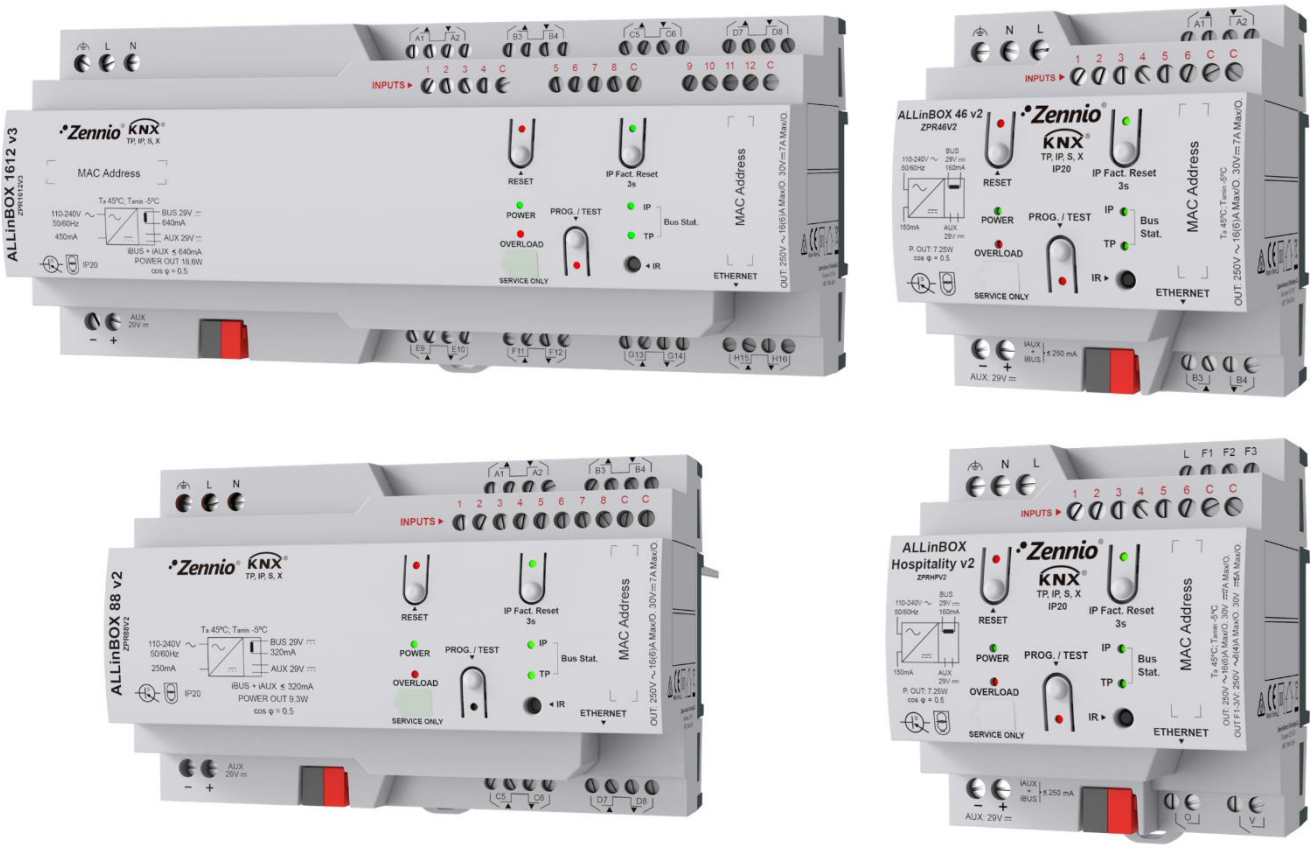

ALLinBOX 1612 v3 / 88 v2 / 46 v2 / Hospitality v2

Multifunction device with power supply, KNX-IP Interface, outputs, inputs, logical module and KNX Secure

ZPR1612V3
ZPR88V2
ZPR46V2
ZPRHPV2

Application program version: [2.4]
User manual edition: [2.4]_a

www.zennio.com

USER MANUAL

CONTENIDO

DOCUMENT UPDATES

Version	Modifications
[2.4]_a	Internal improvements.

1 INTRODUCTION

1.1 ALLinBOX 1612 v3 / ALLinBOX 88 v2 / ALLinBOX 46 v2 / Hospitality v2

ALLinBOX 1612 v3 / ALLinBOX 88 v2 / ALLinBOX 46 v2 / ALLinBOX Hospitality v2 are a versatile KNX actuators with KNX Secure featuring a wide variety of functions.

Functions		1612 v3	88 v2	46 v2	Hospitality v2
Relay Outputs	Shutter Channels	8	4	2	✘
	Individual Outputs	16	8	4	1
	Fan Coil Modules	2 (2/4-Pipe)	1 (2/4-Pipe)	1 (2-Pipe)	1 (2-Pipe)
Inputs	Temperature Probes	12	8	6	6
	Binary Inputs	12	8	6	6
	Motion Detectors	12	8	6	6
Thermostats	Standard	4	4	4	✘
	Hospitality	4	4	4	2

Table 1. ALLinBOX functionalities

In addition to these functions, there are others, common to all ALLinBOX:

- **20 customisable, multi-operation logic functions**.
- **2 master light control instances** for an easy, out-of-the-box control of a set of luminaires (or functionally equivalent devices) one of which acts as a general lamp and the others as secondary lamps.
- **Manual operation / supervision** of the 16/8/4 relay outputs through infrared.
- **Scene-triggered action control,** with an optional delay in the execution.
- **Heartbeat** or periodic “still-alive” notification.
- **Master clock of the installation** functionality, synchronized with **NTP servers**.

- **IP interface**
  - Up to 5 parallel connections from ETS for programming and monitoring.
  - High-capacity buffer
- **7 light indicators** (LEDs): 2 state indicators for the power supply (power and overload), 1 power supply factory reset indicator, 2 state indicators for the lines (bus and Ethernet), 1 IP factory reset indicator, and 1 additional indicator for the programming mode.
- **29V power supply and 640/320/250/250 mA respectively.** It is divided between an auxiliary output of 29V and a bus output with KNX coil include. The nominal input of the power supply must be universal 110/230V ~ 50/60Hz**.**
- **KNX Security.** For detailed information about the functionality and configuration of KNX security, consult the specific user manual "KNX Security", available in the product section of the Zennio web portal (www.zennio.com).

1.2 START-UP AND POWER LOSS

During the start-up of the device, the Test/Prog. LED will blink in blue colour for a few seconds before ALLinBOX is ready. External orders will not be executed during this time, but they will do it afterwards.

Depending on the configuration, some specific actions will also be performed during the start-up. For example, the integrator can set whether the output channels should switch to a particular state and whether the device should send certain objects to the bus after the power recovery. Please consult the next sections of this document for further details.

On the other hand, when a bus power failure takes place, ALLinBOX will interrupt any pending actions and will save its state so it can be recovered once the power supply is restored.

For safety reasons, if a power loss takes place, all **shutter channels** will be stopped (i.e., the relays will open), while the individual outputs and fan coil contacts will switch to the specific state configured in ETS (if any).

1.3 LED INDICATORS

ALLinBOX incorporates 7 LED lights on the top of the device that make it easy to monitor the status of the buses and to detect typical communication problems, as detailed below.

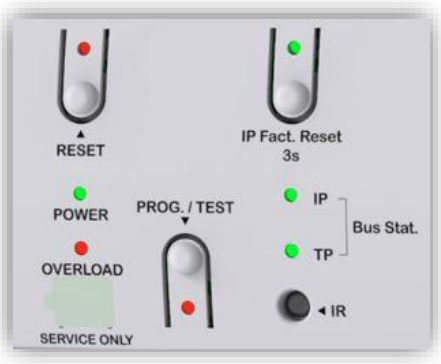

Figure 1. LEDs

- **KNX Line Status LED (TP)**: shows the status of the KNX bus.
  - OFF: KNX line is not powered.
  - ON (green) = KNX line is powered.

  Note: *the update of the LED status can be delayed a few seconds after the trigger event, e.g., after the disconnection of the main power supply.*

- **Ethernet Line Status LED (IP)**: shows the status of the Ethernet line.
  - OFF: IP address missing, or IP line not connected.
  - ON (green): Ethernet connection OK and IP address correctly assigned.

- **Power Supply Status LED (POWER)**: shows the status of the power supply.
  - OFF: the device is not powered.
  - ON (green): device with voltage.
  - BLINKING (green): short circuit on the KNX bus / "Reset" button press.

- **Overload LED (OVERLOAD)**: notifies a high consumption on the KNX bus and/or the auxiliary power output line.
  - OFF: normal power consumption on the KNX bus and/or the auxiliary power output line.

- ON (red): overload on bus KNX and/or auxiliary power output line[1].
- BLINKING (red): cut-off due to overload on the KNX bus and/or the auxiliary power output line[1].

- **Programming LED**:
  - OFF: normal operation.
  - ON (red): programming mode active.
  - BLINKING (red): safe mode active.
  - ON (green): test mode active.
  - BLINKING (blue): the device is initializing.

- **IP Factory Reset LED:**
  - OFF: normal operation.
  - ON (red): IP restored by DHCP.
  - ON (green): static IP (of ETS configuration) restored.
  - ON (yellow): IP restored by APIPA.

  Note: *Please refer to section 1.4 for further details.*

- **Reset LED:**
  - OFF: normal operation.
  - BLINKING (red): "Reset" button is pressed / short circuit on the KNX bus.

1.4 HARD RESET POWER SUPPLY

If "Reset" button is **pressed**, a short circuit is made in the output power supply (29V). The device will not restart (and will not give power) until the button is released. The power supply status LED (POWER) will blink in green, and the Reset status LED will blink in red while the button is being pressed.

[1] Reduce the load on the bus and/or the auxiliary power output lines until its total consumption does not exceed the maximum current specified.

1.5 HARD RESET TO IP FACTORY DEFAULTS

The objective of the IP factory reset is to locate a device that is not accessible on a local network due to an IP configuration loss. Once the device is accessible, it will be necessary a new ETS download to introduce the desire IP configuration.

By **pressing the "IP Factory Reset" button for three seconds**:

- The device will adopt an **IP address via the DHCP server**.
  - If the DHCP client does not obtain a valid IP address (after several attempts), then the device will be assigned an **IP address via the AutoIP (APIPA)**[2] protocol.

    The factory reset indicator LED will light up in red.

If a **second-long press** is made on the "IP Factory Reset" button

- The device will adopt a **static IP address**.
  - If "Use a static IP address" has been chosen on the ETS configuration, the device will have the **configured IP**.

    The factory reset led will light up in green.
  - On the other hand, if on the ETS configuration "Obtain an IP address automatically" has been chosen, the device will obtain an **IP by means of AutoIP (APIPA)**.

    The factory reset indicator LED lights up in yellow.

The factory IP setting and the colour of the factory reset LED will remain until the device is restarted.

The following table summarizes the above:

Press	ETS Configuration	IP Configuration	LED
1st long press (3s)	Obtain an IP automatically	IP obtained by DHCP. (If a valid IP is not obtained → IP by APIPA)	**Red**
	Use a static IP address		
2nd long press (3s)	Obtain an IP automatically	IP obtained by APIPA	**Yellow**
	Use a static IP address	Static IP of ETS configuration	**Green**

Table 2. Hard reset to IP factory defaults

[2] Random static IP configuration in the range 169.254.1.0 - 169.254.254.255

2 CONFIGURATION

To begin with the parameterisation process of the device, it is necessary, once the ETS program has been opened, to import the database of the product. Next, the device should be added to the project where desired.

The configuration of this device is done both in the parameters tab and in the ETS properties. The following sections explain how to configure each of the device functionalities.

2.1 KNX TO IP INTERFACE

ALLinBOX is an interface device intended for the **interconnection between a KNX bus and an Ethernet network (LAN).**

The network parameters can be configured in the "IP" panel of the ETS "Properties":

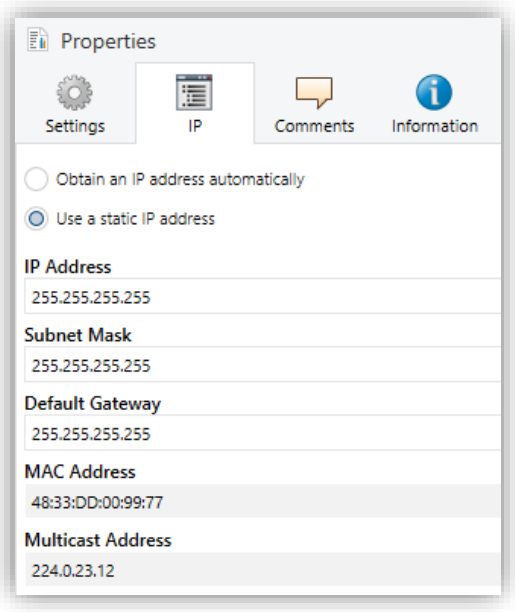

Figure 2 IP Configuration

- *Obtain an IP address automatically*[3]. ALLinBOX will automatically take an IP address whenever there is a DCHP server in the local network to which it is connected.

- *Use a static IP address*. If DHCP protocol is not used, the following properties must be set manually:

[3] The default values of each parameter will be highlighted in blue in this document, as follows: [*default / rest of options*].

- **IP Address** [*0.0.0.0…255.255.255.255*].
- **Subnet Mask** [*0.0.0.0…255.255.255.255*].
- **Default Gateway** [*0.0.0.0…255.255.255.255*].

Note: *If a static IP is configured, it is important to make sure that no other device on the network has this IP assigned to it and that it does not belong to the DHCP range configured for the router, otherwise connection problems with the ALLinBOX will be observed.*

In addition, the following information will be shown:

- **MAC Address.**
- **Multicast Address** [*224.0.23.12*]: IP address (reserved by the IANA organization for the KNXnet/IP protocol) used by ETS in this case, for discovering the available KNX-IP interfaces within the same network.

Once these properties have been entered an ETS programming is required to download the configuration to the device.

2.1.1 DIRECT CONNECTION VIA IP

In both ETS5 and ETS6 it is possible to configure that the device programming is carried out with priority via IP when available and not via USB, thus achieving programming much faster.

CONFIGURATION IN ETS5

In **ETS5** this option is found in the configuration tab “Bus” -> “Connections” -> “Options” -> “Connection Options” -> “Use direct IP connection if available”.

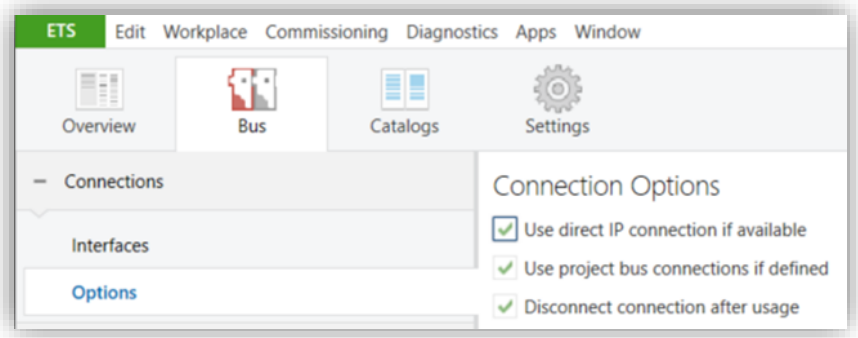

Figure 3. Connection Options in ETS5

CONFIGURATION IN ETS6

From the latest ETS6 versions onwards, this option is always enabled automatically

2.1.2 PROGRAMMER

ALLinBOX can be used in ETS as a **programming interface**. In addition to an IP address, they must be assigned a KNX individual address for this purpose.

Up to five simultaneous connections are allowed for performing downloads or for group monitoring.

Note: *to detect the ALLinBOX as a programmer in ETS, it needs to be connected to the same IP network as the PC*.

To use a device as a programmer simply select it in the ETS "Bus" tab under Connections → Interfaces.

- For **ETS6** must be selected from the drop-down list of “Connection bus”.

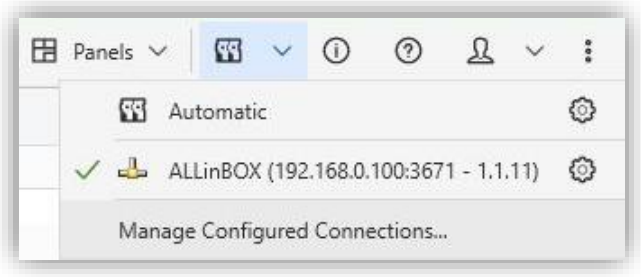

Figure 4. Selection of ALLinBOX in the Bus Connection’s drop-down list in ETS6

- For **ETS5** select it in the ETS "Bus" tab under Connections → Interfaces.

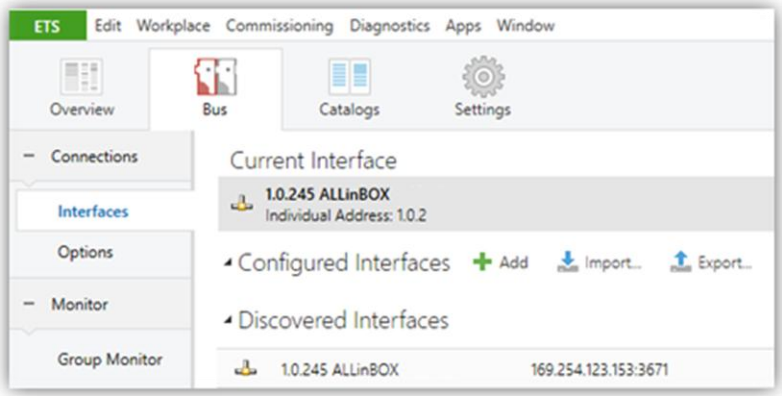

Figure 5. Selection of ALLinBOX in the Bus Connections tab in ETS

Or by selecting it at the bottom left after opening a project in ETS.

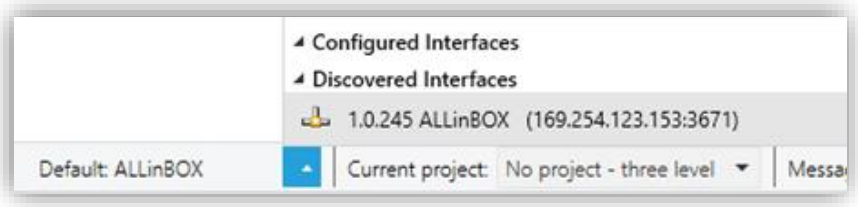

Figure 6. Selection of ALLinBOX in a ETS project

Important: *If the ALLinBOX is selected as the programming interface to program itself it is recommended to first perform individual address download and then application download, rather than a complete download (complete download causes a device restart and therefore communication with ETS is lost and the download is cancelled).*

2.1.2.1 PARALLEL DOWNLOADS

ETS offers the option to perform multiple parallel downloads within the same project. This option is only available for connections via a KNX-IP router or a KNX-IP interface. Certain conditions must be met:

- Each download must be performed on a different line.
- For the **ETS6** version, under "Connection bus" it is necessary to select the option *Automatic*.

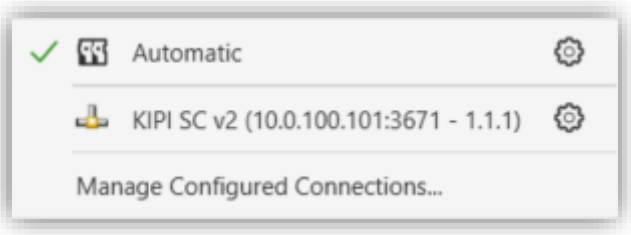

Figure 7. ETS6 parallel downloads configuration

- For the **ETS5** version, for each line it is necessary to select one **KIPI SC v2** to perform the download. It is configured in the line properties.

Notes:

- *There is a restriction: parallel downloads are **not available to download physical addresses**. When performing this type of downloads, the link device used by ETS is not the one selected for the line but the general one.*
- *Once the connection has been set, it will not be available for other lines.*

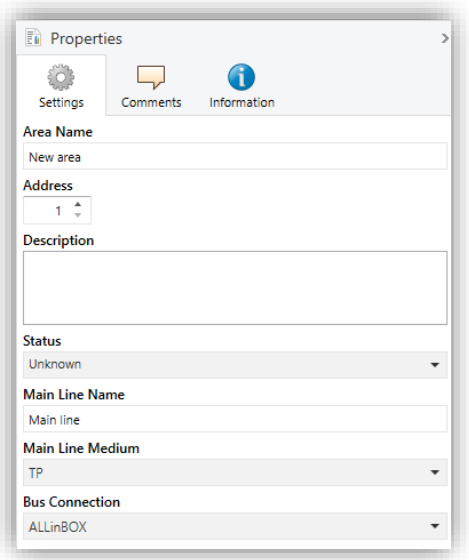

Figure 8. ETS parallel downloads configuration

2.1.3 ADDITIONAL INDIVIDUAL ADDRESSES (TUNNELING ADDRESSES)

ALLinBOX requires a specific individual address when acting as a programming interface (tunnelling) other than the address of the device itself. Up to five simultaneous connections are possible, which implies that up to five different individual addresses must be configured.

After the individual ALLinBOX address has been set, the five tunnelling addresses are automatically set with consecutive values. These addresses can be changed at any time.

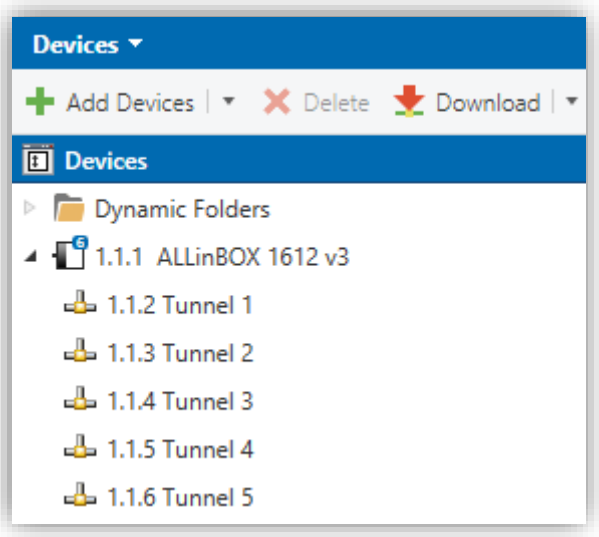

Figure 9. Set tunnelling addresses

Note: *ALLinBOX tunnelling addresses must not match any of the addresses set to other devices on the system.*

2.2 FIRMWARE UPDATE

It is possible to update the firmware of any ALLinBOX using the **ETS App "Zennio FW Updater"** whose specific user manual is available at www.zennio.com.

Note: *meanwhile a non-secure device has a BCU key, an update cannot be performed on it, therefore, it will be necessary to remove the BCU key for the update.*

2.3 GENERAL

After importing the corresponding database in ETS and adding the device into the topology of the desired project, the configuration process begins by entering the Parameters tab of the device.

ETS PARAMETERISATION

The "General" tab contains general settings. From this screen it is possible to activate/deactivate all the required functionality.

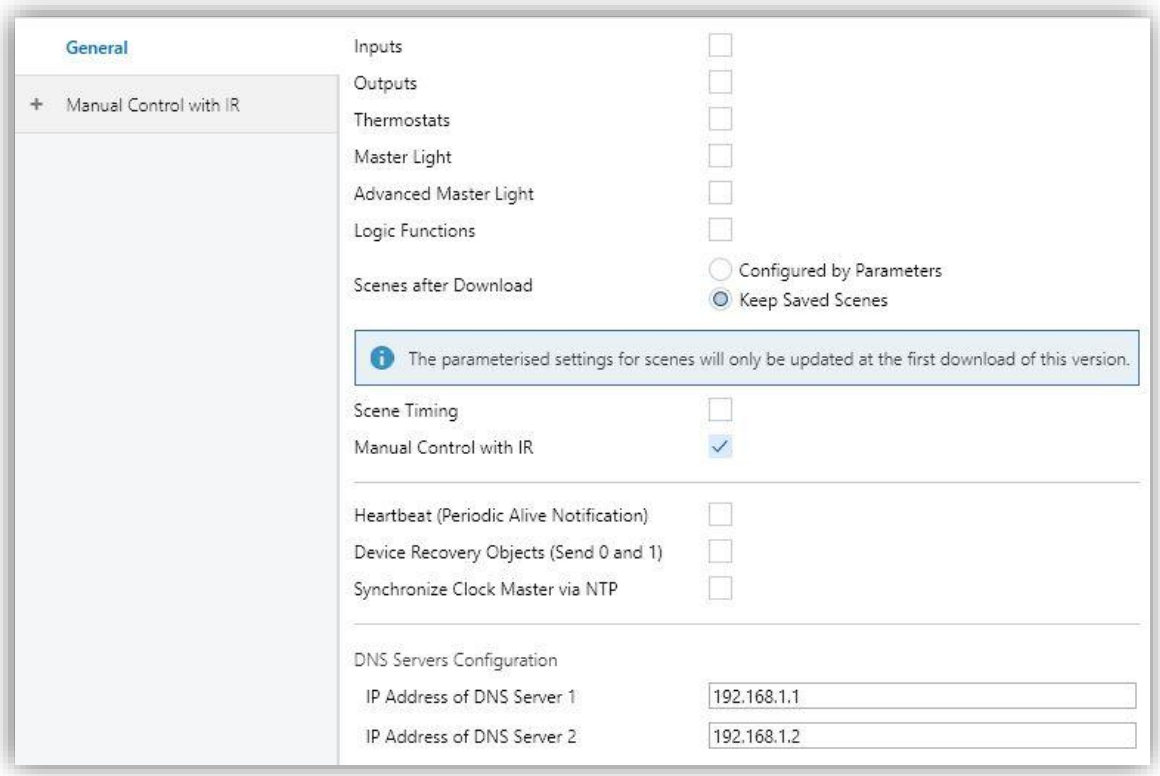

Figure 10. General screen

- **Inputs** [*disabled / enabled*]: enables or disables the “Inputs” tab on the left menu. See section 2.4 for more details.

- **Outputs** [*disabled / enabled*]: enables or disables the “Outputs” tab on the left menu. See section 2.5 for more details.

- **Thermostats** [*disabled / enabled*]: enables or disables the “Thermostats” tab on the left menu. See section 2.6 for more details.

- **Master Light** [*disabled / enabled*]: enables or disables the “Master Light” tab on the left menu. See section 2.7 for more details.

- **Logic Functions** [*disabled / enabled*]: enables or disables the "Logic Functions" tab on the left menu. See section 2.8 for more details.

- **Scene after Download** [*Configured by Parameters / Keep Saved Scenes*]: allows defining whether the value of the scenes is the configured by parameter or whether the previously saved value is kept after download.

  Note: *if "Keep Saved Scenes" option has been configured, but it is the first download of the device or a different version from the current one, the values configured by parameter will be adopted. If new scenes are added in successive downloads, it will be necessary to perform a download by checking the option "Configured by Parameters" to ensure the correct operation of these scenes.*

- **Scene Timing** [*disabled / enabled*]: enables or disables the "Scene Timing" tab on the left menu. See section 2.9 for more details.

- **Manual Control with IR** [*disabled / enabled*]: enables or disables the "Manual Control" tab on the left menu. See section 2.11 for more details.

- **Heartbeat (Periodic Alive Notification)** [*disabled / enabled*]: this parameter lets the integrator incorporate a one-bit object to the project ("**[Heartbeat] Object to Send '1'**") that will be sent periodically with value "1" to notify that the device is still working (*still alive*).

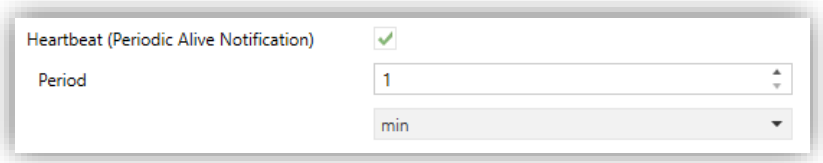

Figure 11. Heartbeat

  Note: *The first sending after download or bus failure takes place with a delay of up to 255 seconds, to prevent bus overload. The following sendings match the period set.*

- **Device Recovery Objects (Send 0 and 1)** [*disabled / enabled*]: this parameter lets the integrator activate two new communication objects ("**[Heartbeat] Device Recovery**"), which will be sent to the KNX bus with values "0" and "1" respectively whenever the device begins operation (for example, after a bus power failure). It is possible to parameterise a certain **delay** [*0…255*] to this sending.

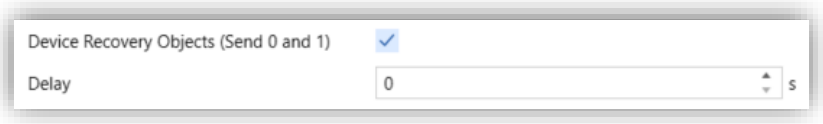

Figure 12. Sending of indication objects on bus voltage recovery

Note: *after download or bus failure, the sending takes place with a delay of up to 6,35 seconds plus the parameterised delay, to prevent bus overload.*

- **Synchronize Clock Master via NTP** [*disabled / enabled*]: enables or disables the "NTP" tab in the tree on the left. For more information, see section 2.10.

  Note: *This parameter must be enabled in the device that will be clock master so that there is only one clock master in the installation.*

- **DNS Servers Configuration:** numeric text fields to enter the IP address of two DNS servers:

  - **IP Address of DNS Server 1** and **2** [*192.168.1.1*, *192.168.1.2*].

    Note: *The connection to the DNS server is necessary to ensure the correct functioning of the NTP servers (see section 2.10). As long as there is no connection to a DNS server, the date and time information will not be synchronized.*

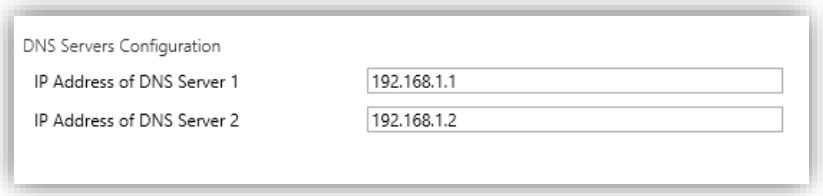

Figure 13. DNS Servers Configuration

2.4 INPUTS

ALLinBOX 1612 v3 / 88 v2 / 46 v2 / Hospitality v2 incorporates **12 / 8 / 6 / 6 analogue/digital inputs**. Each one has three possible configurations, which are outlined below.

2.4.1 BINARY INPUT

Configuration for the connection of a pushbutton, a switch/sensor or a pulse counter. Please refer to the "**Binary Inputs**" user manual, available under the product section at www.zennio.com.

2.4.2 TEMPERATURE PROBE

Configuration for connecting a 6.8k or 10k Ohms Zennio temperature probe, or a custom NTC probe. Please refer to the "**Temperature Probe**" user manual, available under the product section at www.zennio.com.

2.4.3 MOTION DETECTOR

Configuration for the connection of a motion detector. It is possible to connect motion detectors from Zennio. Please refer to the "**Motion Detector**" user manual, available under the product section at www.zennio.com, for detailed information about the functionality and the configuration of the related parameters.

2.5 OUTPUTS

In the case of the outputs, we will distinguish between the devices ALLinBOX 1612 v3 / 88 v2 / 46 v2 (explained in section 2.5.1) and the device ALLinBOX Hospitality v2 (explained in section 2.5.2).

2.5.1 ALLINBOX 1612 v3 / 88 v2 / 46 v2

ALLinBOX 1612 v3 / 88 v2 / 46 v2 incorporates **16 / 8 / 4 relay outputs**, each configurable as:

- **Individual binary output**, which provides an independent control of a load (up to 16 / 8 / 4 different loads can be controlled).

- **Shutter channel**, which enables the control of the motion of one blind (up to 8 / 4 / 2 blinds can be controlled).

- **Fan Coil modules**, to control fan coils fan and valves (up to 2 / 1 / 1[4] modules can be controlled).

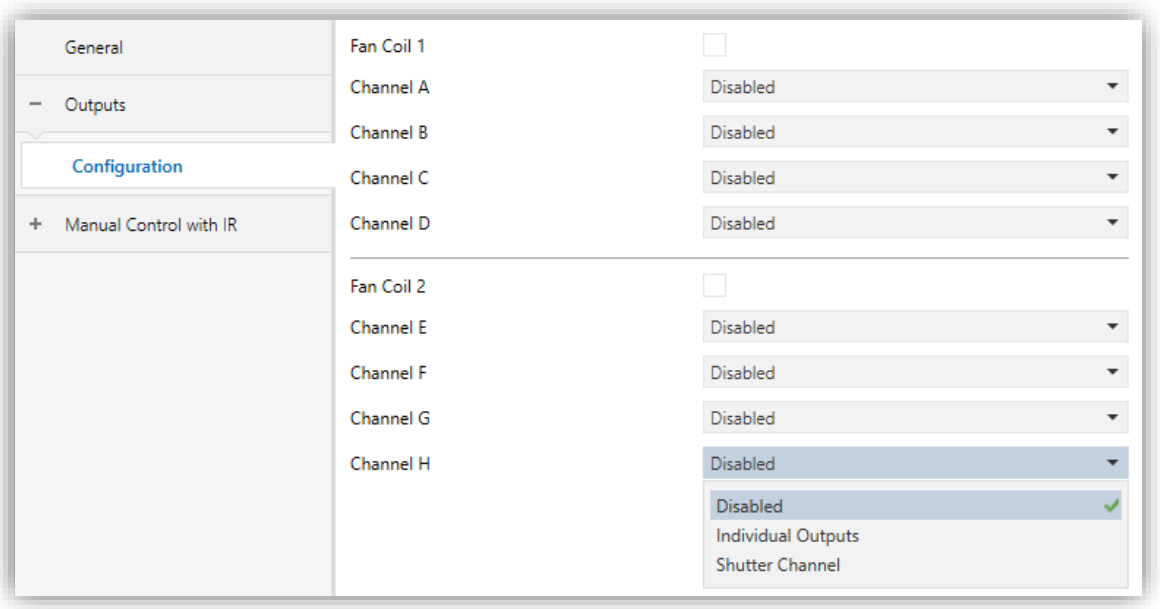

Figure 14. Outputs screen

Each channel can be configured through the drop-down list as two independent **binary outputs** or as a **shutter channel** (which makes use of both relays).

ALLinBOX incorporates **fan coil control modules**, which will be responsible for operating the relays that open and close the water pipe valves (either one three-point valve, one or up to two on-off valves depending on the ALLinBOX and its parameterisation), and the relays that set the fan speed level. The latter can be achieved through **relay accumulation** (more relays closed means a higher fan speed) or through **relay commutation** (one specific relay will be available per level), depending on the configuration. The relays distribution for the valves control is shown in the following table for every possible parameterisation and ALLinBOX type:

[4] Please note that ALLinBOX 46 v2, as it has fewer outputs, not all functions associated with the valves can be configured. See Table 3 for further details.

Fan coil	Number of pipes	Valve type	Output	Action	ALLinBOX		
					1612 v3	88 v2	46 v2
1	4	Todo / nada	B2	Cooling Valve	✓	✓	✗
			C1	Heating Valve	✓	✓	✗
		Tres puntos	B2	Opening Cooling Valve	✓	✓	✗
			C1	Closing Cooling Valve	✓	✓	✗
			C2	Opening Heating Valve	✓	✓	✗
			D1	Closing Heating Valve	✓	✓	✗
	2	Todo / nada	B2	Cooling and/or Heating Valve	✓	✓	✓
		Tres puntos	B2	Opening Valve for both modes	✓	✓	✗
			C1	Closing Valve for both modes	✓	✓	✗
2	4	Todo / nada	F2	Cooling Valve	✓	✗	✗
			G1	Heating Valve	✓	✗	✗
		Tres puntos	F2	Opening Cooling Valve	✓	✗	✗
			G1	Closing Cooling Valve	✓	✗	✗
			G2	Opening Heating Valve	✓	✗	✗
			H1	Closing Heating Valve	✓	✗	✗
	2	Todo / nada	F2	Cooling and/or Heating Valve	✓	✗	✗
		Tres puntos	F2	Opening Valve for both modes	✓	✗	✗
			G1	Closing Valve for both modes	✓	✗	✗

Table 3. Actions performed by the binary outputs associated to the valve control depending on ALLinBOX

For detailed information about the functionality and the configuration of the related parameters, please refer to the following specific manuals, all of them available under the ALLinBOX product section at the Zennio homepage (www.zennio.com):

- **Individual outputs.**
- **Shutter channels.**
- **'Relays' Fan coil.**

2.5.2 ALLINBOX Hospitality v2

ALLinBOX Hospitality v2 incorporates one block of relay outputs to control a **fan coil module** and one additional **individual binary output**.

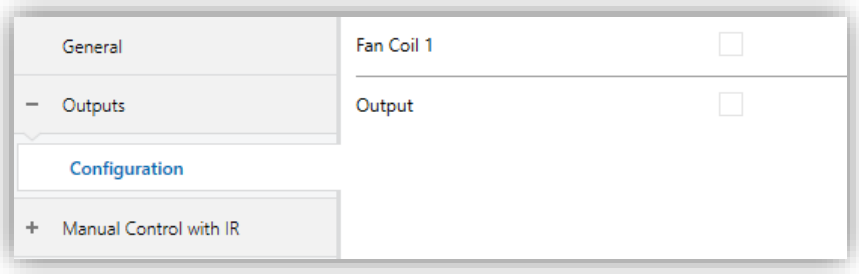

Figure 15. ALLinBOX Hospitality v2 outputs screen

The **fan coil module** is intended to operate the relay that open and close a water pipe valve (one on-off valve only), and the relays that set the fan speed level. The latter can be achieved through **relay accumulation** (more relays closed means a higher fan speed) or through **relay commutation** (one specific relay will be available per level), depending on the configuration.

The **individual output** provides an independent binary control of a load and offers many different options like timers, alarms, lock, etc.

For detailed information about the functionality and the configuration of the related parameters, please refer to the following specific manuals, all of them available under the ALLinBOX product section at the Zennio homepage (www.zennio.com):

- **Individual outputs.**
- **'Relays' Fan coil.**

2.6 THERMOSTATS

ALLinBOX 1612 v3 / 88 v2 / 46 v2 implements **4 standard** thermostats **and 4 Hospitality** thermostats, while **ALLinBOX Hospitality v2** implements **2 Hospitality thermostats.** Both thermostats can be enabled and configured independently. The use of the Hospitality thermostat is only recommended for hotel rooms.

Please refer to the specific "**Thermostat**" or "**Hospitality Thermostat**" user manual available under the ALLinBOX product section at the Zennio homepage (www.zennio.com) for detailed information about the functionality and the configuration of the related parameters.

2.7 MASTER LIGHT

This function brings the option to monitor the state of 2 master light modules up to 30 light sources (or even more, if the Master Light controls from multiple Zennio devices are linked together) or of any other elements whose state is transmitted through a binary object and, depending on those states, perform a ***master order*** every time a certain trigger signal (again, a binary value) is received through a specific object.

Such master order will consist in:

- A **general switch-off** order, if at least one of the up to thirty status objects is found to be on.
- A **courtesy switch-on** order, if none of the up to thirty status objects is found to be on.

Note that the above switch-off and switch-on orders are not necessarily a binary value being sent to the bus – it is up to the integrator the decision of what to send to the KNX bus in both cases: a shutter order, a thermostat setpoint or mode switch order, a constant value, a scene… Only the trigger object and the twelve status objects are required to be binary (on/off).

The most typical scenario for this Master Light control would be a hotel room with a master pushbutton next to the door. When leaving the room, the guest will have the possibility of pressing on the master pushbutton and make all the lamps turn off together.

Afterwards, back on the room and with all the lamps off, pressing on the same master pushbutton will only make a particular lamp turn on (e.g., the closest lamp to the door) – this is the courtesy switch-on.

Besides, it is possible to concatenate two or more Master Light modules by means of a specific communication object which represents the general state of the light sources of each module. Thereby, it is possible to expand the number of light sources by considering the general state of one module as an additional light source for another.

ETS PARAMETERISATION

Once the Master Light function has been enabled, a specific tab will be included in the menu on the left. This new parameter screen () contains the following options:

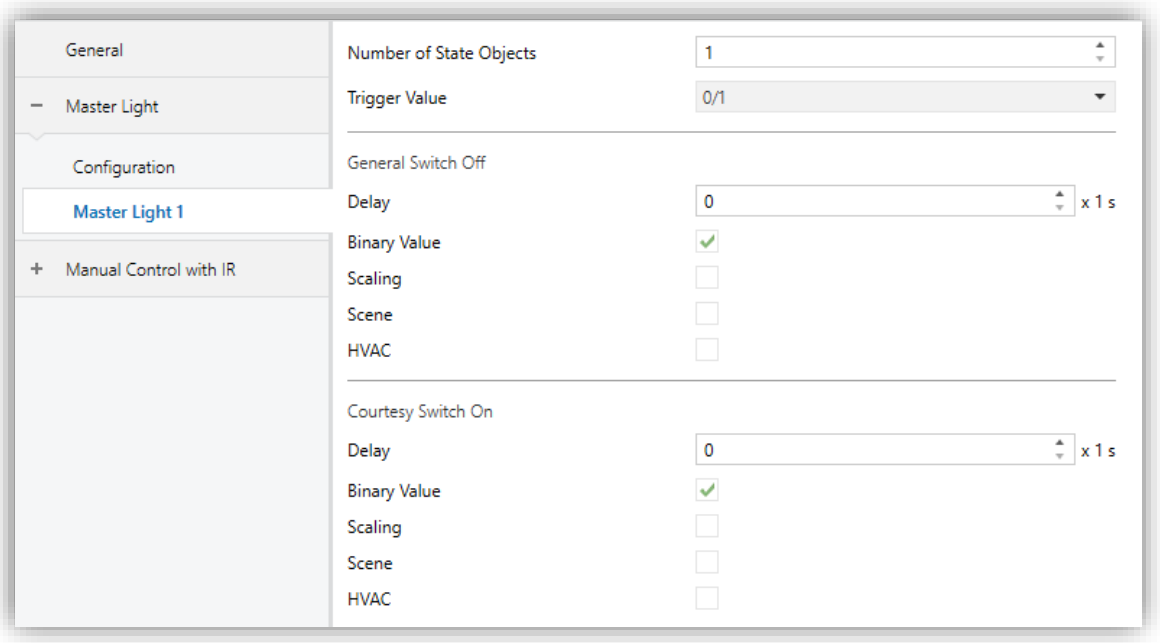

Figure 16. Master Light

- **Number of State Objects** [*1…30*]: defines the number of 1-bit status objects required. These objects are called "**[ML] Status Object *n***".

  In addition, the general status object ("**[ML] General status**") will always be available. It will be sent to the bus with a value of "1" whenever there is at least one of the above state objects with such value. Otherwise (i.e., if none of them has a value of "1"), it will be sent with a value of "0".

- **Trigger Value** [*0 / 1 / 0/1*]: sets the value that will trigger, when received through "**[ML] Trigger**", the master action (the general switch-off or the courtesy switch-on).

- **General Switch-Off**.

  - **Delay** [*0…255*] [*x 1 s*]: defines a certain delay (once the trigger has been received) before the execution of the general switch-off.

  - **Binary Value** [*disabled / enabled*]: if checked object "**[ML] General Switch-off: Binary Object**" will be enabled, which will send one "0" whenever the general switch-off takes off.

  - **Scaling** [*disabled / enabled*]: if checked object "**[ML] General Switch-off: Scaling**" will be enabled, which will send a percentage value (configurable in **Value** [*0…100*]) whenever the general switch-off takes off.

- **Scene** [*disabled / enabled*]: if checked object "**[ML] General Switch-off: Scene**" will be enabled, which will send a scene run / save order (configurable in **Action** [*Run / Save*] and **Scene Number** [*1…64*]) whenever the general switch-off takes off

- **HVAC** [*disabled / enabled*]: if checked, object "**[ML] General Switch-off: HVAC mode**" will be enabled, which will send an HVAC thermostat mode value (configurable in **Value** [*Auto / Comfort / Standby / Economy / Building Protection*) whenever the general switch-off takes off

  Note: *the above options are not mutually exclusive; it is possible to send values of different nature together*.

- **Courtesy Switch-On**:

  The parameters available here are entirely analogous to those already mentioned for General Switch-Off. However, in this case the names of the objects start with "**[ML] Courtesy Switch-On (…)**". On the other hand, sending **scene save orders** is not possible for the courtesy switch-on (only orders to play scenes are allowed).

  Note: *object "**[ML] Courtesy Switch-On: Binary Object**" sends the value "1" (when the courtesy switch-on takes place), in contrast to object "**[ML] General Switch-Off: Binary Object**", which sends the value "0" (during the general switch-off, as explained above)*.

2.8 LOGIC FUNCTIONS

This module makes it possible to perform numeric and binary operations to incoming values received from the KNX bus, and to send the results through other communication objects specifically enabled for this purpose.

ALLinBOX can implement **up to 20 different and independent functions**, each of them entirely customisable and consisting of **up to 4 consecutive operations each**.

The execution of each function can depend on a configurable **condition**, which will be evaluated every time the function is **triggered** through specific, parameterisable communication objects. The result after executing the operations of the function can also be evaluated according to certain **conditions** and afterwards sent (or not) to the

KNX bus, which can be done every time the function is executed, periodically or only when the result differs from the last one.

Please refer to the "**Logic Functions**" user manual available under the ALLinBOX product section at the Zennio homepage (www.zennio.com) for detailed information about the functionality and the configuration of the related parameters.

2.9 SCENE TIMING

The scene timing enables the **imposition of delays over the scenes** of the outputs. These delays, defined in parameters, are applied on the execution of one or more scenes that may have been configured.

Please bear in mind that, as multiple delayed scenes can be configured for each individual output / shutter channel / fan coil module, in case of receiving an order to execute one of them when **a previous temporisation is still pending** for that output / channel / module, such temporisation will be interrupted and only the delay and the action of the new scene will be executed.

ETS PARAMETERISATION

Prior to setting the **scene timing**, it is necessary to have one or more scenes configured in some of the outputs. When entering the Configuration window under Scene Timing, all configured scenes will be listed, together with a few checkboxes to select which of them need to be temporised, as shown in the figure:

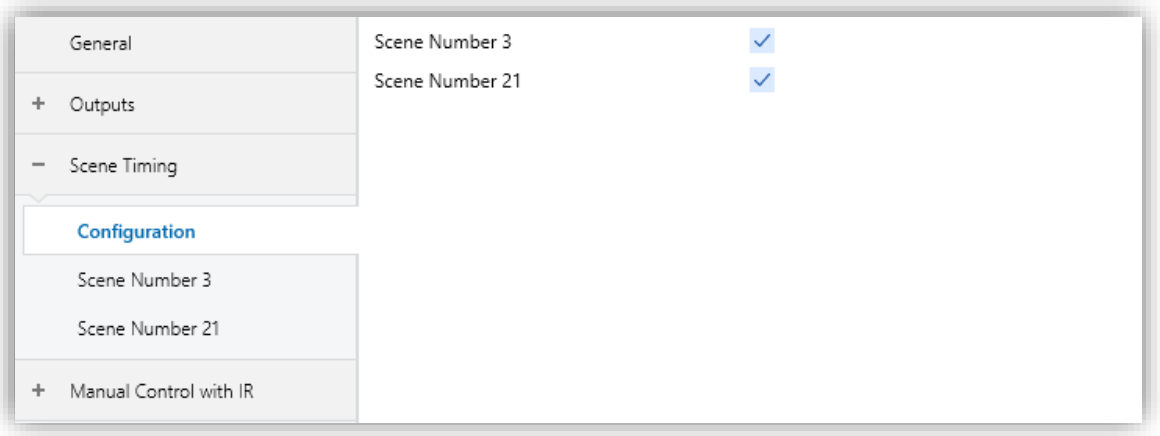

Figure 17. Scene Timing

Enabling a certain **Scene Number *n*** [*disabled / enabled*] brings a new tab with such name to the menu on the left, from which it is possible to configure the temporisation of that scene for each of the outputs where it has been configured.

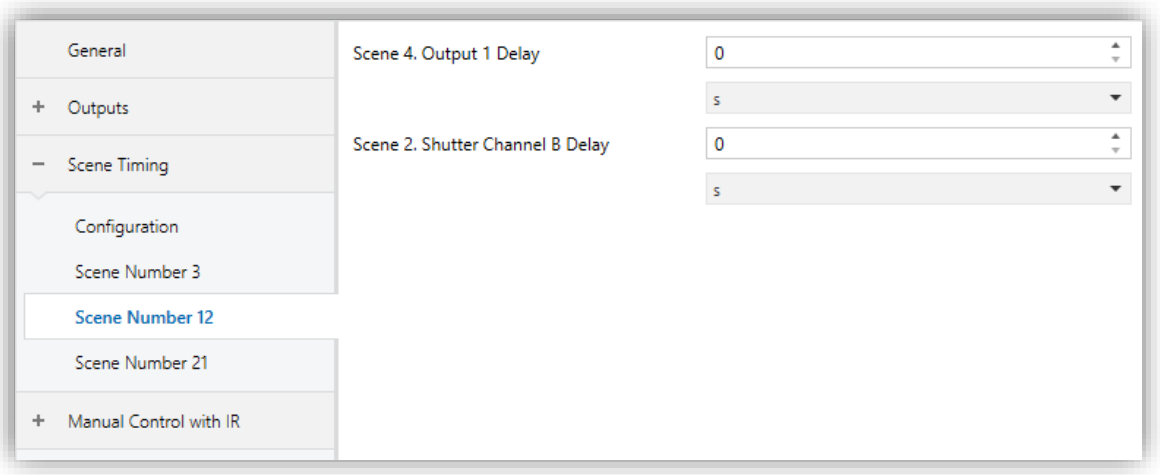

Figure 18. Configuring Scene Timing

Therefore, parameter **Scene *n*. Z Delay** [*0…3600*][*s*] [*0…1440*][*min*] [*0…24*][*h*] defines the delay that will be applied to the action defined in Z (being Z a specific individual output, shutter channel or fan coil module) for the execution of scene m.

Note: *In the configuration of a scene of an output / shutter channel / fan coil module it is possible to parameterise several scenes with the same scene number. This means that several delay parameters associated with the same output appear in the configuration tab of the delays of that scene. With this parameterisation, the behaviour will be as follows: the action and delay of the first scene parameterised with the same scene number will always prevail, where the highest priority scene is 1 (the first in the scene configuration tab) and the lowest priority is the last.*

2.10 NTP

ALLinBOX can be configured as the installation master clock, it will send the date and time information to the rest of the devices of the installation. This information will be obtained from an NTP server.

Please refer to the specific manual "**NTP Clock**" (available under the ALLinBOX product section at Zennio homepage, www.zennio.com) for detailed information about the functionality and the configuration of the involved parameters.

2.11 MANUAL CONTROL THROUGH IR REMOTE CONTROL

ALLinBOX enables the manually switching the state of its output relays through the pushbuttons of an IR remote control. A specific pushbutton on the IR remote control is therefore available per output.

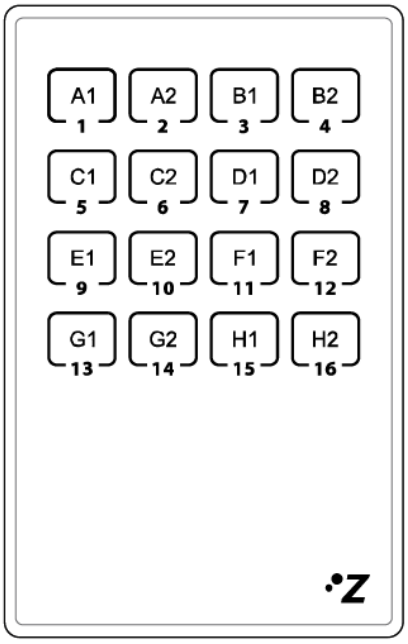

Figure 19. IR Remote Control

Manual operation has the mode, named as **Test On Mode** (for testing purposes during the configuration of the device). From ETS it will be possible to configure if the manual control will be available. Moreover, it is possible to enable a specific binary object for locking and unlocking the manual control in runtime.

Note:

- *Switching to the **Test On mode** (unless disabled by parameter) needs to be done by long pressing the Prog/Test button (for at least three seconds), until the LED is no longer red and turns yellow. From that moment, once the button is released, the LED light will remain green to confirm that the device is in Test On mode. After that, an additional press will turn the LED yellow and then off, once the button is released. This way, the device leaves the Test On mode. Note that it will also leave this mode if a power failure takes place*.

Test On Mode

After entering the Test On mode, it will only be possible to control the outputs through the IR remote control pushbuttons. Orders received through communication objects will be ignored, with independence of the channel or the output they are addressed to.

In order not to interfere with the normal operation of the device, and because the Test On mode is only intended to be used for testing purpose, when leaving the Test On mode **the device will recover its outputs to the previous state.**

Depending on the output parameterisation, the reactions to the button presses will differ.

- **Individual output**: short or long pressing the button will commute the on-off state of the relay.
- **Shutter channel**[5]: pressing the button will make the shutter drive move upward or downward (depending on the button) until the button is released again, thus ignoring the position of the shutter and the parameterised times.

  Note: *after leaving the Test On mode, the status objects will recover the values they had prior to entering Test On. As the device is never aware of the actual position of the shutter (as the shutter drive does not provide any feedback), these values may not show the real position. This can be solved by performing a complete move-up or move-down order, or by calibrating the shutter position in the Test On mode until it matches the status objects.*

- **Fan Coil module**: the behaviour will be different for the buttons identified as fan and the identified as valve (see Table 3):

  - **Fan**: a short or long press will switch the relays to set the selected speed, unless it matches the current speed – in such case all the relays will be opened (speed 0).

    Note: *the behaviour of the relays will depend on the parameterisation, i.e., on the **number of fan speeds**, on the **delay** between switches and on whether the control type is **accumulation** or **switching**.*

  - **Valve**: a short or long press will switch the current status of the relay and therefore of the valve.

[5] In the case of ALLinBOX Hospitality v2, it is not possible to configure the outputs as a shutter channel, so what it is explained in this section does not apply.

- **Disabled output**: short and long presses will switch the state of the corresponding relay. In case this consists in closing the relay, then the remaining relays of its block will open, for safety reasons.

As described previously if the device is in Test On mode, any command sent from the KNX bus to the actuator will not affect the outputs and no status objects will be sent (only periodically timed objects such as Heartbeat or logic functions will continue to be sent to the bus) while Test ON mode is active. However, in the case of the "Alarm" and "Block" objects, even though in Test ON mode the actions received by each object are not taken into account, the evaluation of their status is carried out when exiting this mode; so that any change in the alarm status or blocking of the outputs while Test ON mode is active is taken into account when exiting this mode and is updated with the last status detected.

Important: *the device is factory delivered with all the output disabled, and with manual control Test On mode enabled*.

ETS PARAMETERISATION

When the option "**Manual Control with IR**" is enabled in the "General" screen (see section 2.2), a tab will be shown in the tree on the left.

The only two parameters are:

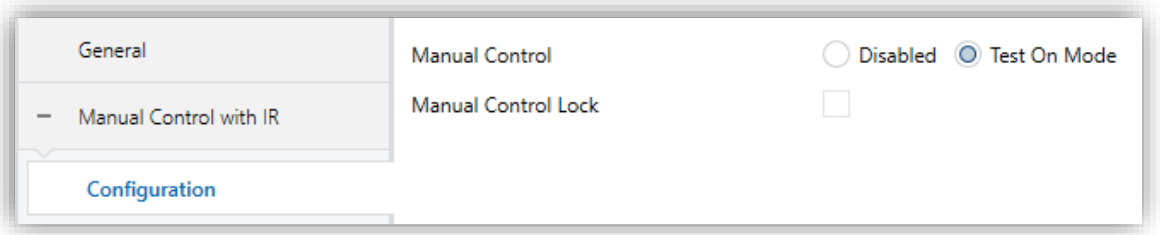

Figure 20. Manual Control

- **Manual Control** [*Disabled / Test On Mode*]: depending on the selection, the device will permit using the manual control under the Test On or have it disabled. Note that, as stated before, using Test On mode does require long pressing the Prog/Test button.

- **Manual Lock Control** [*disabled / enabled*]: unless the above parameter has been "Disabled", the Lock Manual Control parameter provides an optional procedure for locking the manual control in runtime.

When this checkbox is enabled, object "**Manual Control Lock**" turns visible, as well as two more parameters:

- **Value** [*0 = Lock; 1 = Unlock / 0 = Unlock; 1 = Lock*]: defines whether the manual control lock/unlock should take place respectively upon the reception (through the aforementioned object) of values "0" and "1", or the opposite.
- **Initialization** [*Unlocked / Locked / Last Value*]: sets how the manual control should remain after the device start-up (after an ETS download or a power failure). If "Last Value" is selected, on the very first start-up, this will be "Unlocked").

ANNEX I. COMMUNICATION OBJECTS

- **"Functional range**" shows the values that, with independence of any other values permitted by the bus according to the object size, may be of any use or have a particular meaning because of the specifications or restrictions from both the KNX standard or the application program itself.
- **ALLinBOX Hospitality v2**: This device of the ALLinBOX family does not have the shutter channel nor standard thermostat functionalities, therefore it will not be possible to have the objects associated with these functionalities. These objects are those whose name begin with "[Cx]" in the case of blinds and shutter actuators and "[Tx]" for the standard thermostat.

Number	Size	I/O	Flags	Data type (DPT)	Functional Range	Name	Function
1	1 Bit	I	C - W - -	DPT_Enable	0/1	Lock Manual Control	0 = Lock; 1 = Unlock
	1 Bit	I	C - W - -	DPT_Enable	0/1	Lock Manual Control	0 = Unlock; 1 = Lock
2	1 Bit	O	C R - T -	DPT_Trigger	0/1	[Heartbeat] Object to Send '1'	Sending of '1' Periodically
3	1 Bit	O	C R - T -	DPT_Trigger	0/1	[Heartbeat] Device Recovery	Send 0
4	1 Bit	O	C R - T -	DPT_Trigger	0/1	[Heartbeat] Device Recovery	Send 1
5, 16, 27, 38, 49, 60, 71, 82, 93, 104, 115, 126, 137, 148, 159, 170	1 Byte	I	C - W - -	DPT_SceneControl	0-63; 128-191	[Ox] Scenes	0 – 63 (Execute 1 – 64); 128 – 191 (Save 1 – 64)
6, 17, 28, 39, 50, 61, 72, 83, 94, 105, 116, 127, 138, 149, 160, 171	1 Bit	I	C - W - -	DPT_BinaryValue	0/1	[Ox] On/Off	N.O. (0 = Open Relay; 1 = Close Relay)
	1 Bit	I	C - W - -	DPT_BinaryValue	0/1	[Ox] On/Off	N.C. (0=Close Relay; 1= Open Relay)
7, 18, 29, 40, 51, 62, 73, 84, 95, 106, 117, 128, 139, 150, 161, 172	1 Bit	O	C R - T -	DPT_BinaryValue	0/1	[Ox] On/Off (Status)	0 = Output Off; 1 = Output On
8, 19, 30, 41, 52, 63, 74, 85, 96, 107, 118, 129, 140, 151, 162, 173	1 Bit	I	C - W - -	DPT_Enable	0/1	[Ox] Lock	0 = Unlock; 1 = Lock
9, 20, 31, 42, 53, 64, 75, 86, 97, 108, 119, 130, 141, 152, 163, 174	1 Bit	I	C - W - -	DPT_Start	0/1	[Ox] Timer	0 = Switch Off; 1 = Switch On
10, 21, 32, 43, 54, 65, 76, 87, 98, 109, 120, 131, 142, 153, 164, 175	1 Bit	I	C - W - -	DPT_Start	0/1	[Ox] Flashing	0 = Stop; 1 = Start
11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132, 143, 154, 165, 176	1 Bit	I	C - W - -	DPT_Alarm	0/1	[Ox] Alarm	0 = Normal; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[Ox] Alarm	0=Alarm; 1=Normal
12, 23, 34, 45, 56, 67, 78, 89, 100, 111, 122, 133, 144, 155, 166, 177	1 Bit	I	C - W - -	DPT_Ack	0/1	[Ox] Unfreeze Alarm	Alarm = 0 + Unfreeze = 1 => End Alarm
13, 24, 35, 46, 57, 68, 79, 90, 101, 112, 123, 134, 145, 156, 167, 178	1 Bit	O	C R - T -	DPT_State	0/1	[Ox] Warning Time (Status)	0 = Normal; 1 = Warning
14, 25, 36, 47, 58, 69, 80, 91, 102, 113, 124, 135, 146, 157, 168, 179	4 Bytes	I/O	C R W T -	DPT_LongDeltaTimeSec	-2147483648 - 2147483647	[Ox] Operating Time (s)	Time in Seconds
15, 26, 37, 48, 59, 70, 81, 92, 103, 114, 125, 136, 147, 158, 169, 180	2 Bytes	I/O	C R W T -	DPT_TimePeriodHrs	0 - 65535	[Ox] Operating Time (h)	Time in Hours
181	1 Byte	I	C - W - -	DPT_SceneControl	0-63; 128-191	[Shutter] Scenes	0 - 63 (Execute 1 - 64); 128 - 191 (Save 1 - 64)

182	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[Shutter] Outdoor Temperature Input	-30°C ... 60°C
183	1 Byte	I	C - W T U	DPT_Angle		[Shutter] Azimuth	Azimuth External Reference [0° ... 360°]
184	2 Bytes	I	C - W T U	DPT_Rotation_Angle		[Shutter] Elevation	Elevation External Reference [-90° ... 90°]
185, 226, 267, 308, 349, 390, 431, 472	1 Bit	I	C - W - -	DPT_UpDown	0/1	[Cx] Shutter - Move Control	0 = Up; 1 = Down
186, 227, 268, 309, 350, 391, 432, 473	1 Bit	I	C - W - -	DPT_Step	0/1	[Cx] Shutter - Stop/Step Control	0 = Stop/Step Up; 1 = Stop/Step Down
	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Cx] Shutter - Stop Control	0/1 = Stop
187, 228, 269, 310, 351, 392, 433, 474	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Cx] Shutter - Switched Control	0/1 = Up, Down or Stop, Depending on the Last Move
188, 229, 270, 311, 352, 393, 434, 475	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Cx] Shutter - Switched Control Up	0/1 = Up or Stop, Depending on the Last Move
189, 230, 271, 312, 353, 394, 435, 476	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Cx] Shutter - Switched Control Down	0/1 = Down or Stop, Depending on the Last Move
190, 231, 272, 313, 354, 395, 436, 477	1 Bit	I	C - W - -	DPT_Enable	0/1	[Cx] Shutter - Lock	0 = Unlock; 1 = Lock
191, 232, 273, 314, 355, 396, 437, 478	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Cx] Shutter - Percentage Control	0% = Top; 100% = Bottom
192, 233, 274, 315, 356, 397, 438, 479	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Cx] Shutter - Percentage Status	0% = Top; 100% = Bottom
193, 234, 275, 316, 357, 398, 439, 480	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Cx] Shutter - Slats Percentage Control	0% = Open; 100% = Closed
194, 235, 276, 317, 358, 399, 440, 481	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Cx] Shutter - Slats Percentage Status	0% = Open; 100% = Closed
195, 236, 277, 318, 359, 400, 441, 482	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Rising Relay Status	0 = Open; 1 = Closed
196, 237, 278, 319, 360, 401, 442, 483	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Lowering Relay Status	0 = Open; 1 = Closed
197, 238, 279, 320, 361, 402, 443, 484	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Move Status	0 = Stopped; 1 = Moving
198, 239, 280, 321, 362, 403, 444, 485	1 Bit	O	C R - T -	DPT_UpDown	0/1	[Cx] Shutter - Move Direction Status	0 = Upward; 1 = Downward
199, 240, 281, 322, 363, 404, 445, 486	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Totally Up Status	0 = Other Positions; 1 = Up
200, 241, 282, 323, 364, 405, 446, 487	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Totally Down Status	0 = Other Positions; 1 = Down
201, 242, 283, 324, 365, 406, 447, 488	1 Bit	I	C - W - -	DPT_Switch	0/1	[Cx] Shutter - Auto: On/Off	0 = On; 1 = Off
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Cx] Shutter - Auto: On/Off	0 = Off; 1 = On
202, 243, 284, 325, 366, 407, 448, 489	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Auto: On/Off Status	0 = On; 1 = Off
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Cx] Shutter - Auto: On/Off Status	0 = Off; 1 = On
203, 244, 285, 326, 367, 408, 449, 490	1 Bit	I	C - W - -	DPT_UpDown	0/1	[Cx] Shutter - Auto: Move Control	0 = Up; 1 = Down

204, 245, 286, 327, 368, 409, 450, 491	1 Bit	I	C - W - -	DPT_Step	0/1	[Cx] Shutter - Auto: Stop/Step Control	0 = Stop/Step Up; 1 = Stop/Step Down
	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Cx] Shutter - Auto: Stop Control	0/1 = Stop
205, 246, 287, 328, 369, 410, 451, 492	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Cx] Shutter - Auto: Percentage Control	0% = Top; 100% = Bottom
206, 247, 288, 329, 370, 411, 452, 493	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Cx] Shutter - Auto: Slats Percentage Control	0% = Open; 100% = Closed
207, 248, 289, 330, 371, 412, 453, 494	1 Bit	I	C - W T U	DPT_Scene_AB	0/1	[Cx] Shutter - Sunshine/Shadow Input	0 = Sunshine; 1 = Shadow
	1 Bit	I	C - W T U	DPT_Scene_AB	0/1	[Cx] Shutter - Sunshine/Shadow Input	0 = Shadow; 1 = Sunshine
208, 249, 290, 331, 372, 413, 454, 495	2 Bytes	I	C - W T U	DPT_Value_Lux		[Cx] Shutter - Sunshine/Shadow Input	1 Lux ... 100.000 Lux
209, 250, 291, 332, 373, 414, 455, 496	1 Bit	I	C - W T U	DPT_Heat_Cool	0/1	[Cx] Shutter - Cooling/Heating	0 = Cooling; 1 = Heating
	1 Bit	I	C - W T U	DPT_Heat_Cool	0/1	[Cx] Shutter - Cooling/Heating	0 = Heating; 1 = Cooling
210, 251, 292, 333, 374, 415, 456, 497	1 Bit	I	C - W T U	DPT_Occupancy	0/1	[Cx] Shutter - Presence/No Presence	0 = No Presence; 1 = Presence
	1 Bit	I	C - W T U	DPT_Occupancy	0/1	[Cx] Shutter - Presence/No Presence	0 = Presence; 1 = No Presence
211, 212, 213, 214, 215, 216	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CA] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CA] Shutter - x	0 = Alarm; 1 = No Alarm
217, 258, 299, 340, 381, 422, 463, 504	1 Bit	I	C - W - -	DPT_Ack	0/1	[Cx] Shutter - Unfreeze Alarm	Alarm1 = Alarm2 = ... = Alarm6 = No Alarm + Unfreeze (1) => End Alarm
218, 259, 300, 341, 382, 423, 464, 505	1 Bit	O	C R - T -	DPT_Alarm	0/1	[Cx] Shutter - General Alarm Status	0 = No Alarm; 1 = Alarm
	1 Bit	O	C R - T -	DPT_Alarm	0/1	[Cx] Shutter - General Alarm Status	0 = Alarm; 1 = No Alarm
219, 260, 301, 342, 383, 424, 465, 506	1 Bit	I	C - W - -	DPT_Scene_AB	0/1	[Cx] Shutter - Move Control (Reversed)	0 = Down; 1 = Up
220, 261, 302, 343, 384, 425, 466, 507	1 Bit	I	C - W - -	DPT_Ack	0/1	[Cx] Shutter - Direct Positioning 1	0 = No Action; 1 = Go to Position
221, 262, 303, 344, 385, 426, 467, 508	1 Bit	I	C - W - -	DPT_Ack	0/1	[Cx] Shutter - Direct Positioning 2	0 = No Action; 1 = Go to Position
222, 263, 304, 345, 386, 427, 468, 509	1 Bit	I	C - W - -	DPT_Ack	0/1	[Cx] Shutter - Direct Positioning 1 (Save)	0 = No Action; 1 = Save Current Position
223, 264, 305, 346, 387, 428, 469, 510	1 Bit	I	C - W - -	DPT_Ack	0/1	[Cx] Shutter - Direct Positioning 2 (Save)	0 = No Action; 1 = Save Current Position
224, 265, 306, 347, 388, 429, 470, 511	1 Bit	O	C R - T -	DPT_BinaryValue	0/1	[Cx] Shutter - External Contact - Stop Movement	0 = Open Relay; 1 = Close Relay
225, 266, 307, 348, 389, 430, 471, 512	1 Bit	I	C - W - -	DPT_Start	0/1	[Cx] Shutter - Start/Stop Rise and Fall Times Measurement	0 = Stop; 1 = Start
	1 Bit	I	C - W - -	DPT_Start	0/1	[Cx] Shutter - Start/Stop Rise and Fall Times Measurement	0 = Start; 1 = Stop
252, 253, 254, 255, 256, 257	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CB] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CB] Shutter - x	0 = Alarm; 1 = No Alarm
293, 294, 295, 296, 297, 298	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CC] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CC] Shutter - x	0 = Alarm; 1 = No Alarm
334, 335, 336, 337, 338, 339	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CD] Shutter - x	0 = No Alarm; 1 = Alarm

	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CD] Shutter - x	0 = Alarm; 1 = No Alarm
375, 376, 377, 378, 379, 380	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CE] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CE] Shutter - x	0 = Alarm; 1 = No Alarm
416, 417, 418, 419, 420, 421	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CF] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CF] Shutter - x	0 = Alarm; 1 = No Alarm
457, 458, 459, 460, 461, 462	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CG] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CG] Shutter - x	0 = Alarm; 1 = No Alarm
498, 499, 500, 501, 502, 503	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CH] Shutter - x	0 = No Alarm; 1 = Alarm
	1 Bit	I	C - W - -	DPT_Alarm	0/1	[CH] Shutter - x	0 = Alarm; 1 = No Alarm
513	1 Byte	I	C - W - -	DPT_SceneControl	0-63; 128-191	[Fan Coil] Scenes	0 - 63 (Execute 1 - 64); 128 - 191 (Save 1 - 64)
514, 547	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] On/Off	0 = Off; 1 = On
515, 548	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] On/Off (Status)	0 = Off; 1 = On
516, 549	1 Bit	I	C - W - U	DPT_Heat_Cool	0/1	[FCx] Mode	0 = Cool; 1 = Heat
517, 550	1 Bit	O	C R - T -	DPT_Heat_Cool	0/1	[FCx] Mode (Status)	0 = Cool; 1 = Heat
518, 551	1 Bit	I	C - W - U	DPT_Enable	0/1	[FCx] Fan: Manual/Automatic	0 = Automatic; 1 = Manual
	1 Bit	I	C - W - U	DPT_Enable	0/1	[FCx] Fan: Manual/Automatic	0 = Manual; 1 = Automatic
519, 552	1 Bit	O	C R - T -	DPT_Enable	0/1	[FCx] Fan: Manual/Automatic (Status)	0 = Automatic; 1 = Manual
	1 Bit	O	C R - T -	DPT_Enable	0/1	[FCx] Fan: Manual/Automatic (Status)	0 = Manual; 1 = Automatic
520, 553	1 Bit	I	C - W - U	DPT_Step	0/1	[FCx] Manual Fan: Step Control	0 = Down; 1 = Up
521, 554	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Manual Fan: Speed 0	0 = Off; 1 = On
522, 555	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Manual Fan: Speed 1	0 = Off; 1 = On
523, 556	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Manual Fan: Speed 2	0 = Off; 1 = On
524, 557	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Manual Fan: Speed 3	0 = Off; 1 = On
525, 558	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Fan: Speed 0 (Status)	0 = Off; 1 = On
526, 559	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Fan: Speed 1 (Status)	0 = Off; 1 = On
527, 560	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Fan: Speed 2 (Status)	0 = Off; 1 = On
528, 561	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Fan: Speed 3 (Status)	0 = Off; 1 = On
529, 562	1 Byte	I	C - W - U	DPT_Fan_Stage	0 - 255	[FCx] Manual Fan: Enumeration Control	S0 = 0; S1 = 1; S2 = 2; S3 = 3
	1 Byte	I	C - W - U	DPT_Fan_Stage	0 - 255	[FCx] Manual Fan: Enumeration Control	S0 = 0; S1 = 1; S2 = 2
	1 Byte	I	C - W - U	DPT_Fan_Stage	0 - 255	[FCx] Manual Fan: Enumeration Control	S0 = 0; S1 = 1
530, 563	1 Byte	O	C R - T -	DPT_Fan_Stage	0 - 255	[FCx] Fan: Speed Enumeration (Status)	S0 = 0; S1 = 1; S2 = 2; S3 = 3
	1 Byte	O	C R - T -	DPT_Fan_Stage	0 - 255	[FCx] Fan: Speed Enumeration (Status)	S0 = 0; S1 = 1; S2 = 2
	1 Byte	O	C R - T -	DPT_Fan_Stage	0 - 255	[FCx] Fan: Speed Enumeration (Status)	S0 = 0; S1 = 1

531, 564	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Manual Fan: Percentage Control	S0 = 0%; S1 = 0,4-33,3%; S2 = 33,7-66,7%; S3 = 67,1-100%
	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Manual Fan: Percentage Control	S0 = 0%; S1 = 1-50%; S2 = 51-100%
	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Manual Fan: Percentage Control	S0 = 0%; S1 = 1-100%
532, 565	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Fan: Speed Percentage (Status)	S0 = 0%; S1 = 33,3%; S2 = 66,6%; S3 = 100%
	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Fan: Speed Percentage (Status)	S0 = 0%; S1 = 1-50%; S2 = 51-100%
	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Fan: Speed Percentage (Status)	S0 = 0%; S1 = 1-100%
533, 566	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Cooling Fan: Continuous Control	0 - 100%
	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Cooling Valve: PI Control (Continuous)	0 - 100%
534, 567	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Heating Fan: Continuous Control	0 - 100%
	1 Byte	I	C - W - U	DPT_Scaling	0% - 100%	[FCx] Heating Valve: PI Control (Continuous)	0 - 100%
535, 568	1 Bit	I	C - W - U	DPT_OpenClose	0/1	[FCx] Cooling Valve: Control Variable (1 bit)	0 = Open Valve; 1 = Close Valve
	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Cooling Valve: Control Variable (1 bit)	0 = Close Valve; 1 = Open Valve
536, 569	1 Bit	I	C - W - U	DPT_OpenClose	0/1	[FCx] Heating Valve: Control Variable (1 bit)	0 = Open Valve; 1 = Close Valve
	1 Bit	I	C - W - U	DPT_Switch	0/1	[FCx] Heating Valve: Control Variable (1 bit)	0 = Close Valve; 1 = Open Valve
537, 570	1 Bit	O	C R - T -	DPT_OpenClose	0/1	[FCx] Cooling Valve (Status)	0 = Open; 1 = Closed
	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Cooling Valve (Status)	0 = Closed; 1 = Open
	1 Bit	O	C R - T -	DPT_OpenClose	0/1	[FCx] Valve (Status)	0 = Open; 1 = Closed
	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Valve (Status)	0 = Closed; 1 = Open
538, 571	1 Bit	O	C R - T -	DPT_OpenClose	0/1	[FCx] Heating Valve (Status)	0 = Open; 1 = Closed
	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Heating Valve (Status)	0 = Closed; 1 = Open
539, 572	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Cooling Valve: Anti-Seize Protection (Status)	0 = Not Active; 1 = Active
	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Valve: Anti-Seize Protection (Status)	0 = Not Active; 1 = Active
540, 573	1 Bit	O	C R - T -	DPT_Switch	0/1	[FCx] Heating Valve: Anti-Seize Protection (Status)	0 = Not Active; 1 = Active
541, 574	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Valve (Status)	0 - 100%
	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Cooling Valve (Status)	0 - 100%
542, 575	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[FCx] Heating Valve (Status)	0 - 100%
543, 576	1 Bit	O	C R - T -	DPT_Bool	0/1	[FCx] Control Value - Error	0 = No Error; 1 = Error

544, 577	2 Bytes	I	C - W - U	DPT_Value_Temp	-273.00º - 670433.28º	[FCx] Ambient Temperature	Ambient Temperature
545, 578	2 Bytes	I	C - W - U	DPT_Value_Temp	-273.00º - 670433.28º	[FCx] Setpoint Temperature	Setpoint Temperature
546, 579	2 Bytes	I/O	C R W T U	DPT_TimePeriodMin	0 - 65535	[FCx] Duration of Manual Control	0 = Endless; 1 - 1440 min
	2 Bytes	I/O	C R W T U	DPT_TimePeriodHrs	0 - 65535	[FCx] Duration of Manual Control	0 = Endless; 1 - 24 h
580, 589, 598, 607, 616, 625, 634, 643, 652, 661, 670, 679	1 Bit	I	C - W - -	DPT_Enable	0/1	[Ix] Input Lock	0 = Unlock; 1 = Lock
581, 590, 599, 608, 617, 626, 635, 644, 653, 662, 671, 680	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Short Press] 0	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Short Press] 1	Sending of 1
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Short Press] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Short Press] Move Up Shutter	Sending of 0 (Up)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Short Press] Move Down Shutter	Sending of 1 (Down)
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Short Press] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Short Press] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Short Press] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Short Press] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Short Press] Brighter	Increase Brightness
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Short Press] Darker	Decrease Brightness
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Short Press] Brighter/Darker	Switch Bright/Dark
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Short Press] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Short Press] Light On/Off	0/1
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Short Press] Light Off	Sending of 0 (Off)
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Short Press] Run Scene	Sending of 0 - 63
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Short Press] Save Scene	Sending of 128 - 191
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Short Press] Constant Value (Integer)	0 - 255
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Short Press] Constant Value (Percentage)	0% - 100%
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Short Press] Constant Value (Integer)	0 - 65535
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Short Press] Constant Value (Float)	Float Value
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 0	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 1	Sending of 1

	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Rising Edge] Move Up Shutter	Sending of 0 (Up)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Rising Edge] Move Down Shutter	Sending of 1 (Down)
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Rising Edge] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Rising Edge] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Rising Edge] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Rising Edge] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] Light Off	Sending of 0 (Off)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] Light On/Off	0/1
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Rising Edge] Brighter	Increase Brightness
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Rising Edge] Darker	Decrease Brightness
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Rising Edge] Brighter/Darker	Switch Bright/Dark
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Switch/Sensor] [Rising Edge] Run Scene	Sending of 0 - 63
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Switch/Sensor] [Rising Edge] Save Scene	Sending of 128 - 191
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Switch/Sensor] [Rising Edge] Constant Value (Integer)	0 - 255
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Rising Edge] Constant Value (Percentage)	0% - 100%
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Switch/Sensor] [Rising Edge] Constant Value (Integer)	0 - 65535
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Switch/Sensor] [Rising Edge] Constant Value (Float)	Float Value
	1 Bit	O	C - - T -	DPT_Ack	0/1	[Ix] [Pulse Counter] Counter	Send 1
	1 Byte	O	C R - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Pulse Counter] Counter	Number of Pulses
	2 Bytes	O	C R - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Pulse Counter] Counter	Number of Pulses
	2 Bytes	O	C R - T -	DPT_Power	-671088.64 - 670433.28	[Ix] [Pulse Counter] Counter	Power (kW)

					kW		
	2 Bytes	O	C R - T -	DPT_Value_Volume_Flow		[Ix] [Pulse Counter] Counter	Flow (l/h)
	4 Bytes	O	C R - T -	DPT_Value_4_Ucount	0 - 4294967295	[Ix] [Pulse Counter] Counter	Number of Pulses
	4 Bytes	O	C R - T -	1.xxx	0/1	[Ix] [Pulse Counter] Counter	Flow Rate (m3/h)
	4 Bytes	O	C R - T -	DPT_ActiveEnergy	0 - 2147483647	[Ix] [Pulse Counter] Counter	Energy (Wh)
	4 Bytes	O	C R - T -	DPT_ActiveEnergy_kWh	0 - 2147483647	[Ix] [Pulse Counter] Counter	Energy (kWh)
	4 Bytes	O	C R - T -	DPT_Value_Power	-3.4E+38 W - 3.4E+38 W	[Ix] [Pulse Counter] Counter	Power (W)
	4 Bytes	O	C R - T -	DPT_Value_Volume		[Ix] [Pulse Counter] Counter	Volume (m3)
582, 591, 600, 609, 618, 627, 636, 645, 654, 663, 672, 681	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Short Press] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Short Press] Dimming Status (Input)	0% - 100%
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Rising Edge] Dimming Status (Input)	0% - 100%
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Rising Edge] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 0/1 Switching (Immediate Object)	Switching 0/1
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 0 (Immediate Object)	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Rising Edge] 1 (Immediate Object)	Sending of 1
583, 592, 601, 610, 619, 628, 637, 646, 655, 664, 673, 682	1 Bit	I	C - W - -	DPT_Reset	0/1	[Ix] [Pulse Counter] Reset	0 = No Action; 1 = Reset
	1 Bit	O	C R - T -	DPT_Alarm	0/1	[Ix] [Switch/Sensor] Alarm: Breakdown or Sabotage	1 = Alarm; 0 = No Alarm
584, 593, 602, 611, 620, 629, 638, 647, 656, 665, 674, 683	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Double Press] 0	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Double Press] 1	Sending of 1
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Double Press] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Double Press] Move Up Shutter	Sending of 0 (Up)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Double Press] Move Down Shutter	Sending of 1 (Down)
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Double Press] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Double Press] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Double Press] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Double Press] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Double Press] Brighter	Increase Brightness
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.)	[Ix] [Double Press] Darker	Decrease Brightness

					0x9...0xF (Inc.)		
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Double Press] Brighter/Darker	Switch Bright/Dark
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Double Press] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Double Press] Light Off	Sending of 0 (Off)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Double Press] Light On/Off	0/1
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Double Press] Run Scene	Sending of 0 - 63
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Double Press] Save Scene	Sending of 128 - 191
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Double Press] Constant Value (Integer)	0 - 255
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Double Press] Constant Value (Percentage)	0% - 100%
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Double Press] Constant Value (Integer)	0 - 65535
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Double Press] Constant Value (Float)	Float Value
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 0	Sending of 0
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 1	Sending of 1
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Falling Edge] Brighter	Increase Brightness
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Falling Edge] Brighter/Darker	Switch Bright/Dark
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Switch/Sensor] [Falling Edge] Constant Value (Float)	Float Value
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Switch/Sensor] [Falling Edge] Constant Value (Integer)	0 - 65535
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Switch/Sensor] [Falling Edge] Constant Value (Integer)	0 - 255
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Falling Edge] Constant Value (Percentage)	0% - 100%
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Switch/Sensor] [Falling Edge] Darker	Decrease Brightness
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] Light Off	Sending of 0 (Off)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge]	0/1

						Light On/Off	
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Falling Edge] Move Down Shutter	Sending of 1 (Down)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Falling Edge] Move Up Shutter	Sending of 0 (Up)
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Switch/Sensor] [Falling Edge] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Switch/Sensor] [Falling Edge] Run Scene	Sending of 0 - 63
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Switch/Sensor] [Falling Edge] Save Scene	Sending of 128 - 191
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Falling Edge] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Falling Edge] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Switch/Sensor] [Falling Edge] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
585, 594, 603, 612, 621, 630, 639, 648, 657, 666, 675, 684	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Double Press] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Double Press] Dimming Status (Input)	0% - 100%
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Falling Edge] Dimming Status (Input)	0% - 100%
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Switch/Sensor] [Falling Edge] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 0 (Immediate Object)	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 1 (Immediate Object)	Sending of 1
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Switch/Sensor] [Falling Edge] 0/1 Switching (Immediate Object)	Switching 0/1
586, 595, 604, 613, 622, 631, 640, 649, 658, 667, 676, 685	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Long Press] 0	Sending of 0
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Long Press] 1	Sending of 1
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Long Press] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Long Press] Move Up Shutter	Sending of 0 (Up)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Long Press] Move Down Shutter	Sending of 1 (Down)
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Long Press] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Long Press] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Long Press] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Long Press] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)

	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Long Press] Brighter	Long Pr. -> Brighter; Release -> Stop
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Long Press] Darker	Long Pr. -> Darker; Release -> Stop
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Long Press] Brighter/Darker	Long Pr. -> Brighter/Darker; Release -> Stop
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Long Press] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Long Press] Light Off	Sending of 0 (Off)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Long Press] Light On/Off	0/1
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Long Press] Run Scene	Sending of 0 - 63
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Long Press] Save Scene	Sending of 128 - 191
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Long Press] Constant Value (Integer)	0 - 255
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Long Press] Constant Value (Percentage)	0% - 100%
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Long Press] Constant Value (Integer)	0 - 65535
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Long Press] Constant Value (Float)	Float Value
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Triple Press] Stop/Step Up Shutter	Sending of 0 (Stop/Step Up)
	1 Bit	I	C - W T -	DPT_Step	0/1	[Ix] [Triple Press] Stop/Step Shutter (Switched)	Switching of 0/1 (Stop/Step Up/Down)
	1 Bit	O	C - - T -	DPT_Step	0/1	[Ix] [Triple Press] Stop/Step Down Shutter	Sending of 1 (Stop/Step Down)
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Triple Press] Save Scene	Sending of 128 - 191
	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Ix] [Triple Press] Run Scene	Sending of 0 - 63
	1 Bit	I	C - W T -	DPT_UpDown	0/1	[Ix] [Triple Press] Move Up/Down Shutter	Switching 0/1 (Up/Down)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Triple Press] Move Up Shutter	Sending of 0 (Up)
	1 Bit	O	C - - T -	DPT_UpDown	0/1	[Ix] [Triple Press] Move Down Shutter	Sending of 1 (Down)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Triple Press] Light On/Off	0/1
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Triple Press] Light On	Sending of 1 (On)
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Triple Press] Light Off	Sending of 0 (Off)
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Triple Press] Darker	Decrease Brightness
	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[Ix] [Triple Press] Constant Value (Percentage)	0% - 100%
	2 Bytes	O	C - - T -	DPT_Value_2_Ucount	0 - 65535	[Ix] [Triple Press] Constant Value	0 - 65535

						(Integer)	
	1 Byte	O	C - - T -	DPT_Value_1_Ucount	0 - 255	[Ix] [Triple Press] Constant Value (Integer)	0 - 255
	2 Bytes	O	C - - T -	9.xxx	-671088.64 - 670433.28	[Ix] [Triple Press] Constant Value (Float)	Float Value
	4 Bit	I	C - W T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Triple Press] Brighter/Darker	Switch Bright/Dark
	4 Bit	O	C - - T -	DPT_Control_Dimming	0x0/0x8 (Stop) 0x1...0x7 (Dec.) 0x9...0xF (Inc.)	[Ix] [Triple Press] Brighter	Increase Brightness
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Triple Press] 1	Sending of 1
	1 Bit	I	C - W T -	DPT_Switch	0/1	[Ix] [Triple Press] 0/1 Switching	Switching 0/1
	1 Bit	O	C - - T -	DPT_Switch	0/1	[Ix] [Triple Press] 0	Sending of 0
587, 596, 605, 614, 623, 632, 641, 650, 659, 668, 677, 686	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Long Press] Dimming Status (Input)	0% - 100%
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Long Press] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Triple Press] Shutter Status (Input)	0% = Top; 100% = Bottom
	1 Byte	I	C - W - -	DPT_Scaling	0% - 100%	[Ix] [Triple Press] Dimming Status (Input)	0% - 100%
588, 597, 606, 615, 624, 633, 642, 651, 660, 669, 678, 687	1 Bit	O	C - - T -	DPT_Trigger	0/1	[Ix] [Long Press/Release] Stop Shutter	Release -> Stop Shutter
688	1 Byte	I	C - W - -	DPT_SceneNumber	0 - 63	[Motion Detector] Scene Input	Scene Value
689	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[Motion Detector] Scene Output	Scene Value
690, 727, 764, 801, 838, 875, 912, 949, 986, 1023, 1060, 1097	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Ix] Luminosity	0-100%
691, 728, 765, 802, 839, 876, 913, 950, 987, 1024, 1061, 1098	1 Bit	O	C R - T -	DPT_Alarm	0/1	[Ix] Open Circuit Error	0 = No Error; 1 = Open Circuit Error
692, 729, 766, 803, 840, 877, 914, 951, 988, 1025, 1062, 1099	1 Bit	O	C R - T -	DPT_Alarm	0/1	[Ix] Short Circuit Error	0 = No Error; 1 = Short Circuit Error
693, 730, 767, 804, 841, 878, 915, 952, 989, 1026, 1063, 1100	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Ix] Presence State (Scaling)	0-100%
694, 731, 768, 805, 842, 879, 916, 953, 990, 1027, 1064, 1101	1 Byte	O	C R - T -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[Ix] Presence State (HVAC)	Auto, Comfort, Standby, Economy, Building Protection
695, 732, 769, 806, 843, 880, 917, 954, 991, 1028, 1065, 1102	1 Bit	O	C R - T -	DPT_Switch	0/1	[Ix] Presence State (Binary)	Binary Value
	1 Bit	O	C R - T -	DPT_Start	0/1	[Ix] Presence: Slave Output	1 = Motion Detected
696, 733, 770, 807, 844, 881, 918, 955, 992, 1029, 1066, 1103	1 Bit	I	C - W - -	DPT_Window_Door	0/1	[Ix] Presence Trigger	Binary Value to Trigger the Presence Detection
697, 734, 771, 808, 845, 882, 919, 956, 993, 1030, 1067, 1104	1 Bit	I	C - W - -	DPT_Start	0/1	[Ix] Presence: Slave Input	0 = Nothing; 1 = Detection from slave device

698, 735, 772, 809, 846, 883, 920, 957, 994, 1031, 1068, 1105	2 Bytes	I/O	C R W - -	DPT_TimePeriodSec	0 - 65535	[Ix] Presence: Waiting Time	0-65535 s.
699, 736, 773, 810, 847, 884, 921, 958, 995, 1032, 1069, 1106	2 Bytes	I/O	C R W - -	DPT_TimePeriodSec	0 - 65535	[Ix] Presence: Listening Time	1-65535 s.
700, 737, 774, 811, 848, 885, 922, 959, 996, 1033, 1070, 1107	2 Bytes	I/O	C R W - -	DPT_TimePeriodMin	0 - 65535	[Ix] Presence: Safety Time	0-1440 min.
701, 738, 775, 812, 849, 886, 923, 960, 997, 1034, 1071, 1108	1 Byte	I/O	C R W - -	DPT_Value_1_Ucount	0 - 255	[Ix] Presence: Number of Detections of the Filter	2-5
702, 739, 776, 813, 850, 887, 924, 961, 998, 1035, 1072, 1109	1 Byte	I/O	C R W - -	DPT_Value_1_Ucount	0 - 255	[Ix] Presence: Filter Detection Window	15-60 s.
703, 740, 777, 814, 851, 888, 925, 962, 999, 1036, 1073, 1110	1 Bit	I	C - W - -	DPT_Enable	0/1	[Ix] Presence: Enable	0 = Disable; 1 = Enable
	1 Bit	I	C - W - -	DPT_Enable	0/1	[Ix] Presence: Enable	0 = Enable; 1 = Disable
704, 741, 778, 815, 852, 889, 926, 963, 1000, 1037, 1074, 1111	1 Bit	I/O	C R W - -	DPT_DayNight	0/1	[Ix] Presence: Day/Night	0 = Day; 1 = Night
	1 Bit	I/O	C R W - -	DPT_DayNight	0/1	[Ix] Presence: Day/Night	0 = Night; 1 = Day
705, 742, 779, 816, 853, 890, 927, 964, 1001, 1038, 1075, 1112	1 Bit	O	C R - T -	DPT_Occupancy	0/1	[Ix] Presence: Occupancy State (Master Output)	0 = Not Occupied; 1 = Occupied
	1 Bit	I	C - W - -	DPT_Occupancy	0/1	[Ix] Presence: Occupancy State (Master Input)	0 = Not Occupied; 1 = Occupied
706, 743, 780, 817, 854, 891, 928, 965, 1002, 1039, 1076, 1113	1 Bit	I	C - W - -	DPT_Switch	0/1	[Ix] Presence: Access Guest/Employee	0 = Guest; 1 = Employee
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Ix] Presence: Access Guest/Employee	0 = Employee; 1 = Guest
707, 744, 781, 818, 855, 892, 929, 966, 1003, 1040, 1077, 1114	1 Bit	I	C - W - -	DPT_Bool	0/1	[Ix] Presence: Sold/Unsold Room	0 = Unsold; 1 = Sold
	1 Bit	I	C - W - -	DPT_Bool	0/1	[Ix] Presence: Sold/Unsold Room	0 = Sold; 1 = Unsold
708, 745, 782, 819, 856, 893, 930, 967, 1004, 1041, 1078, 1115	1 Bit	I	C - W - -	DPT_Start	0/1	[Ix] External Motion Detection	0 = Nothing; 1 = Motion detected by an external sensor
709, 715, 721, 746, 752, 758, 783, 789, 795, 820, 826, 832, 857, 863, 869, 894, 900, 906, 931, 937, 943, 968, 974, 980, 1005, 1011, 1017, 1042, 1048, 1054, 1079, 1085, 1091, 1116, 1122, 1128	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Ix][Cx] Detection State (Scaling)	0-100%
710, 716, 722, 747, 753, 759, 784, 790, 796, 821, 827, 833, 858, 864, 870, 895, 901, 907, 932, 938, 944, 969, 975, 981, 1006, 1012, 1018, 1043, 1049, 1055, 1080, 1086, 1092, 1117, 1123, 1129	1 Byte	O	C R - T -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[Ix][Cx] Detection State (HVAC)	Auto, Comfort, Standby, Economy, Building Protection
711, 717, 723, 748, 754, 760, 785, 791, 797, 822, 828, 834, 859, 865, 871, 896, 902, 908, 933, 939, 945, 970, 976, 982, 1007, 1013, 1019, 1044, 1050, 1056, 1081, 1087, 1093, 1118, 1124, 1130	1 Bit	O	C R - T -	DPT_Switch	0/1	[Ix][Cx] Detection State (Binary)	Binary Value
712, 718, 724, 749, 755, 761, 786, 792, 798, 823, 829, 835, 860, 866,	1 Bit	I	C - W - -	DPT_Enable	0/1	[Ix][Cx] Enable Channel	According to parameters

872, 897, 903, 909, 934, 940, 946, 971, 977, 983, 1008, 1014, 1020, 1045, 1051, 1057, 1082, 1088, 1094, 1119, 1125, 1131							
713, 719, 725, 750, 756, 762, 787, 793, 799, 824, 830, 836, 861, 867, 873, 898, 904, 910, 935, 941, 947, 972, 978, 984, 1009, 1015, 1021, 1046, 1052, 1058, 1083, 1089, 1095, 1120, 1126, 1132	1 Bit	I	**C - W - -**	DPT_Switch	0/1	[Ix][Cx] Force State	0 = No Detection; 1 = Detection
714, 720, 726, 751, 757, 763, 788, 794, 800, 825, 831, 837, 862, 868, 874, 899, 905, 911, 936, 942, 948, 973, 979, 985, 1010, 1016, 1022, 1047, 1053, 1059, 1084, 1090, 1096, 1121, 1127, 1133	1 Byte	I	**C - W - -**	DPT_Scaling	0% - 100%	[Ix][Cx] Luminosity Threshold	1-100%
1134, 1138, 1142, 1146, 1150, 1154, 1158, 1162, 1166, 1170, 1174, 1178	2 Bytes	O	**C R - T -**	DPT_Value_Temp	-273.00º - 670433.28º	[Ix] Current Temperature	Temperature Sensor Value
1135, 1139, 1143, 1147, 1151, 1155, 1159, 1163, 1167, 1171, 1175, 1179	1 Bit	O	**C R - T -**	DPT_Alarm	0/1	[Ix] Overcooling	0 = No Alarm; 1 = Alarm
1136, 1140, 1144, 1148, 1152, 1156, 1160, 1164, 1168, 1172, 1176, 1180	1 Bit	O	**C R - T -**	DPT_Alarm	0/1	[Ix] Overheating	0 = No Alarm; 1 = Alarm
1137, 1141, 1145, 1149, 1153, 1157, 1161, 1165, 1169, 1173, 1177, 1181	1 Bit	O	**C R - T -**	DPT_Alarm	0/1	[Ix] Probe Error	0 = No Alarm; 1 = Alarm
1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245	1 Bit	I	**C - W - -**	DPT_Bool	0/1	[LF] (1-Bit) Data Entry x	Binary Data Entry (0/1)
1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277	1 Byte	I	**C - W - -**	DPT_Value_1_Ucount	0 - 255	[LF] (1-Byte) Data Entry x	1-Byte Data Entry (0-255)

1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309	2 Bytes	I	C - W - -	DPT_Value_2_Ucount	0 - 65535	[LF] (2-Byte) Data Entry x	2-Byte Data Entry
	2 Bytes	I	C - W - -	DPT_Value_2_Count	-32768 - 32767	[LF] (2-Byte) Data Entry x	2-Byte Data Entry
	2 Bytes	I	C - W - -	9.xxx	-671088.64 - 670433.28	[LF] (2-Byte) Data Entry x	2-Byte Data Entry
1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325	4 Bytes	I	C - W - -	DPT_Value_4_Count	-2147483648 - 2147483647	[LF] (4-Byte) Data Entry x	4-Byte Data Entry
1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345	1 Bit	O	C R - T -	DPT_Bool	0/1	[LF] Function x - Result	(1-Bit) Boolean
	1 Byte	O	C R - T -	DPT_Value_1_Ucount	0 - 255	[LF] Function x - Result	(1-Byte) Unsigned
	2 Bytes	O	C R - T -	DPT_Value_2_Ucount	0 - 65535	[LF] Function x - Result	(2-Byte) Unsigned
	4 Bytes	O	C R - T -	DPT_Value_4_Count	-2147483648 - 2147483647	[LF] Function x - Result	(4-Byte) Signed
	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[LF] Function x - Result	(1-Byte) Percentage
	2 Bytes	O	C R - T -	DPT_Value_2_Count	-32768 - 32767	[LF] Function x - Result	(2-Byte) Signed
	2 Bytes	O	C R - T -	9.xxx	-671088.64 - 670433.28	[LF] Function x - Result	(2-Byte) Float
1346, 1386	1 Bit	I	C - W - -	DPT_Trigger	0/1	[MLx] Trigger	Trigger the Master Light Function
	1 Bit	I	C - W - -	DPT_Ack	0/1	[MLx] Trigger	0 = Nothing; 1 = Trigger the Master Light Function
	1 Bit	I	C - W - -	DPT_Ack	0/1	[MLx] Trigger	1 = Nothing; 0 = Trigger the Master Light Function
1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416	1 Bit	I	C - W - -	DPT_Switch	0/1	[MLx] Status Object x	Binary Status
1377, 1417	1 Bit	O	C R - T -	DPT_Switch	0/1	[MLx] General Status	Binary Status
1378, 1418	1 Bit	O	C - - T -	DPT_Switch	0/1	[MLx] General Switch Off: Binary Object	Switch Off Sending
1379, 1419	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[MLx] General Switch Off: Scaling	0-100%
1380, 1420	1 Byte	O	C - - T -	DPT_SceneControl	0-63; 128-191	[MLx] General Switch Off: Scene	Scene Sending
1381, 1421	1 Byte	O	C - - T -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[MLx] General Switch Off: HVAC mode	Auto, Comfort, Standby, Economy, Building Protection

1382, 1422	1 Bit	O	C - - T -	DPT_Switch	0/1	[MLx] Courtesy Switch On: Binary Object	Switch On Sending
1383, 1423	1 Byte	O	C - - T -	DPT_Scaling	0% - 100%	[MLx] Courtesy Switch On: Scaling	0-100%
1384, 1424	1 Byte	O	C - - T -	DPT_SceneNumber	0 - 63	[MLx] Courtesy Switch On: Scene	Scene Sending
1385, 1425	1 Byte	O	C - - T -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[MLx] Courtesy Switch On: HVAC mode	Auto, Comfort, Standby, Economy, Building Protection
1426, 1500, 1574, 1648	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[HTx] [A] System On/Off	0 = Off; 1 = On
1427, 1501, 1575, 1649	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[HTx] [A] User On/Off	0 = Off; 1 = On
1428, 1502, 1576, 1650	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [A] On/Off Fancoil	0 = Off; 1 = On
	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [A] On/Off Split	0 = Off; 1 = On
1429, 1503, 1577, 1651	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [A] On/Off Climate (Status)	0 = Off; 1 = On
1430, 1504, 1578, 1652	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [A] Temperature Source 1	External Sensor Temperature
1431, 1505, 1579, 1653	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [A] Temperature Source 2	External Sensor Temperature
1432, 1506, 1580, 1654	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [A] Room Temperature	Current Temperature
1433, 1507, 1581, 1655	1 Bit	I/O	C R W - -	DPT_Heat_Cool	0/1	[HTx] [A] System Mode	0 = Cooling; 1 = Heating
1434, 1508, 1582, 1656	1 Bit	I/O	C R W - -	DPT_Heat_Cool	0/1	[HTx] [A] User Mode	0 = Cooling; 1 = Heating
1435, 1509, 1583, 1657	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[HTx] [A] Force System Mode	0 = User Mode / Auto Change; 1 = System Mode
1436, 1510, 1584, 1658	1 Bit	O	C R - T -	DPT_Heat_Cool	0/1	[HTx] [A] Mode (Status)	0 = Cooling; 1 = Heating
1437, 1511, 1585, 1659	1 Byte	O	C R - T -	DPT_HVACContrMode	0=Auto 1=Heat 3=Cool 9=Fan 14=Dry	[HTx] [A] Split: Mode	1 = Heat; 3 = Cooling; 9 = Fan; 14 = Dry
1438, 1512, 1586, 1660	1 Bit	I	C - W T U	DPT_Enable	0/1	[HTx] [A] Fan: Manual/Automatic	0 = Manual; 1 = Automatic
	1 Bit	I	C - W T U	DPT_Enable	0/1	[HTx] [A] Fan: Manual/Automatic	0 = Automatic; 1 = Manual
1439, 1513, 1587, 1661	1 Byte	I	C - W T U	DPT_Scaling	0% - 100%	[HTx] [A] Fan Speed	0% - 100%
	1 Byte	I	C - W T U	DPT_Scaling	0% - 100%	[HTx] [A] Fan Speed	0% = Automatic; 1% - 100% = Manual
1440, 1514, 1588, 1662	1 Bit	I	C - W - -	DPT_Reset	0/1	[HTx] [B] User Comfort Setpoint Reset	0 = Nothing; 1 = Reset
1441, 1515, 1589, 1663	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] User Setpoint Control	[-20°C, 100°C]
	2 Bytes	I	C - W T U	DPT_Value_Tempd	-671088.64º - 670433.28º	[HTx] [B] User Setpoint Offset	[-15°C, 15°C]
1442, 1516, 1590, 1664	1 Bit	I	C - W - -	DPT_Step	0/1	[HTx] [B] Step User Setpoint	0 = Decrease; 1 = Increase
1443, 1517, 1591, 1665	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Comfort Setpoint (Cooling)	[-20°C, 100°C]
	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Comfort Setpoint	[-20°C, 100°C]
1444, 1518, 1592, 1666	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Standby Setpoint (Cooling)	[-20°C, 100°C]
1445, 1519, 1593, 1667	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Economy Setpoint (Cooling)	[-20°C, 100°C]

1446, 1520, 1594, 1668	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Protection Setpoint (Cooling)	[-20°C, 100°C]
1447, 1521, 1595, 1669	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Comfort Setpoint (Heating)	[-20°C, 100°C]
1448, 1522, 1596, 1670	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Standby Setpoint (Heating)	[-20°C, 100°C]
1449, 1523, 1597, 1671	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Economy Setpoint (Heating)	[-20°C, 100°C]
1450, 1524, 1598, 1672	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Protection Setpoint (Heating)	[-20°C, 100°C]
1451, 1525, 1599, 1673	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Real Setpoint (Status)	[-20°C, 100°C]
1452, 1526, 1600, 1674	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] User Setpoint (Status)	[-20°C, 100°C]
	2 Bytes	O	C R - T -	DPT_Value_Tempd	-671088.64º - 670433.28º	[HTx] [B] User Setpoint Offset Status	[-15°C, 15°C]
1453, 1527, 1601, 1675	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [B] Setpoint to Split	[-20°C, 100°C]
1454, 1528, 1602, 1676	2 Bytes	I/O	C R W T U	DPT_TimePeriodSec	0 - 65535	[HTx] [C] Transition Time: Comfort to Default Mode	Seconds (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodMin	0 - 65535	[HTx] [C] Transition Time: Comfort to Default Mode	Minutes (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodHrs	0 - 65535	[HTx] [C] Transition Time: Comfort to Default Mode	Hours (0 = Disabled)
1455, 1529, 1603, 1677	2 Bytes	I/O	C R W T U	DPT_TimePeriodSec	0 - 65535	[HTx] [C] Transition Time: Standby to Economy	Seconds (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodMin	0 - 65535	[HTx] [C] Transition Time: Standby to Economy	Minutes (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodHrs	0 - 65535	[HTx] [C] Transition Time: Standby to Economy	Hours (0 = Disabled)
1456, 1530, 1604, 1678	2 Bytes	I/O	C R W T U	DPT_TimePeriodSec	0 - 65535	[HTx] [C] Comfort Setpoint Reset Time	Seconds (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodMin	0 - 65535	[HTx] [C] Comfort Setpoint Reset Time	Minutes (0 = Disabled)
	2 Bytes	I/O	C R W T U	DPT_TimePeriodHrs	0 - 65535	[HTx] [C] Comfort Setpoint Reset Time	Hours (0 = Disabled)
1457, 1531, 1605, 1679	1 Bit	I	C - W - U	DPT_Occupancy	0/1	[HTx] [C] Presence Detector (Input)	0 = Not Occupied; 1 = Occupied
1458, 1532, 1606, 1680	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [C] Lock Presence Detection	0 = Unlock; 1 = Lock
	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [C] Lock Presence Detection	0 = Lock; 1 = Unlock
1459, 1533, 1607, 1681	1 Bit	I/O	C R W - -	DPT_Bool	0/1	[HTx] [C] Sold/Unsold Room (Input)	0 = Unsold; 1 = Sold
1460, 1534, 1608, 1682	1 Byte	I	C - W - -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[HTx] [D] Special Mode	1-byte HVAC Mode
1461, 1535, 1609, 1683	1 Bit	I	C - W - -	DPT_Ack	0/1	[HTx] [D] Special Mode: Comfort	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[HTx] [D] Special Mode: Comfort	0 = Off; 1 = On

1462, 1536, 1610, 1684	1 Bit	I	C - W - -	DPT_Ack	0/1	[HTx] [D] Special Mode: Standby	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[HTx] [D] Special Mode: Standby	0 = Off; 1 = On
1463, 1537, 1611, 1685	1 Bit	I	C - W - -	DPT_Ack	0/1	[HTx] [D] Special Mode: Economy	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[HTx] [D] Special Mode: Economy	0 = Off; 1 = On
1464, 1538, 1612, 1686	1 Bit	I	C - W - -	DPT_Ack	0/1	[HTx] [D] Special Mode: Protection	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[HTx] [D] Special Mode: Protection	0 = Off; 1 = On
1465, 1539, 1613, 1687	1 Byte	O	C R - T -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[HTx] [D] Special Mode (Status)	1-byte HVAC Mode
1466, 1540, 1614, 1688	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [D] Comfort Mode (Status)	0 = Off; 1 = On
1467, 1541, 1615, 1689	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [D] Thermostat Lock	0 = Lock; 1 = Unlock
	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [D] Thermostat Lock	0 = Unlock; 1 = Lock
1468, 1542, 1616, 1690	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [D] Comfort Lower Limit	[-20°C, 100°C]
1469, 1543, 1617, 1691	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [D] Comfort Upper Limit	[-20°C, 100°C]
1470, 1544, 1618, 1692	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[HTx] [D] Hidden Offset On/Off	0 = Off; 1 = On
1471, 1545, 1619, 1693	2 Bytes	I/O	C R W T U	DPT_Value_Tempd	-671088.64º - 670433.28º	[HTx] [D] Hidden Offset Value	[-20°C, 100°C]
1472, 1546, 1620, 1694	1 Bit	O	C R - T -	DPT_Bool	0/1	[HTx] [D] Eco Mode Notification	0 = Out of Eco Range; 1 = Setpoint in Eco Range
1473, 1547, 1621, 1695	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[HTx] [D] Eco Mode Ratio	Percentage of Time Working in Eco Range
1474, 1548, 1622, 1696	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [D] Eco Mode: Lower Limit (Cooling)	Lower Value for the Ecological Range
1475, 1549, 1623, 1697	2 Bytes	I/O	C R W T U	DPT_Value_Temp	-273.00º - 670433.28º	[HTx] [D] Eco Mode: Upper Limit (Heating)	Upper Value for the Ecological Range
1476, 1550, 1624, 1698	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 1 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 1 (Input)	0 = Open; 1 = Closed
1477, 1551, 1625, 1699	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 2 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 2 (Input)	0 = Open; 1 = Closed
1478, 1552, 1626, 1700	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 3 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 3 (Input)	0 = Open; 1 = Closed
1479, 1553, 1627, 1701	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 4 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Window Status 4 (Input)	0 = Open; 1 = Closed
1480, 1554, 1628, 1702	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [E] Enable Window Status	0 = Disable; 1 = Enable
1481, 1555, 1629, 1703	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Door Status 1 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Door Status 1 (Input)	0 = Open; 1 = Closed
1482, 1556, 1630, 1704	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Door Status 2 (Input)	0 = Closed; 1 = Open
	1 Bit	I	C - W - U	DPT_Window_Door	0/1	[HTx] [E] Door Status 2 (Input)	0 = Open; 1 = Closed
1483, 1557, 1631, 1705	1 Bit	I/O	C R W - -	DPT_Enable	0/1	[HTx] [E] Enable Door Status	0 = Disable; 1 = Enable
1484, 1558, 1632, 1706	2 Bytes	I	C - W - -	DPT_Value_Humidity	-12% - 12%	[HTx] [F] Current Humidity	Humidity Sensor Value
1485, 1559, 1633, 1707	2 Bytes	I	C - W - -	DPT_Value_Humidity	-12% - 12%	[HTx] [F] Comfort Humidity Alarm	Comfort Humidity Alarm Threshold

						Threshold	Value
1486, 1560, 1634, 1708	2 Bytes	O	C R - T -	DPT_Value_Humidity	-12% - 12%	[HTx] [F] Equivalent Humidity Alarm Threshold Status	Equivalent Humidity Alarm Threshold Status
1487, 1561, 1635, 1709	1 Bit	I/O	C R W T U	DPT_Enable	0/1	[HTx] [F] Dehumidification Control	0 = Disable; 1 = Enable
1488, 1562, 1636, 1710	1 Bit	O	C R - T -	DPT_Bool	0/1	[HTx] [F] Dehumidification (Status)	0 = No Dehumidifying; 1 = Dehumidifying
1489, 1563, 1637, 1711	1 Bit	O	C R - T -	DPT_Alarm	0/1	[HTx] [F] Humidity Alarm	0 = No Alarm; 1 = Alarm
1490, 1564, 1638, 1712	1 Bit	I/O	C R W T U	DPT_Enable	0/1	[HTx] [F] Enable Apparent Temperature	0 = Room Temperature; 1 = Apparent Temperature
1491, 1565, 1639, 1713	1 Byte	I	C - W - -	DPT_SceneControl	0-63; 128-191	[HTx] [G] Scenes	Scene Value
1492, 1566, 1640, 1714	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[HTx] [Cooling] Control Variable	PI Control (Continuous)
1493, 1567, 1641, 1715	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[HTx] [Heating] Control Variable	PI Control (Continuous)
1494, 1568, 1642, 1716	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Cooling] Control Variable	2-Point Control
	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Cooling] Control Variable	PI Control (PWM)
1495, 1569, 1643, 1717	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Heating] Control Variable	2-Point Control
	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Heating] Control Variable	PI Control (PWM)
1496, 1570, 1644, 1718	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Cooling] Additional Cool	Temp >= (Setpoint+Band) => "1"
1497, 1571, 1645, 1719	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Heating] Additional Heat	Temp <= (Setpoint-Band) => "1"
1498, 1572, 1646, 1720	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Cooling] PI State	0 = PI Signal 0%; 1 = PI Signal Greater than 0%
1499, 1573, 1647, 1721	1 Bit	O	C R - T -	DPT_Switch	0/1	[HTx] [Heating] PI State	0 = PI Signal 0%; 1 = PI Signal Greater than 0%
1722	1 Byte	I	C - W - -	DPT_SceneControl	0-63; 128-191	[Thermostat] Scenes	Scene Value
1723, 1761, 1799, 1837	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Temperature Source 1	External Sensor Temperature
1724, 1762, 1800, 1838	2 Bytes	I	C - W T U	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Temperature Source 2	External Sensor Temperature
1725, 1763, 1801, 1839	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Effective Temperature	Effective Control Temperature
1726, 1764, 1802, 1840	1 Byte	I	C - W - -	DPT_HVACMode	1=Comfort 2=Standby 3=Economy 4=Building Protection	[Tx] Special Mode	1-Byte HVAC Mode
1727, 1765, 1803, 1841	1 Bit	I	C - W - -	DPT_Ack	0/1	[Tx] Special Mode: Comfort	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Tx] Special Mode: Comfort	0 = Off; 1 = On
1728, 1766, 1804, 1842	1 Bit	I	C - W - -	DPT_Ack	0/1	[Tx] Special Mode: Standby	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Tx] Special Mode: Standby	0 = Off; 1 = On
1729, 1767, 1805, 1843	1 Bit	I	C - W - -	DPT_Ack	0/1	[Tx] Special Mode: Economy	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Tx] Special Mode: Economy	0 = Off; 1 = On
1730, 1768, 1806, 1844	1 Bit	I	C - W - -	DPT_Ack	0/1	[Tx] Special Mode: Protection	0 = Nothing; 1 = Trigger
	1 Bit	I	C - W - -	DPT_Switch	0/1	[Tx] Special Mode: Protection	0 = Off; 1 = On
1731, 1769, 1807, 1845	1 Bit	I	C - W - -	DPT_Window_Door	0/1	[Tx] Window Status (Input)	0 = Closed; 1 = Open
1732, 1770, 1808, 1846	1 Bit	I	C - W - -	DPT_Trigger	0/1	[Tx] Comfort Prolongation	0 = Nothing; 1 = Timed Comfort
1733, 1771, 1809, 1847	1 Byte	O	C R - T -	DPT_HVACMode	1=Comfort 2=Standby	[Tx] Special Mode Status	1-Byte HVAC Mode

					3=Economy 4=Building Protection		
1734, 1772, 1810, 1848	2 Bytes	I	C - W - -	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Setpoint	Thermostat Setpoint Input
	2 Bytes	I	C - W - -	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Basic Setpoint	Reference Setpoint
1735, 1773, 1811, 1849	1 Bit	I	C - W - -	DPT_Step	0/1	[Tx] Setpoint Step	0 = Decrease Setpoint; 1 = Increase Setpoint
1736, 1774, 1812, 1850	2 Bytes	I	C - W - -	DPT_Value_Tempd	-671088.64º - 670433.28º	[Tx] Setpoint Offset	Float Offset Value
1737, 1775, 1813, 1851	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Setpoint Status	Current Setpoint
1738, 1776, 1814, 1852	2 Bytes	O	C R - T -	DPT_Value_Temp	-273.00º - 670433.28º	[Tx] Basic Setpoint Status	Current Basic Setpoint
1739, 1777, 1815, 1853	2 Bytes	O	C R - T -	DPT_Value_Tempd	-671088.64º - 670433.28º	[Tx] Setpoint Offset Status	Current Setpoint Offset
1740, 1778, 1816, 1854	1 Bit	I	C - W - -	DPT_Reset	0/1	[Tx] Setpoint Reset	Reset Setpoint to Default
	1 Bit	I	C - W - -	DPT_Reset	0/1	[Tx] Offset Reset	Reset Offset
1741, 1779, 1817, 1855	1 Bit	I	C - W - -	DPT_Heat_Cool	0/1	[Tx] Mode	0 = Cool; 1 = Heat
1742, 1780, 1818, 1856	1 Bit	O	C R - T -	DPT_Heat_Cool	0/1	[Tx] Mode Status	0 = Cool; 1 = Heat
1743, 1781, 1819, 1857	1 Bit	I	C - W - -	DPT_Switch	0/1	[Tx] On/Off	0 = Off; 1 = On
1744, 1782, 1820, 1858	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] On/Off Status	0 = Off; 1 = On
1745, 1783, 1821, 1859	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[Tx] Main System (Cool)	0 = System 1; 1 = System 2
1746, 1784, 1822, 1860	1 Bit	I/O	C R W - -	DPT_Switch	0/1	[Tx] Main System (Heat)	0 = System 1; 1 = System 2
1747, 1785, 1823, 1861	1 Bit	I	C - W - -	DPT_Enable	0/1	[Tx] Enable/Disable Secondary System (Cool)	0 = Disable; 1 = Enable
1748, 1786, 1824, 1862	1 Bit	I	C - W - -	DPT_Enable	0/1	[Tx] Enable/Disable Secondary System (Heat)	0 = Disable; 1 = Enable
1749, 1755, 1787, 1793, 1825, 1831, 1863, 1869	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Tx] [Sx] Control Variable (Cool)	PI Control (Continuous)
1750, 1756, 1788, 1794, 1826, 1832, 1864, 1870	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Tx] [Sx] Control Variable (Heat)	PI Control (Continuous)
	1 Byte	O	C R - T -	DPT_Scaling	0% - 100%	[Tx] [Sx] Control Variable	PI Control (Continuous)
1751, 1757, 1789, 1795, 1827, 1833, 1865, 1871	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable (Cool)	2-Point Control
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable (Cool)	PI Control (PWM)
1752, 1758, 1790, 1796, 1828, 1834, 1866, 1872	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable (Heat)	2-Point Control
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable (Heat)	PI Control (PWM)
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable	2-Point Control
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] Control Variable	PI Control (PWM)
1753, 1759, 1791, 1797, 1829, 1835, 1867, 1873	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] PI State (Cool)	0 = PI Signal 0%; 1 = PI Signal Greater than 0%
1754, 1760, 1792, 1798, 1830, 1836, 1868, 1874	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] PI State (Heat)	0 = PI Signal 0%; 1 = PI Signal Greater than 0%
	1 Bit	O	C R - T -	DPT_Switch	0/1	[Tx] [Sx] PI State	0 = PI Signal 0%; 1 = PI Signal Greater than 0%
1875	3 Bytes	O	C R - T -	DPT_Date	01/01/1990 - 31/12/2089	[NTP] Date	Current Date
1876	3 Bytes	O	C R - T -	DPT_TimeOfDay	00:00:00 - 23:59:59	[NTP] Time of Day	Current Time
1877	8 Bytes	O	C R - T -	DPT_DateTime		[NTP] Date and Time	Current Date and Time

1878	1 Bit	I	**C - W - -**	DPT_Ack	0/1	[NTP] Sending Request	0 = No Action; 1 = Request Date and Time Sending
1879, 1881, 1883, 1885, 1887, 1889, 1891, 1893, 1895, 1897, 1899, 1901, 1903, 1905, 1907, 1909, 1911, 1913, 1915, 1917, 1919, 1921, 1923, 1925, 1927, 1929, 1931, 1933, 1935, 1937, 1939, 1941, 1943, 1945, 1947, 1949, 1951, 1953, 1955, 1957, 1959, 1961, 1963, 1965, 1967, 1969, 1971, 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005	1 Bit	I	**C - W - U**	DPT_Ack	0/1	[AML][Mx] Trigger	0 = Do Nothing; 1 = Trigger
	1 Bit	I	**C - W - U**	DPT_Switch	0/1	[AML][Mx] Trigger	0 = Recover Previous State; 1 = Trigger
	1 Bit	I	**C - W - U**	DPT_Ack	0/1	[AML][Mx] Trigger	0 = Trigger; 1 = Do Nothing
	1 Bit	I	**C - W - U**	DPT_Switch	0/1	[AML][Mx] Trigger	0 = Trigger; 1 = Recover Previous State
1880, 1882, 1884, 1886, 1888, 1890, 1892, 1894, 1896, 1898, 1900, 1902, 1904, 1906, 1908, 1910, 1912, 1914, 1916, 1918, 1920, 1922, 1924, 1926, 1928, 1930, 1932, 1934, 1936, 1938, 1940, 1942, 1944, 1946, 1948, 1950, 1952, 1954, 1956, 1958, 1960, 1962, 1964, 1966, 1968, 1970, 1972, 1974, 1976, 1978, 1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2006	1 Bit	O	**C R - T -**	DPT_Switch	0/1	[AML][Mx] Status	0 = Off; 1 = On
	1 Bit	O	**C R - T -**	DPT_Switch	0/1	[AML][Mx] Status	0 = On; 1 = Off
2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023, 2025, 2027, 2029, 2031, 2033, 2035, 2037, 2039, 2041, 2043, 2045, 2047, 2049, 2051, 2053, 2055, 2057, 2059, 2061, 2063, 2065, 2067, 2069	1 Byte	O	**C - - T -**	DPT_Scaling	0% - 100%	[AML] Lx - Control	0% ... 100%
	1 Bit	O	**C - - T -**	DPT_Switch	0/1	[AML] Lx - Control	0 = Off; 1 = On
2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022, 2024, 2026, 2028, 2030, 2032, 2034, 2036, 2038, 2040, 2042, 2044, 2046, 2048, 2050, 2052, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070	1 Byte	I	**C - W - U**	DPT_Scaling	0% - 100%	[AML] Lx - Status	0% ... 100%
	1 Bit	I	**C - W - U**	DPT_Switch	0/1	[AML] Lx - Status	0 = Off; 1 = On

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