Zennio

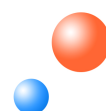# KLIC-DD

INTERFACE KNX - RESIDENTIAL A/C UNIT

ZN1CL-KLIC-DD

Program version: 1.5

Manual edition: a

INDEX

1. INTRODUCTION

1.1.   KLIC-DD

KLIC-DD is a Zennio interface that allows a **bidirectional** communication between a KNX domotic system and residential air-conditioning units.

Due to its bidirectional communication, the air conditioning unit can be controlled in the same way as using a remote control and the real status if the air-conditioning unit is checked and sent to the KNX bus for its monitoring.

KLIC-DD combines in a same device the following features:

- **Bidirectional** communication with AC units through port S21.

- Control over the main functionalities of the A/C unit: ON/OFF, Temperature, Mode, Fan and Swing.

- Errors control and identification (it handles AC unit error codes as well as any communication errors that may arise).

- LED indicator that allows monitoring the bidirectional traffic flow (see section 1.2).

- **5 multi operational logical functions** module.

Figure 1.1. KLIC-DD interface

1.2. INSTALLATION

KLIC-DD interface connects to the KNX bus via the bus connecting terminals.

On the other hand, this device is connected to the internal unit PCB, using a special 5-wire cable with **S21 connectors** provided in the original device packaging.

Once the device is provided with power supply from the KNX bus, both the physical address and the associated application program can be downloaded.

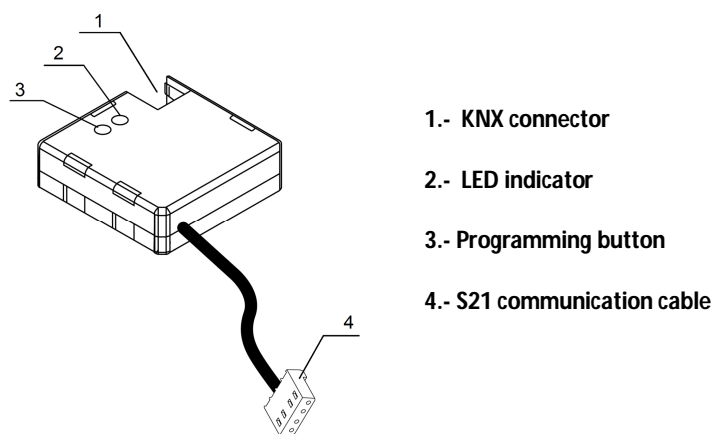In the figure 1.2, the elements scheme of KLIC-DD is shown.

1.- KNX connector

2.- LED indicator

3.- Programming button

4.- S21 communication cable

Figure 1.2. KLIC-DD Elements scheme

It is described below the functionality of its main elements:

🔵 **Programming button:** a short press on this button set the device in programming mode, and the associated LED (2) lights red. If this button is held while plugging the device into de KNX bus, KLIC-DD goes into secure mode.

🔵 **LED indicator:** luminous signal that indicates the working state of KLIC-DD. Besides lighting red when the device is in programming mode, this LED will also light blue and green, thus indicating the status of the bidirectional communication between KNX and the AC unit, resulting very useful in the installation process. Next, the meaning of each LED color is explained:

➢ **Fixed red:** KLIC-DD is in programming mode.

➢ **Blinking red:** KLIC-DD is in secure mode (the LED blinks red every 0.5 seconds).

➢ **Fixed green:** failure in the KLIC-DD power supply (this happens when KLIC-DD is not connected to the AC unit and/or when the AC unit is not connected to the power supply line).

➢ **Blinking green:** communication data from AC unit to KLIC-DD.

➢ **Blinking blue:** communication data from KLIC-DD to AC unit.

◉ **Communication cable:** 5-wire cable to connect KLIC-DD to the PCB board (S21) of the inner unit of the AC unit.

To obtain more detailed information about the technical features of KLIC-DD, as well as security and installation information, please read the controller Datasheet, included in the original package of the device and also available at http://www.zennio.com.

It is also recommended to consult the KLIC-DD Installation Note, also available in the same web site.

2. CONFIGURATION

2.1. BASIC CONTROL

With KLIC-DD, the air-conditioning unit can be monitored and controlled the same way it is done with the infrared remote control provided with it.

By means of the KNX bus, the following basic functionalities of the air conditioning unit can be controlled:

- **ON/OFF**

- **Setpoint Temperature**

- **Operating mode:** Auto, Heat, Cool, Fan and Dry.

- **Fan Speed:** 3 or 5 speed levels configuration, besides the automatic speed (check out the available levels in the AC unit)

- **Swing:** swing or stopped

These functionalities have associated a machine status, which is periodically sent to KLIC-DD. When KLIC-DD receives a status different from the previous one from thhe machine, it updates the status of the corresponding parameter in the KNX bus.

2.2. ADVANCED FUNCTIONALITIES

Besides the basic control over the air-conditioning system, KLIC-DD offers other advanced functionalities that give an added value with regard to the remote control. These are the following:

- **Scenes configuration:** allows establishing a specific parameters combination and its synchronized sending to the machine, in order to generate a specific climate ambient in the room. KLIC-DD allows configuring up to 4 different scenes.

- **Temperature limitation:** AC units are limited in temperature for each operating mode by default. This functionality allows configuring custom temperature ranges, via parameter, in such way that the setpoint temperature will remain in that range. In case of receiving from the

KNX bus a temperature command with a value out of the configured limits, the temperature value sent to the machine will be the corresponding limit value.

🔵 **Auto OFF:** allows an automatic and temporary switch off of the machine (after an established delay, if parameterized) if a status change in the communication object associated to it takes place. Moreover, it has an option called "Flexibility enabled" that allows, if it is enabled, reactivating the unit although it is in the auto off.

An example of this functionality could be the use of a window sensor, associated to the auto switch off, which allows switching off the machine if the window is opened.

🔵 **Errors management:** this functionality allows sending messages to the KNX bus informing about errors. Errors management handles AC unit error codes as well as any communication errors that may arise.

Besides informing about the apparition of possible errors it can be also configured the sending of the error type. In case of internal errors, the numerical code associated to the error type is shown in Table 2.1.

Regarding the numerical code associated to the type of external errors, please look up the manual of the installed air-conditioning system.

Error Number	Type of Internal Error
1	Problems with the data reception (speed, parity, etc.)
2	Communication waiting time exceeded (Time Out)
3	Incorrect checksum
4	Incorrect response from the machine

Table 2.1. Type of Internal Error

🔵 **Initial configuration:** this functionality allows establishing an initial value for the AC unit statuses after installing the system or after recovering from a power failure. The statuses that may be configured are: ON/OFF, temperature, mode, fan and swing of the machine.

This initial configuration can be sent both to the KNX bus and to the AC unit.

🔵 **Advance Climate Management:** it allows modifying the setpoint temperature to be sent to the AC unit with regard to the real temperature of the room to climate (temperature measured by an external sensor, as it may be the touch panel **InZennio Z38i**). It is a

periodical analysis of the difference between the real temperature and the setpoint temperature. If KLIC-DD detects a great difference between them, mainly due to an incorrect machine measurement of the real temperature, it will readjust the setpoint temperature value. KLIC-DD keeps a memory of these possible deviations, in order to apply them again after a reset, change of mode, etc.

🔵 **Logical functions:** KLIC-DD allows enabling and configuring up to 5 different logical functions. Please read section 3.2.8 for further information.
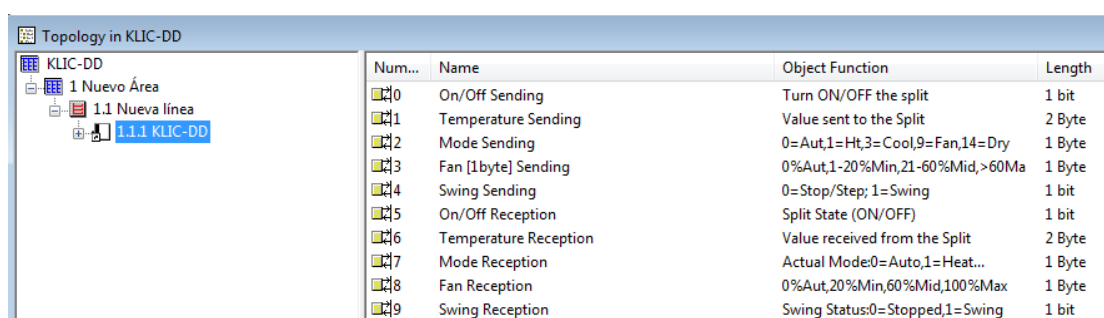
3. ETS PARAMETERIZATION

For starting to parameterize the KLIC-DD interface it is necessary, once the ETS program has been opened, importing the data base of the product (version 1.5 of the application program).

Next, the device is added to the project where desired. Click the right mouse button on the device and select "Edit parameters" for starting with the configuration.

In the following sections there is a detailed explanation about each of the different functionalities of ZAS in ETS.

3.1. DEFAULT CONFIGURATION

This section shows the default configuration from which the device parameterization starts.

Figure 3.1. Default topology in KLIC-DD

In the default topology window (see figure 3.1) appear the communication objects associated to the sending and reception of the orders for basic control of the AC unit: ON/OFF, Temperature, Mode, Fan and Swing.

When entering for the first time to the parameters edition of KLIC-DD, the following window will be shown:
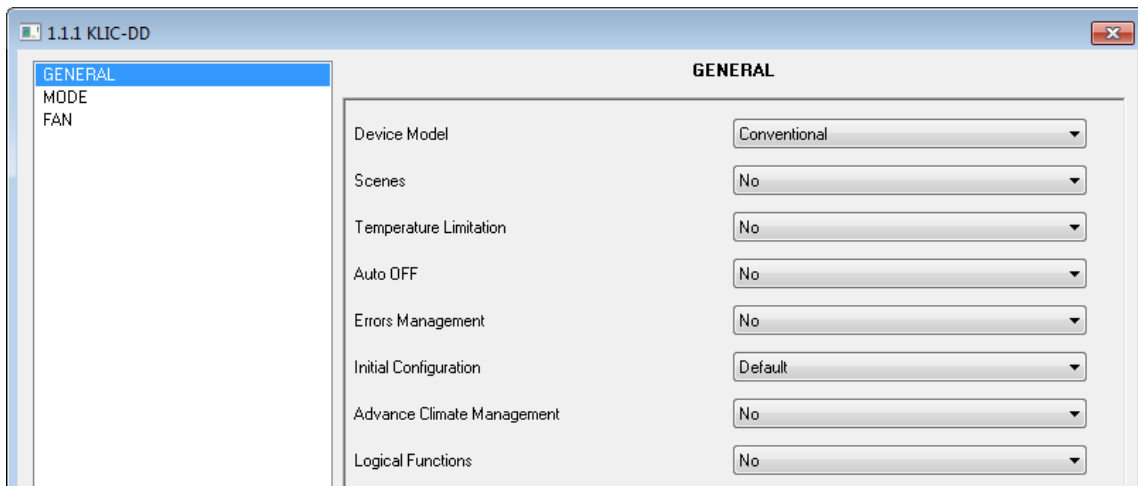
Figure 3.2. Configuration screen by default

As it can be seen in the figure 3.2, the configuration screen has 3 main windows:

- **General:** to individually enable each of the advanced functionalities of the AC machine.

- **Mode:** to configure features related to the operating mode of the AC machine.

- **Fan:** to configure features related to the fan speed of the AC machine.

3.2. GENERAL WINDOW

From the general configuration window the different advanced functionalities of the AC unit can be enabled (Scenes, Temperature Limitation, Auto OFF, Errors Management, Initial Configuration, Advance Climate Management and Logical Functions), as well as the AC unit model to control (conventional or Humidify Dehumidify Indoor Unit). All these advanced functionalities are explained in detail in the following sections.

3.2.1. DEVICE MODEL

This option allows selecting the AC model to control, choosing between: Conventional model or Humidify Dehumidify Indoor Unit.
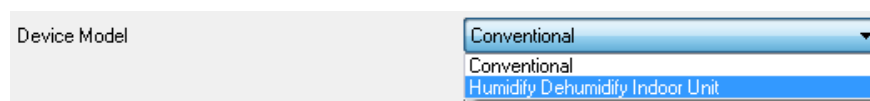
The conventional model includes all the AC residential machines compatible with the KLIC-DD interface.

If the second option is chosen, it will appear several communication objects related to the specific functionality of this AC model. Moreover, during all the parameterization, several options with regard to this model will be shown (named in ETS as *Humidify Dehumidify Indoor Unit*).

3.2.2. SCENES

After enabling this functionality, it will appear in the left menu the option Scenes, where to enable and parametrize each of the 4 available scenes. The scene to be run will be sent to the KNX bus through the object, enabled for this aim: "Scenes".
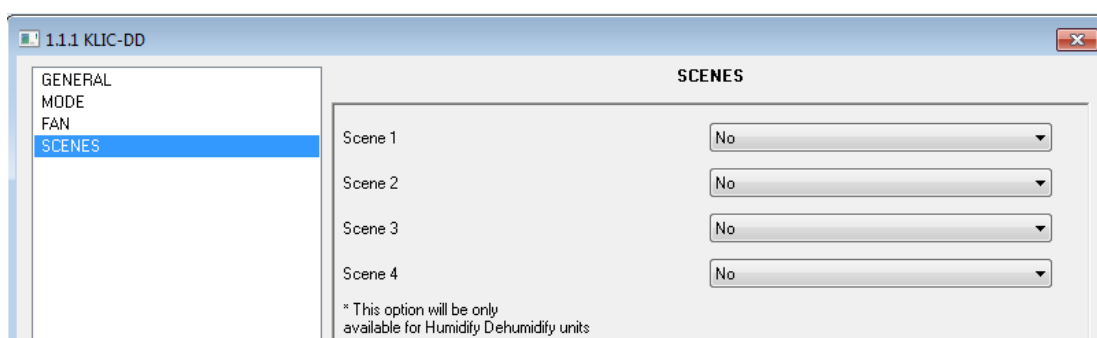
Figure 3.3. Scenes configuration window

For every enabled scene, the parameters that may be configured are the following:

🔹 **Scene number.** It indicates the scene number (from 1 to 64) to which the corresponding configured orders will be sent to the AC machine.

🔹 **ON/OFF.** Possibility to choose the AC machine status: No change, OFF or ON.

🔹 **Temperature.** No change or sending of a new temperature value (from 18ºC to 30ºC).

🔹 **Mode.** No change, auto, heat, dry, fan, cool or humidify (only for Humidify Dehumidify models).

🔹 **Fan.** No change, auto, minimum, medium, maximum.

🔹 **Swing.** No change, both stopped, normal swing. And the options for Humidify Dehumidify Indoor Units: Extra swing or both swing.

In the figure 3.4, an example of scene configuration is shown.
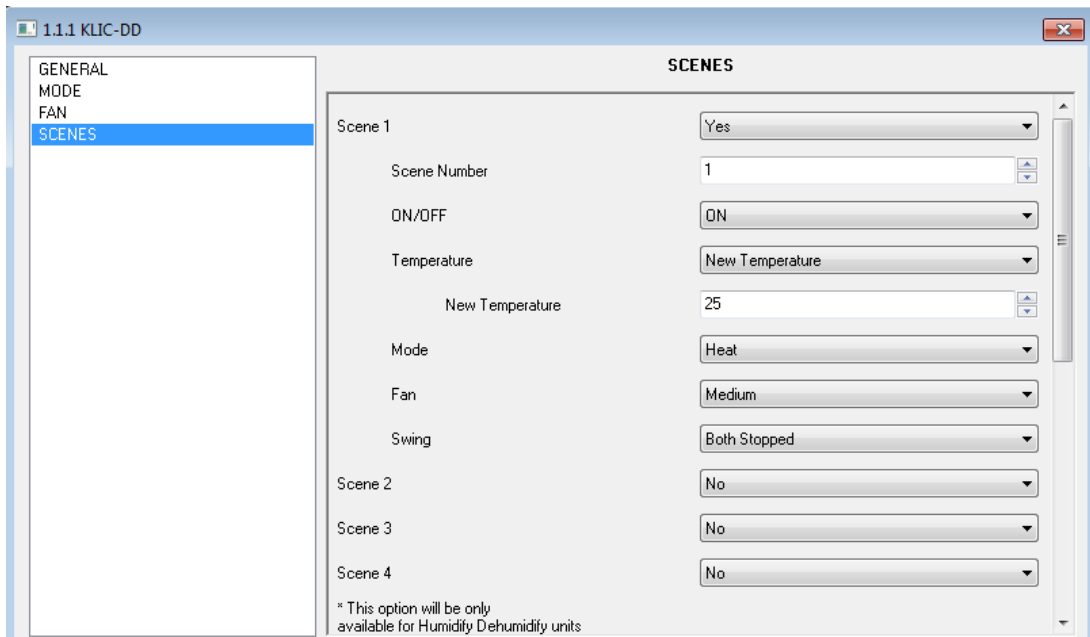
Figure 3.4. Scene configuration example (Scene 1)

3.2.3. TEMPERATURE LIMITATION

The air conditioning unit has defined upper and lower temperature limits that cannot be exceeded. Nevertheless, KLIC-DD offers the possibility of establishing new temperature limits if they are specified within the AC unit predefined limits (please, llok up the AC unit manual).

The temperature limits can be customized for the three modes that have a temperature associated: Auto, Cool and Heat.
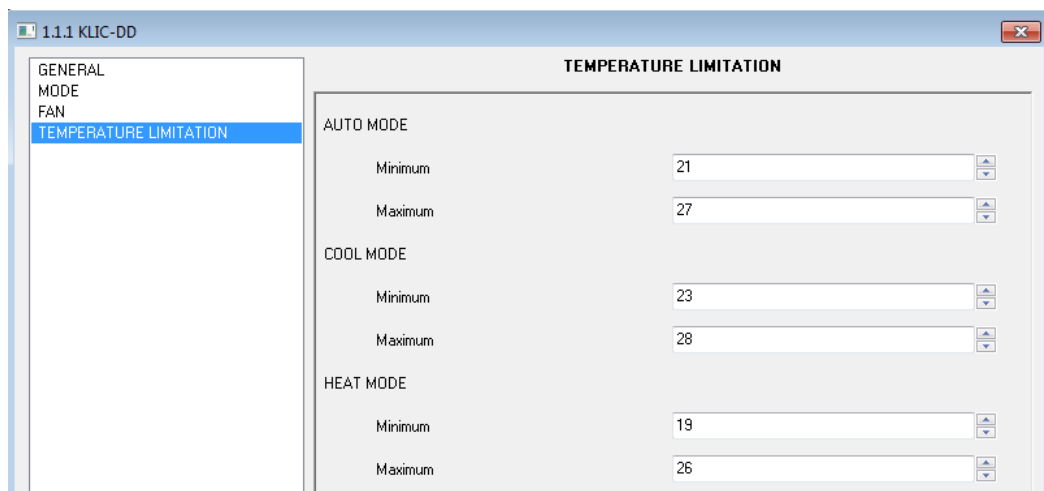
Figure 3.5. Temperature limitation configuration

For these limits to be taken into account, it will be necessary to explicitaly enable the temperature limitation, by sending the value "1" through the specific communication object "Temperature Limitation". To control the machine using its predefined temperature limitations, it is necessary to send the value "0" through the same object.

Once established the new temperature limits for every mode and enabled the functionality, when a value out of the range is sent from the KNX bus, the value that will be sent to the AC unit will be the corresponding temperature limit and this new temperature will be notified, through the object "Temperature sending".

Note: *When configuring in ETS the temperature limitation, this functionlaityy is automatically enabled by default and the personalized ranges will control the unit performance when it switches on.*

3.2.4. AUTO OFF

This option allows switching off the AC machine temporarily if a status change (from value "0" to value "1") in the associated communication object happens ("Auto-OFF").
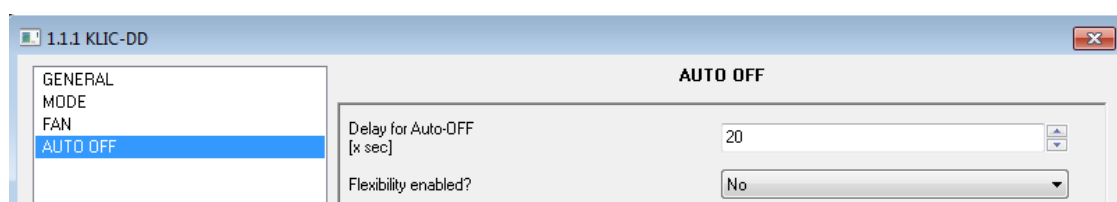
Figure 3.6. Auto OFF configuration

The following parameters can be configured:

🔵 **Delay for Auto-OFF:** to establish the time, in seconds, KLIC-DD waits before automatically switching off the AC machine.

🔵 **Flexibility enable?:** when enabling this parameter ("Yes"), it will be possible to restore the unit control although it is in auto off mode: ("Auto-OFF"=1). If this option is disabled, the unit cannot be controlled after an auto-off order and it will remain inactive until the object "Auto-OFF" has the value "0".

3.2.5. ERRORS MANAGEMENT

The errors management window allows enabling the sending of messages to the bus indicating any error that may arise: internal errors of the communication between KLIC-DD and the AC unit, or external errors (errors in the own AC unit).

Figure 3.7. Errors management configuration window

The detection of internal, external or both types of errors can be enabled:

🔵 **Internal errors:** when enabling this option, two new communication objects appear: "Internal error", 1-bit object and "Type of internal error", 1-byte object. The first one indicates if an internal error has occurred (value "1": there is an error, value "0": there is not). The second object indicates the code that identifies the error (numerical value between 1 and 4. See Table 2.1: Type of Internal Errors).

🔵 **External errors:** when enabling this option, two new communication objects appear: "External Error" and "Type of external error". The first one indicates if an external error has occurred (value "1": there is an error, value "0": there is not). The second object indicates the code that identifies the error (see the specific manual of the AC unit installed).

3.2.6. START-UP CONFIGURATION

This functionality allows configuring the initial statuses of the AC machine after the installation or a power failure. This configuration can be default or custom. If a custom configuration is chosen, the window of the figure 3.8 will be shown.
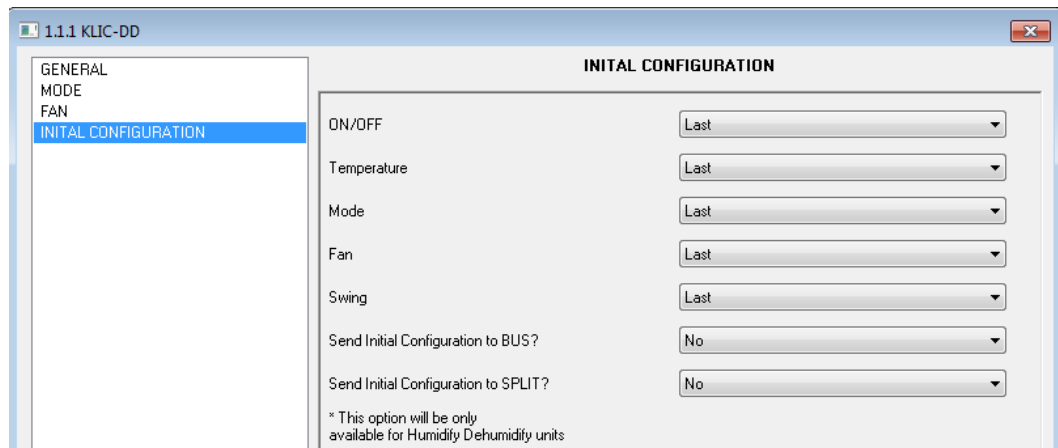
Figure 3.8. Initial configuration window

The variables than can be initialized are the following:

🔵 **ON/OFF:** last (the status the machine had before the power failure; after the first installation, this status will be OFF), ON or OFF.

🔵 **Temperature:** Last or custom (a new field appears to establish the new initial temperature).

🔵 **Mode:** Last, auto, heat, dry, fan, cool or humidify (only for Humidify Dehumidify models).

🔵 **Fan:** Last, auto, minimum, medium or maximum.

🔵 **Swing:** Last, both stopped, normal swing. And the options for Humidify Dehumidify Indoor Units: Extra swing or both swing.

Moreover, it can be configured the sending of the statuses to the KNX bus and/or to the AC split and when they must be carried out:

🔵 **Send initial configuration to BUS?:** If this sending is enabled ("Yes"), a new field will appear next: "Delay", where to configure the time, in seconds, KLIC-DD delays the sending of the statuses to the KNX bus.

🔵 **Send initial configuration to SPLIT?:** If this sending is enabled ("Yes"), a new field will appear next: **"Delay"**, where to configure the time, in seconds, KLIC-DD delays the sending of the statuses to the AC machine.

Note: *It is highly recommended to establish a delay for the initial configuration sending to split of at least 1 minute, in order to leave the machine enough time for recovering itself after a power failure.*

It is also recommended to establish a higher delay for the initial configuration sending to the Bus than for the Split. If not, the values could be sent to the bus twice: the first one, due to the initial statuses sending to the Bus and other due to a response to the initial configuration to the Split from the split itself.

3.2.7. ADVANCE CLIMATE MANAGEMENT

This functionality allows modifying the setpoint temperature sent to the AC machine, with regard to the real temperature of the room to be climate.

Figure 3.9. ADVANCE CLIMATE MANAGEMENT

The real temperature monitoring is carried out in some periods of time. This analyse period is configured in the ACM window (Advance Climate Management) in the field **Analize Period**, where to establish the monitoring period, in minutes, depending on the particular conditions of the installation where the AC unit is located. Periods between 15 and 240 minutes can be configured (take into account that the value set in the field Analize period is internally multiplied by 5, so the allowed values are in the range [3-48]).

When enabling this option, two communication objects appear (2-bytes each): "Ambient Temperature" and "Modified Temperature". The first one receives the value of the real temperature of the room (this value is sent by an external KNX sensor). The second object indicates the setpoint temperature that is sent to the machine, modified regarding the original one.

3.2.8. LOGICAL FUNCTIONS

This section in KLIC-DD is meant to perform binary logic operations with incoming data from the KNX bus, to send the result through other communication objects specifically enabled in the actuator for this operation.

Up to 5 different logical functions can be enabled, independent of each other, which can carry out up to 4 operations each. To use any of them, it is necessary to enable them in the configuration window shown in the figure 3.10.
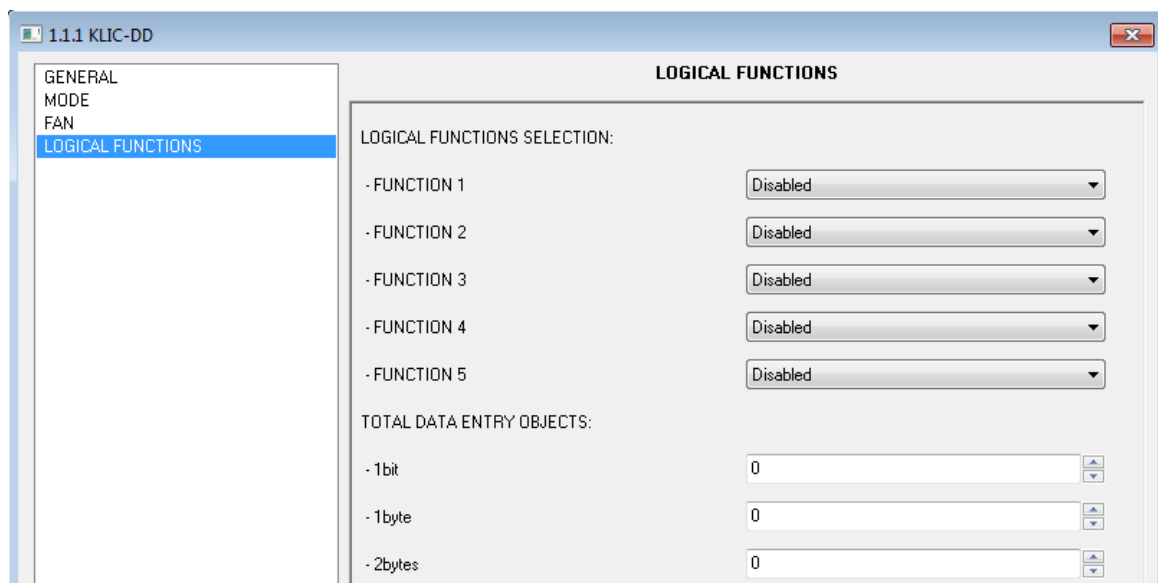
Figure 3.10. Logical functions window

The specific communication objects for logical functions can be 1-bit, 1-byte or 2-bytes. It is necessary to indicate how many of them are needed to implement the enabled functions.

To obtain detailed information about the use of logical functions, please read the specific section "Logical Functions" in the user´s manual of Zennio actuators, such as ACTinBOX MAX6 or ACTinBOX QUATRO.

3.3. MODE WINDOW

As seen in section 3.1. Default Configuration, the specific Mode window allows configuring featured regarding to the operating mode of the AC machine.
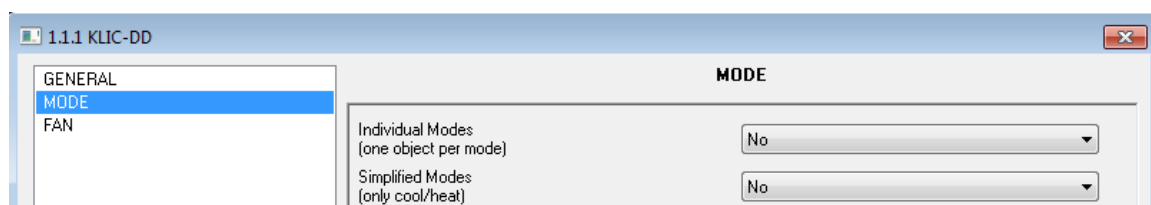
Figure 3.11. Mode window

🔵 **Individual modes:** when selecting this option, 10 new 1-bit communication objects will be shown. 5 of them are associated to the sending of each of the available modes (Auto, Cool,

Fan, Heat and Dry) and the other 5 objects, to the reception from the AC machine of the status of every mode.

The objects associated with the sending are: "Auto Mode Sending", "Cool Mode Sending", "Fan Mode Sending", "Heat Mode Sending" and "Dry Mode Sending".

The objects associated to the reception are: "Auto Mode Reception", "Cool Mode Reception", "Fan Mode Reception", "Heat Mode Reception" and "Dry Mode Reception".

Moreover, the objects "Mode Sending" and "Mode Reception" (1-byte each and available by default) may be used.

If the option Individual modes is activated, the operating mode of the AC machine can be modified (by writing the value "1" through the sending object associated to the desired individual mode). Moreover, the current mode will be also sent to the KNX bus, through the object "Mode Reception" and with the 1-bit reception object of the individual current mode.

● **Simplified modes:** when selecting this option, the 1-bit object "Simplified Mode" will be enabled. It allows establishing the desired mode: Cool mode, writing the value "0" in the object, or Heat mode, writing the value "1". For this control object there is no status object associated.

3.4. FAN WINDOW

In this window it can be configured several features related to the fan speed of the AC machine.

Figure 3.12. Fan window

● **Number of levels:** this option allows configuring the number of fan levels the AC unit has. These may be 3 or 5 levels. The fan speed has associated two 1-byte objects: "Fan [1 Byte] Sending" and "Fan Reception", for controlling and indicating the fan speed when requested. The control object ("Fan Sending") records the fan speed in percentage. This value will be interpolated in such a way that corresponds to the selected number of levels, as it can

be seen next. The status object ("Fan Reception") will show the current fan sped, according to the interpolated percentages.

➢ **3 levels:** The fan speed percentages will be interpolated as shown in Table 3.1.

Initial Speed Percentage	Interpolated Speed Percentage	Level
0%	0%	Auto
1-20%	20%	Minimum
21-60%	60%	Medium
61-100%	100%	Maximum

Table 3.1. Fan speed percentages for 3 levels

➢ **5 levels:** The fan speed percentages will be interpolated as shown in Table 3.2.

Initial Speed Percentage	Interpolated Speed Percentage	Level
0%	0%	Auto
1-20%	20%	Minimum
21-40%	40%	Minimum-Medium
41-60%	60%	Medium
61-80%	80%	Medium-Maximum
81-100%	100%	Maximum

Table 3.2. Fan speed percentages for 5 levels

🔹 **Step control:** the selection of this option ("Yes") enables the 1-bit object "Fan [1 bit] Sending" that allows increasing (sending the value "1") or decreasing (value "0") the fan speed in one level (for example, for 3 levels, in the minimum level of fan speed, the value "1" is sent via the object "Fan [1 bit] Sending", the fan speed level will go to medium).

The step control is **not cyclical**. This means that, being in the Auto level (0%), when decreasing the fan speed level, the AC machine will stay in the auto mode until the speed level is increased. The same way, when the speed level is in the maximum level (100%), the machine will remain in this level until receiving an order to decrease the speed.

ANNEX I. COMMUNICATION OBJECTS

SECTION	NUMBER	SIZE	IN/OUT	FLAGS	VALUES			NAME	DESCRIPTION
					RANGE	1st TIME	RESET		
GENERAL	0	1 bit	I	W	0/1	0	Last	ON/OFF Sending	Turn ON/OFF the split
	1	2 bytes	I	W	16-32ºC	25ºC	Last	Temperature Sending	Value sent to the Split
	2	1 byte	I	W	0-255	Cool (3)	Last	Mode Sending	0=Aut;1=Heat;3=Cool;9=Fan;14=Dry
	3	1 byte	I	W	0-255	0	Last	Fan [1 byte] Sending	Auto(0%); Min(1-20%); Med(21-60%); Max(61-100%) → For 3 levels Auto(0%); Mínimo(1-20%); Min-Med(21-40%); Med(41-60%); Med-Max(61-80%); Max(81-100%) → For 5 levels
	4	1 bit	I	W	0/1	0	Last	Swing sending	0=Stop/Step; 1=Swing
	5	1 bit	O	RT	0/1	Status dependant	Last	ON/OFF Reception	Split state (ON/OFF)
	6	2 bytes	O	RT	16-32ºC	Status dependant	Last	Temperature Reception	Value received from the split
	7	1 byte	O	RT	0-255	Status dependant	Last	Mode reception	Actual mode: 0=Aut;1=Heat;3=Cool;9=Fan;14=Dry
	8	1 byte	O	RT	0-255	Status dependant	Last	Fan Reception	Auto(0%); Min(20%); Med(60%); Max(100%)→ For 3 levels Auto(0%); Mínimo(20%); Min-Med(40%); Med(60%); Med-Max(80%); Max(100%)→For 5 levels
	9	1 bit	O	RT	0/1	Status dependant	Last	Swing reception	Swing status: 0=Stopped; 1=Swing
MODE	10	1 bit	I	WT	0/1	0	Last	Auto mode sending	1=Set Auto Mode; 0=Nothing
	11	1 bit	I	WT	0/1	0	Last	Cool mode sending	1=Set Cool Mode; 0=Nothing
	12	1 bit	I	WT	0/1	0	Last	Heat mode sending	1=Set Heat Mode; 0=Nothing
	13	1 bit	I	WT	0/1	0	Last	Fan mode sending	1=Set Fan Mode; 0=Nothing

SECTION	NUMBER	SIZE	IN/OUT	FLAGS	VALUES			NAME	DESCRIPTION
					RANGE	1st TIME	RESET		
MODE	14	1 bit	I	WT	0/1	0	Last	Dry mode sending	1=Set Dry Mode; 0=Nothing
	15	1 bit	I	W	0/1	0	Last	Simplified Mode	0=Cool; 1=Heat
	16	1 bit	O	RT	0/1	0	Last	Auto mode reception	1=Auto mode enabled; 0=Disabled
	17	1 bit	O	RT	0/1	0	Last	Cool mode reception	1=Cool mode enabled; 0=Disabled
	18	1 bit	O	RT	0/1	0	Last	Heat mode reception	1=Heat mode enabled; 0=Disabled
	19	1 bit	O	RT	0/1	0	Last	Fan mode reception	1=Fan mode enabled; 0=Disabled
	20	1 bit	O	RT	0/1	0	Last	Dry mode reception	1=Dry mode enabled; 0=Disabled
FAN	21	1 bit	I	W	0/1	0	Indifferent	Fan [1 bit] Sending	0=Down; 1=Up
SCENES	22	1 byte	I	W	0-63	Indifferent	Indifferent	Scenes	Set scene "value"
TEMPERATURE LIMITATION	23	1 bit	I	W	0/1	0	Last	Temperature limitation	0=Disable; 1=Enable
AUTO OFF	24	1 bit	I	W	0/1	0	Last	Auto-OFF	0=Disable; 1=Enable
ERRORS MANAGEMENT	25	1 bit	O	RT	0/1	Connection status dependant	Connection status dependant	Internal error	0=No Error; 1=Error
	26	1 byte	O	RT	1-4	Error type dependant	Error type dependant	Type of Internal Error	1=Recep.Err, 2=TimeOut, 3=Checksum, 4=Resp.Err
	27	1 bit	O	RT	0/1	Machine status dependant	Machine status dependant	External error	0=No Error; 1=Error
	28	1 byte	O	RT	0-255	Error type dependant	Error type dependant	Type of External Error	Check errors table

SECTION	NUMBER	SIZE	IN/OUT	FLAGS	VALUES			NAME	DESCRIPTION
					RANGE	1st TIME	RESET		
SPECIFIC PARAMETERS FOR HUMIDIFY DEHUMIDIFY INDOOR UNITS	29	1 bit	I	W	0/1	0	Last	Humidify mode sending	1=enable mode; 0=Ignore
	30	1 bit	O	RT	0/1	0	Last	Humidify mode reception	0=Disabled; 1=Enabled
	31	1 byte	O	RT	0-100%	0	Last	Humidify level reception	0=Off; 25=Low; 50=Med; 75=High...
	32	1 bit	I	W	0/1	0	Indifferent	Humidify level step sending	0=Down; 1=Up
	33	1 bit	I	W	0/1	0	Last	Extra Swing sending	0=Stop; 1=Move
	34	1 bit	O	RT	0/1	0	Last	Extra Swing reception	0=Stopped; 1=Movement
ADVANCE CLIMATE MANAGEMENT	35	2 bytes	I	W	16-32ºC	25ºC	Last	Ambient temperature	Temperature from KNX
	36	2 bytes	O	RT	16-32ºC	Parameter.	Parameter.	Modified temperature	Real emp. sent to machine
LOGICAL FUNCTIONS	37-52	1 bit	I	W	0/1	0	Last	[LF] (1 bit) Data Entry 1 … [LF] (1 bit) Data Entry 16	Binary data entry (0/1) … Binary data entry (0/1)
	53-60	1 byte	I	W	0-255	0	Last	[LF] (1 byte) Data Entry 1 … [LF] (1 byte) Data Entry 8	1 byte data entry (0-255) … 1 byte data entry (0-255)
	61-68	2 bytes	I	W	0-FFFF	0	Last	[LF] (2 bytes) Data Entry 1 … [LF] (2 bytes) Data Entry 8	2 byte data entry (0-FFFF) … 2 byte data entry (0-FFFF)
	69-73	1 bit	O	RT	0/1	0	Last	[LF] Function 1 RESULT (1 bit) … [LF] Function 5 RESULT (1 bit)	Function 1 RESULT … Function 5 RESULT

SECTION	NUMBER	SIZE	IN/OUT	FLAGS	VALUES			NAME	DESCRIPTION
					RANGE	1st TIME	RESET		
LOGICAL FUNCTIONS	74-78	1 byte	O	RT	0-255	0	Last	[LF] Function 1 RESULT (1 byte) … [LF] Function 5 RESULT (1 byte)	Function 1 RESULT … Function 5 RESULT
	79-83	2 bytes	O	RT	0-FFFF	0	Last	[LF] Function 1 RESULT (2 bytes) … [LF] Function 5 RESULT (2 byte)	Function 1 RESULT … Function 5 RESULT
					0ºC-120ºC	25ºC	Last	[LF] Function 1 RESULT (2 bytes) … [LF] Function 5 RESULT (2 bytes)	Function 1 RESULT … Function 5 RESULT

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