °C). <u>Range:</u> 250 – 450 <u>Default:</u> 350 × 0.1 °C Remark: Only visible for "Temperature unit" is "Celsius (°C)".
Comfort cooling setpoint	Cooling setpoint in 0.1 °F steps (59.0–95.0 °F). <u>Range:</u> 590 – 950

Parameter	Description
	<u>Default:</u> $752 \times 0.1 \text{ }^{\circ}\text{F}$ <u>Communication objects:</u> • 45: Thermostat cool setpoint – Thermostat cool setpoint (output) • 46: Thermostat comfort cool setpoint – Comfort cooling setpoint (input) Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Standby cooling offset	Standby cooling offset (relative mode) in $0.1 \text{ }^{\circ}\text{F}$ ($0\text{--}9.0 \text{ }^{\circ}\text{F}$). <u>Range:</u> $0 - 90$ <u>Default:</u> $36 \times 0.1 \text{ }^{\circ}\text{F}$ Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Economy cooling offset	Economy cooling offset (relative mode) in $0.1 \text{ }^{\circ}\text{F}$ ($0\text{--}18.0 \text{ }^{\circ}\text{F}$). <u>Range:</u> $0 - 180$ <u>Default:</u> $90 \times 0.1 \text{ }^{\circ}\text{F}$ Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".
Building Protection cooling setpoint	Cooling Building Protection (heat) setpoint in $0.1 \text{ }^{\circ}\text{F}$ steps ($77.0\text{--}113.0 \text{ }^{\circ}\text{F}$). <u>Range:</u> $770 - 1130$ <u>Default:</u> $950 \times 0.1 \text{ }^{\circ}\text{F}$ Remark: Only visible for "Temperature unit" is "Fahrenheit (°F)".

11 Scene Controller

The Scene controller exposes 6 scenes, each driving up to 8 outputs. Scene values come from two sources: the ETS configuration on this page, and (when 'Save scene values from bus on store telegram' is enabled) the learn-on-bus mechanism — a DPT 18.001 telegram with the learn flag set, or a long-press of a button configured for 'Scenes+Store' / 'StoreScene', captures the current bus state of Output1..8 into the matching scene. Learned values are stored separately from the ETS parameter memory.

When the user re-learns a scene, the new values replace the ETS defaults for that scene only. ETS downloads remain authoritative: any download that changes any parameter discards the entire set of learned scenes on the next boot, so the user must re-learn after any post-commissioning ETS push, even if the change is unrelated to scenes.

Layout

General

+ Button 1

+ Button 2

+ Button 3

+ Button 4

+ Temperature sensor

– Scene controller

Scene controller

Scene 1

Scene 2

Scene 3

Scene 4

Scene 5

Scene 6

Temperature unit

☒ Celsius (°C)☐ Fahrenheit (°F)

Save scene values from bus on store telegram

☒ disable☐ enable

Output 1

1 byte

Output 2

1 bit

Output 3

not used

Output 4

1 byte

Output 5

1 byte

Output 6

1 byte

Output 7

1 byte

Output 8

1 byte

Parameter	Description
Temperature unit	Temperature display and transmission unit <u>Settings:</u> - Celsius (°C) (default) - Fahrenheit (°F)
Save scene values from bus on store telegram	When Enabled, an incoming DPT 18.001 telegram with the learn flag set captures the current bus state of Output1..8 into the matching scene's stored values. Persists across reboot until ETS download. <u>Settings:</u> - disable (default) - enable <u>Behaviour:</u> When Enabled, an incoming DPT 18.001 scene-control telegram with the learn flag set (bit 7) — or a long-press of a button configured as 'Scenes+Store' / 'StoreScene' — captures the current bus state of Output1..8 into the matching scene's stored values, overriding the values configured here for that scene. Learned values are stored separately from the ETS parameter memory and persist across reboots. Remark: Any subsequent ETS download that changes any parameter — including parameters unrelated to scenes — discards the entire set of learned scenes on the next boot, and the user

Parameter	Description
	will need to re-learn. This is intentional: the integrator's pushed configuration is treated as authoritative.
Output 1 to 8	Whether this output participates in the scene. Select the data format to send (nothing, 1-bit, or 1-byte). <u>Settings:</u> • not used • 1 bit • 1 byte (default) • 0-100% • Temperature • CCT • RGB • RGBW

11.1 Scene Configuration (per scene)

Layout	Scene name	Morning
General	Scene 1 (scene number)	17
+ Button 1	Output 1 - send value	☐ no ☒ yes
+ Button 2	Output 1 - byte	25
+ Button 3	Output 2 - send value	☐ no ☒ yes
+ Button 4	Output 2 - byte	255
+ Temperature sensor	Output 3 - send value	☐ no ☒ yes
- Scene controller	Output 3 - byte	255
Scene controller	Output 3 - not used	
Morning	Output 4 - send value	☒ no ☐ yes
Scene 2	Output 4 - byte	255
Scene 3	Output 5 - send value	☒ no ☐ yes
Scene 4	Output 5 - byte	255
Scene 5	Output 6 - send value	☐ no ☒ yes
Scene 6	Output 6 - byte	15
	Output 7 - send value	☒ no ☐ yes
	Output 7 - byte	255
	Output 8 - send value	☐ no ☒ yes
	Output 8 - byte	255

Parameter	Description
Scene name	Give the scene number a textual description
Scene 1 (scene number)	The scene number <u>Range:</u> 1 – 64 <u>Default:</u> 1
Output 1 to 8 - send value	Whether to send a value for this output when the scene is recalled. <u>Settings:</u> - no - yes (default) Remark: Only visible for "Output 1 to 8" is not "not used".

Parameter	Description
Output 1 to 8 - bit	The 1-bit value to send for this output (on or off). <u>Settings:</u> • off • on (default) <u>Communication objects:</u> • 53: Scene controller - output 1 – on/off (output) • 54: Scene controller - output 2 – on/off (output) • 55: Scene controller - output 3 – on/off (output) • 56: Scene controller - output 4 – on/off (output) • 57: Scene controller - output 5 – on/off (output) • 58: Scene controller - output 6 – on/off (output) • 59: Scene controller - output 7 – on/off (output) • 60: Scene controller - output 8 – on/off (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - byte	The 1-byte value to send for this output (0–255). <u>Range:</u> 0 – 255 <u>Default:</u> 255 <u>Communication objects:</u> • 53: Scene controller - output 1 – on/off (output) • 54: Scene controller - output 2 – on/off (output) • 55: Scene controller - output 3 – on/off (output) • 56: Scene controller - output 4 – on/off (output) • 57: Scene controller - output 5 – on/off (output) • 58: Scene controller - output 6 – on/off (output) • 59: Scene controller - output 7 – on/off (output) • 60: Scene controller - output 8 – on/off (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - 0-100%	Percentage value 0-100% (sent as DPT 5.001) <u>Range:</u> 0 – 100 <u>Default:</u> 0 <u>Communication objects:</u> • 53: Scene controller - output 1 – 0-100% (output) • 54: Scene controller - output 2 – 0-100% (output) • 55: Scene controller - output 3 – 0-100% (output) • 56: Scene controller - output 4 – 0-100% (output) • 57: Scene controller - output 5 – 0-100% (output) • 58: Scene controller - output 6 – 0-100% (output) • 59: Scene controller - output 7 – 0-100% (output) • 60: Scene controller - output 8 – 0-100% (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - Temperature (°C)	Temperature in 0.1 °C steps (0.0–1000 = 0.0–100.0 °C; sent as DPT 9.001) <u>Range:</u> 0 – 1000 <u>Default:</u> 200 × 0.1 °C <u>Communication objects:</u> • 53: Scene controller - output 1 – temperature (output) • 54: Scene controller - output 2 – temperature (output) • 55: Scene controller - output 3 – temperature (output) • 56: Scene controller - output 4 – temperature (output) • 57: Scene controller - output 5 – temperature (output) • 58: Scene controller - output 6 – temperature (output)

Parameter	Description
	• 59: Scene controller - output 7 – temperature (output) • 60: Scene controller - output 8 – temperature (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes" and "Temperature unit" is "Celsius (°C)".
Output 1 to 8 - Temperature (°F)	Temperature in 0.1 °F steps (320–2120 = 32.0–212.0 °F; sent as DPT 9.027) <u>Range:</u> 320 – 2120 <u>Default:</u> 680 × 0.1 °F <u>Communication objects:</u> • 53: Scene controller - output 1 – temperature (output) • 54: Scene controller - output 2 – temperature (output) • 55: Scene controller - output 3 – temperature (output) • 56: Scene controller - output 4 – temperature (output) • 57: Scene controller - output 5 – temperature (output) • 58: Scene controller - output 6 – temperature (output) • 59: Scene controller - output 7 – temperature (output) • 60: Scene controller - output 8 – temperature (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes" and "Temperature unit" is "Fahrenheit (°F)".
Output 1 to 8 - CCT (K)	Colour temperature in Kelvin (1000-10000, sent as DPT 7.600) <u>Range:</u> 1000 – 10000 <u>Default:</u> 3000 <u>Communication objects:</u> • 53: Scene controller - output 1 – CCT (output) • 54: Scene controller - output 2 – CCT (output) • 55: Scene controller - output 3 – CCT (output) • 56: Scene controller - output 4 – CCT (output) • 57: Scene controller - output 5 – CCT (output) • 58: Scene controller - output 6 – CCT (output) • 59: Scene controller - output 7 – CCT (output) • 60: Scene controller - output 8 – CCT (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - RGB R	RGB channel value 0-255 (one channel of DPT 232.600) <u>Range:</u> 0 – 255 <u>Default:</u> 255 <u>Communication objects:</u> • 53: Scene controller - output 1 – RGB (output) • 54: Scene controller - output 2 – RGB (output) • 55: Scene controller - output 3 – RGB (output) • 56: Scene controller - output 4 – RGB (output) • 57: Scene controller - output 5 – RGB (output) • 58: Scene controller - output 6 – RGB (output) • 59: Scene controller - output 7 – RGB (output) • 60: Scene controller - output 8 – RGB (output) Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - RGB G	RGB channel value 0-255 (one channel of DPT 232.600) <u>Range:</u> 0 – 255 <u>Default:</u> 255 Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".

Parameter	Description
Output 1 to 8 - RGB B	RGB channel value 0-255 (one channel of DPT 232.600) <u>Range:</u> 0 – 255 <u>Default:</u> 255 Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".
Output 1 to 8 - RGB W	RGB channel value 0-255 (one channel of DPT 232.600) <u>Range:</u> 0 – 255 <u>Default:</u> 0 Remark: Only visible for "Output 1 to 8" is not "not used" and "Output 1 to 8 - send value" is "yes".

Scene 1 through Scene 6 all share the same parameter structure. Each scene has its own scene number, name, and per-output settings.

12 Appendix — Communication Objects

Comm. object	Name	Function	Input/Output	Data length	Data type
1	Button 1 - short press	on/off (output) motor up/down (output) scene recall (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
2	Button 1 - short press	motor step/stop (output) dedicated stop (output)	Output	1 Bit	Step DPST-1-17
3	Button 1 - feedback input	motor feedback (input)	Input	1 Byte	Percentage
4	Button 1 - motor direction feedback	up/down (input)	Input	1 Bit	Up/Down
5	Button 1 - blocking	blocking (input)	Input	1 Bit	Switch
6	Button 1 - long press	on/off (output) motor up/down (output) up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 4 Bit 1 Byte 2 Bytes	Switch Up/Down Dim Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
7	Button 1 - double press	on/off (output) motor up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
8	Button 2 - short press	motor up/down (output) scene recall (output) 1 byte value (output) 2 bytes value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Up/Down Scene control Unsigned 8-bit Unsigned 16-bit

Comm. object	Name	Function	Input/Output	Data length	Data type
		1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output) on/off (output)			Percentage DPST-8-1 DPT-9 Switch
9	Button 2 - short press	motor step/stop (output) dedicated stop (output)	Output	1 Bit	Step DPST-1-17
10	Button 2 - feedback input	motor feedback (input)	Input	1 Byte	Percentage
11	Button 2 - motor direction feedback	up/down (input)	Input	1 Bit	Up/Down
12	Button 2 - blocking	blocking (input)	Input	1 Bit	Switch
13	Button 2 - long press	on/off (output) motor up/down (output) up/down (output) scene recall (output) 1 byte value (output) 2 bytes value (output) scene store (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 4 Bit 1 Byte 2 Bytes	Switch Up/Down Dim Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
14	Button 2 - double press	on/off (output) motor up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
15	Button 3 - short press	on/off (output) motor up/down (output) scene recall (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
16	Button 3 - short press	motor step/stop (output) dedicated stop (output)	Output	1 Bit	Step DPST-1-17
17	Button 3 - feedback input	motor feedback (input)	Input	1 Byte	Percentage

Comm. object	Name	Function	Input/Output	Data length	Data type
18	Button 3 - motor direction feedback	up/down (input)	Input	1 Bit	Up/Down
19	Button 3 - blocking	blocking (input)	Input	1 Bit	Switch
20	Button 3 - long press	on/off (output) motor up/down (output) up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 4 Bit 1 Byte 2 Bytes	Switch Up/Down Dim Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
21	Button 3 - double press	on/off (output) motor up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
22	Button 4 - short press	on/off (output) motor up/down (output) scene recall (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
23	Button 4 - short press	motor step/stop (output) dedicated stop (output)	Output	1 Bit	Step DPST-1-17
24	Button 4 - feedback input	motor feedback (input)	Input	1 Byte	Percentage
25	Button 4 - motor direction feedback	up/down (input)	Input	1 Bit	Up/Down
26	Button 4 - blocking	blocking (input)	Input	1 Bit	Switch
27	Button 4 - long press	on/off (output) motor up/down (output) up/down (output) scene recall (output) scene store (output)	Input/Output	1 Bit 4 Bit 1 Byte 2 Bytes	Switch Up/Down Dim Scene control Unsigned 8-bit

Comm. object	Name	Function	Input/Output	Data length	Data type
		1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)			Unsigned 16-bit Percentage DPST-8-1 DPT-9
28	Button 4 - double press	on/off (output) motor up/down (output) scene recall (output) scene store (output) 1 byte value (output) 2 bytes value (output) 1 byte (%) value (output) 2 byte (signed) value (output) 2 byte (float) value (output)	Input/Output	1 Bit 1 Byte 2 Bytes	Switch Up/Down Scene control Unsigned 8-bit Unsigned 16-bit Percentage DPST-8-1 DPT-9
29	Internal temperature	Internal temperature (output)	Output	2 Bytes	Temperature (°C) Temperature (°F)
30	External temperature	External temperature (input)	Input	2 Bytes	Temperature (°C) Temperature (°F)
31	Internal humidity	Internal humidity (output)	Output	2 Bytes	Humidity (%)
32	External humidity	External humidity (input)	Input	2 Bytes	Humidity (%)
33	Temperature alarm (high)	Temperature high alarm (output)	Output	1 Bit	Alarm
34	Temperature alarm (low)	Temperature low alarm (output)	Output	1 Bit	Alarm
35	Humidity alarm (high)	Humidity high alarm (output)	Output	1 Bit	Alarm
36	Humidity alarm (low)	Humidity low alarm (output)	Output	1 Bit	Alarm
37	Thermostat actual temperature	Thermostat actual temperature (output)	Output	2 Bytes	Temperature (°C) Temperature (°F)
38	Thermostat heat setpoint	Thermostat heat setpoint (output)	Output	2 Bytes	Temperature (°C) Temperature (°F)
39	Thermostat comfort heat setpoint	Comfort heating setpoint (input)	Input	2 Bytes	Temperature (°C) Temperature (°F)
40	Thermostat setpoint shift	Thermostat setpoint shift (input)	Input	2 Bytes	DPST-9-2
41	Thermostat HVAC mode	Thermostat HVAC mode (input)	Input	1 Byte	DPST-20-102
42	Thermostat HVAC mode status	Thermostat HVAC mode (output)	Output	1 Byte	DPST-20-102
43	Thermostat heating	on/off (output) 0–100 % (output)	Output	1 Bit 1 Byte	Switch Percentage

Comm. object	Name	Function	Input/Output	Data length	Data type
44	Thermostat heating active	Thermostat heating active (output)	Output	1 Bit	Switch
45	Thermostat cool setpoint	Thermostat cool setpoint (output)	Output	2 Bytes	Temperature (°C) Temperature (°F)
46	Thermostat comfort cool setpoint	Comfort cooling setpoint (input)	Input	2 Bytes	Temperature (°C) Temperature (°F)
47	Thermostat cooling	on/off (output) 0-100 % (output)	Output	1 Bit 1 Byte	Switch Percentage
48	Thermostat cooling active	Thermostat cooling active (output)	Output	1 Bit	Switch
49	Thermostat window contact	Thermostat window contact (input)	Input	1 Bit	DPST-1-19
50	Thermostat presence	Thermostat presence (input)	Input	1 Bit	DPST-1-18
51	Thermostat heating/cooling changeover	Thermostat heating/cooling changeover (input)	Input	1 Bit	DPST-1-100
52	Scene controller	scene number (input)	Input	1 Byte	Scene control
53	Scene controller - output 1	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
54	Scene controller - output 2	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
55	Scene controller - output 3	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color

Comm. object	Name	Function	Input/Output	Data length	Data type
56	Scene controller - output 4	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
57	Scene controller - output 5	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
58	Scene controller - output 6	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
59	Scene controller - output 7	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color
60	Scene controller - output 8	on/off (output) 0-100% (output) temperature (output) CCT (output) RGB (output) RGBW (output)	Input/Output	1 Bit 1 Byte 2 Bytes 3 Bytes 6 Bytes	Switch Unsigned 8-bit Percentage Temperature (°C) Temperature (°F) Color temperature (K) RGB color RGBW color

thank you for choosing rond
