AIRZONE Aidoo KNX Controller Instruction Manual

Contents

AIRZONE Aidoo KNX Controller

Product Information: Aidoo KNX Controller

The Aidoo KNX Controller is a device that manages and integrates HVAC units in KNX TP-1 control systems. It is externally powered by the indoor unit and has a standard KNX connector for connecting to the KNX bus. The device features indoor unit wires, digital inputs, common input, KNX connection, indoor unit port, device reboot, and enable KNX programming.

Product Usage Instructions

Follow these instructions to use the Aidoo KNX Controller:

1. Mount the device using screws or double-sided adhesive tape.
2. Follow the instructions on the technical data sheet for connecting the device to the AC unit.
3. Connect the Aidoo to the KNX TP-1 bus, following the color code.
4. Configure and set up the device through ETS tool using the product database downloaded from http://doc.airzone.es/producto/Gama_AZ6/Airzone/Aidoo/BBDD_AZAI6KNX.zip
5. Use the default communication objects available in ETS for the Aidoo KNX device to control the AC unit's on/off switch, operating mode, ventilation speed, and position of the slats.
6. For your security and to protect the devices, strictly follow the directions outlined in the manual and the environmental policy for the Airzone System and communications.

Warnings and Environmental Policy

Precautions

For your security and to protect the devices, follow these instructions:

- Strictly follow the directions outlined in the manual.
- Follow the instructions on the technical data sheet for connecting the device to the AC unit.
- Connect the Aidoo to the KNX TP-1 bus, following the color code.

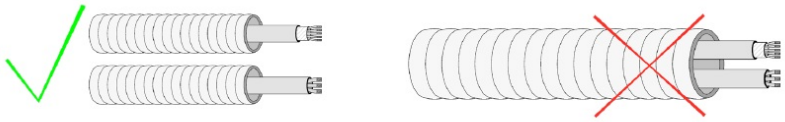
Environmental Policy

General requirements: Strictly follow the directions outlined in this manual for the Airzone System and communications. Do not dispose of this equipment in the household waste. Electrical and electronic equipment contain substances that may damage the environment if they are not handled appropriately. The symbol of a crossed-out waste bin indicates that electrical equipment should be collected separately from other urban waste. For correct environmental management, it must be taken to the collection centers provided for this purpose, at the end of its useful life. The equipment's components may be recycled. Act in accordance with current regulations on environmental protection. If you replace it with other equipment, you must return it to the distributor or take it to a specialized collection center. Those breaking the law or by-laws will be subject to such fines and measures as are laid down in environmental protection legislation.

General requirements

Strictly follow the directions outlined in this manual:

- This system must be installed by a qualified technician.
- Verify that the units to be controlled have been installed according to the manufacturer's requirements and operate correctly before installing the Airzone System.
- Locate and connect all the devices of the installation in accordance with the electronic regulations in force.
- Verify that the air conditioning installation to be controlled is in accordance with the regulations in force.
- Perform all the connections with total absence of power supply.
- Do not place the system bus close to lines of force, fluorescent lights, LED lamps, motors, etc. It might cause interference on the communications.



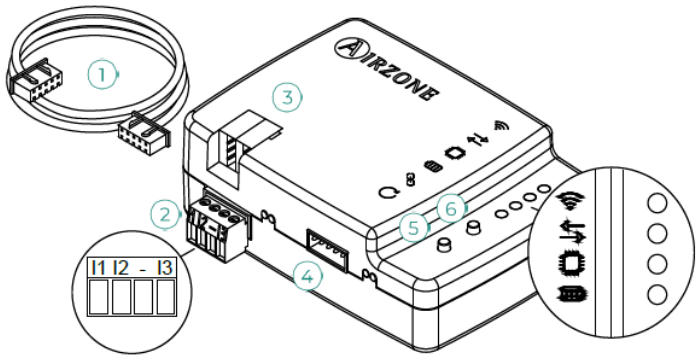
- Respect the connection polarity of each device. A wrong connection may seriously damage the product.

Introduction

Device to manage and integrate HVAC units in KNX TP-1 control systems.

Externally powered by the indoor unit. Features:

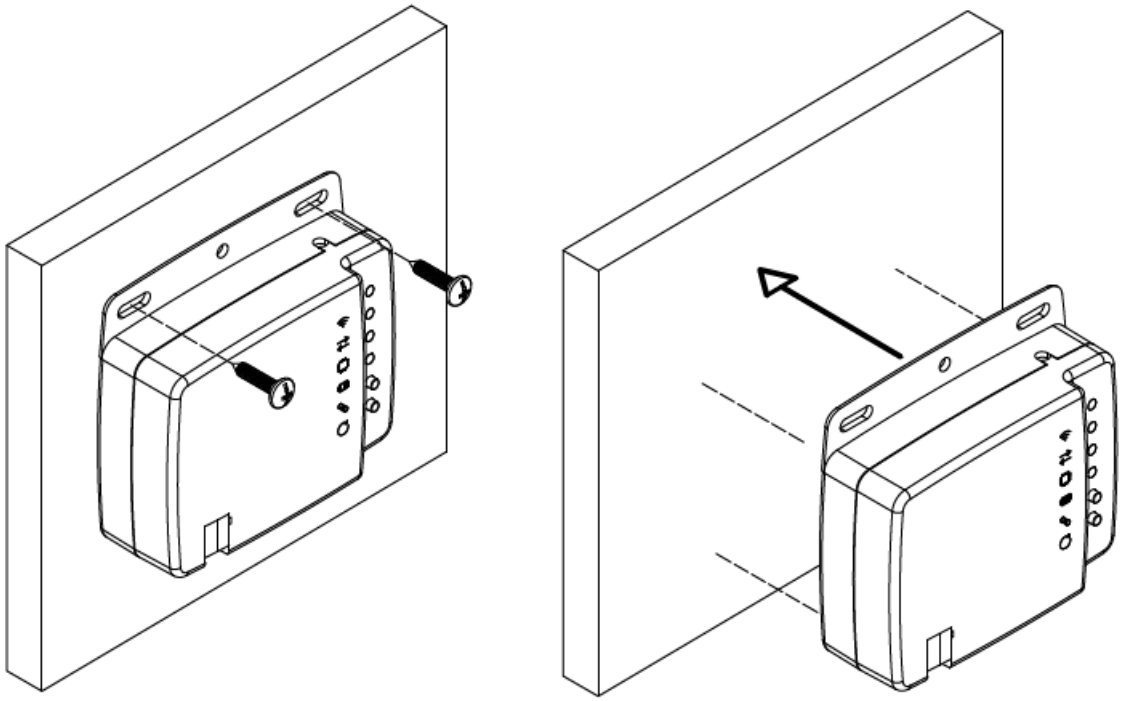
- Control of the parameters of the unit.
- KNX Control.
- KNX standard data.
- 3 digital inputs.
- Easily configurable from ETS.
- Communication errors detection.



	Meaning
1	Indoor unit wire
2	Digital input 1
	Digital input 2
	Commom input
	Digital input 3
3	KNX Connection
4	Indoor unit port
5	Device reboot
6	Enable KNX programming

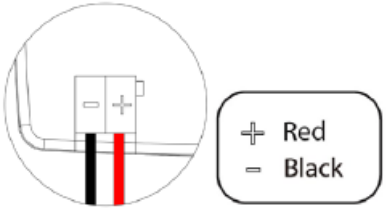
Assembly

The device can be mounted using screws or double-sided adhesive tape (included with the product).



Connection

To connect the device to the AC unit, follow the instructions on the technical data sheet that comes with the Aidoo. It has a standard KNX connector for connecting to the KNX bus. Connect the Aidoo to the KNX TP-1 bus, following the color code.



Configuration

This device is totally compatible with KNX, so you can configure it and set it up through ETS tool **. To do this, download the product database at:** http://doc.airzone.es/producto/Gama_AZ6/Airzone/Aidoo/BBDD_AZAI6KNX.zip The installation of the database in the ETS tool is carried out following the usual procedure for importing new products.

Communication objects

The Aidoo KNX device has a series of communication objects available for configuration by default (see the Default communication objects section). If you wish to use all the communication objects contained in this device, go to the Parameters tab in order to enable them (see the Configuration Parameters section for more information). **IMPORTANT:** The number of functionalities that can be controlled by the different communication objects offered by the Aidoo KNX device will depend on the particular AC unit being controlled. To view all the communication objects available on the Aidoo KNX device, please go to Annexes – Index – Communication Objects for more information.

DEFAULT COMMUNICATION OBJECTS

The default communication objects available in ETS for the Aidoo KNX device are:

Object number	**1: Control On/Off**	
Description	This allows you to switch the AC unit on or off	
Values	0 -> Off	1 -> On
Type of access to the Bus	Write	
Data point identification	1.001 (DPT_Switch)	
Object number	**2: Control Mode**	

Note: You can configure the object type in the Fan Configuration section, under the Parameters tab in ETS. By default it is configured as Datapoint 5.001 (percentage control). See the Configuration Parameters – Fan Configuration section for more information.

Note: Configure the object type in the Vanes Up-Down configuration section, under the Parameters tab in ETS. By default it is configured as Datapoint 5.001 (percentage control). See the Configuration Parameters – Vanes Up-Down configuration section for more information.

Object number	**51: Status On/Off**	
Description	This displays the status of the AC uni t (on or off)	
Valores disponibles	0 -> Off	1 -> On
Tipo de acceso al bus	Reading	
Identificación Datapoint	1.001 (DPT_Switch)	
Object number	**52: Status mode**	
Description	Position	
Values	0 -> Auto 1-> Heat 3 -> Cool	9 -> Fan 14 -> Dry
Type of access to the Bus	Reading	
Data point identification	20.105 (DPT_ Hvaccontrmode)	
Object number	**60: Status Fan speed / 3 speed**	
Description	This displays the AC unit's ventilation speed	
Values	33% -> Speed 1 67% -> Speed 2 100% -> Speed 3	1 -> Speed 1 2 -> Speed 2 3 -> Speed 3
Type of access to the Bus	Reading	
Data point identification	5.001 (DPT_Scalling)	5.010 (DPT_Enumerated)

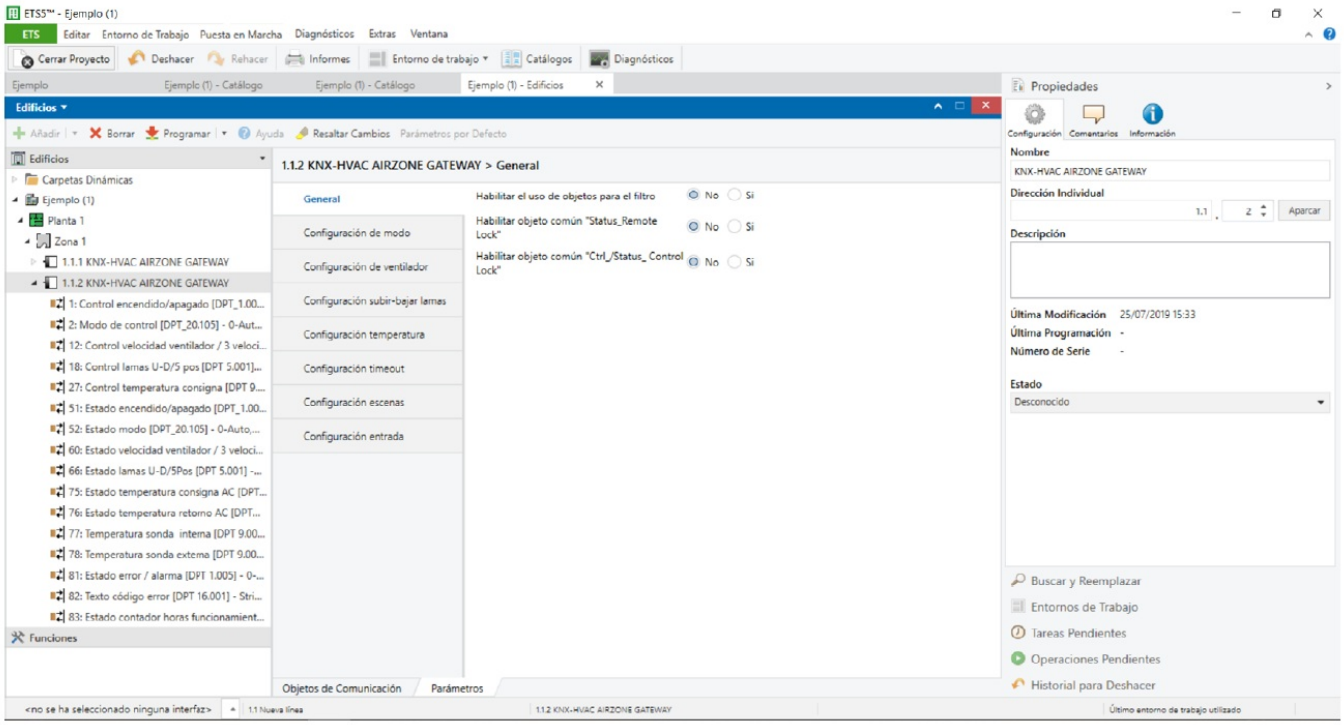
Note: Configure the object type in the Vanes Up-Down configuration section, under the Parameters tab in ETS. By default it is configured as Datapoint 5.001 (percentage control). See the Configuration Parameters – Vanes Up-Down configuration section for more information.

Object number	**66: Status Vanes U-D/5Pos**	
Description	This displays the position of the AC unit's slats	
Values	20% -> Position 1 40% -> Position 2 60 % -> Position 3 80% -> Position 4 100% -> Position 5	1 -> Position 1 2 -> Position 2 3 -> Position 3 4 -> Position 4 5 -> Position 5
Type of access to the Bus	Reading	
Data point identification	5.001 (DPT_Scalling)	5.010 (DPT_Enumerated)

Note: Configure the object type in the Vanes Up-Down configuration section, under the Parameters tab in ETS. By default it is configured as Datapoint 5.001 (percentage control). See the Configuration Parameters – Vanes Up-Down configuration section for more information.

CONFIGURATION PARAMETERS

The Aidoo KNX device has a series of communication objects that can be enabled for use via the Parameters tab in ETS.



General

- Enable use of objects for filter

Object number	**31: Control Reset Filter**
Description	This resets the filter cleaning warning counter on the AC unit
Values	1 -> Reset
Type of access to the Bus	Write
Data point identification	1.015 (DPT_Reset)

Object number	**79: Status Reset Filter**
Description	This shows whether or not there has been a warning from the AC unit regarding filter cleaning
Values	0 -> No alarm 1 -> Alarm
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

- Enable comm obj “Status_Remote Lock”

Object number	**84: Status Lock Remote Control**
Description	This allows you to lock control from the AC unit’s controller
Values	0 -> Unlocked 1 -> Locked
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

- Enable comm obj “Ctrl_/Status_Control Lock”

Object number	**36: Control Lock Control Objects**
Description	This allows you to lock control from KNX communication objects
Values	0 -> Unlocked 1 -> Locked
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**85: Status Lock Control Objects**
Description	This shows whether control has been locked from KNX communication objects
Values	0 -> Unlocked 1 -> Locked
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Mode configuration

- Enable “Mode Cool/Heat” objects

Object number	**3: Control Mode Cool/Heat**
Description	This allows you to select the AC unit’s operating mode (Cooling or Heating) by changing the value of the object
Values	0 -> Cool 1 -> Heat
Type of access to the Bus	Write
Data point identification	1.100 (DPT_Heat/Cool)

Object number	**53: Status Mode Cool/Heat**	
Description	This displays the operating mode (Cooling or Heating) currently selected for the AC unit	
Values	0 -> Cool	1 -> Heat
Type of access to the Bus	Reading	
Data point identification	1.100 (DPT_Heat/Cool)	

- Enable PID-Compat Scaling Mode Objects

Object number	**4: Control Mode Cool & On**	
Description	This allows you to switch the AC unit on or off, with the selected operating mode being Cooling	
Values	0 -> Off	1... 100% -> On + Cool
Type of access to the Bus	Write	
Data point identification	5.001 (DPT_Scaling)	

Object number	**5: Control Mode Heat & On**	
Description	This allows you to switch the AC unit on or off, with the selected operating mode being Heating	
Values	0 -> Off	1... 100% -> On + Heat
Type of access to the Bus	Write	
Data point identification	5.001 (DPT_Scaling)	

- Enable use of bit-type Mode objects

Object number	**6: Control Mode Auto**
Description	This allows you to select the Auto mode as the AC unit's operating mode
Values	1 -> Mode Auto
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**7: Control Mode heat**
Description	This allows you to select the Heating mode as the AC unit's operating mode
Values	1 -> Mode Heat
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**8: Control Mode Cool**
Description	This allows you to select the Cooling mode as the AC unit's operating mode
Values	1 -> Mode Cool
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**9: Control Mode Fan**
Description	This allows you to select the Ventilation mode as the AC unit's operating mode
Values	1 -> Mode Fan
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**10: Control Mode Dry**
Description	This allows you to select the Dry mode as the AC unit's operating mode
Values	1 -> Mode Dry
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**54: Status Mode Auto**
Description	This shows that the operating mode currently selected for the AC unit is Auto mode
Values	1 -> Mode Auto
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**55: Status Mode Heat**
Description	This shows that the operating mode currently selected for the AC unit is Heating mode
Values	1 -> Mode Heat
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**56: Status Mode Cool**
Description	This shows that the operating mode currently selected for the AC unit is Cooling mode
Values	1 -> Mode Cool
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**57: Status Mode Fan**
Description	This shows that the operating mode currently selected for the AC unit is Ventilation mode
Values	1 -> Mode Fan
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**58: Status Mode Dry**
Description	This shows that the operating mode currently selected for the AC unit is Dry mode
Values	1 -> Mode Dry
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

- Enable use of +/- object for mode

Select whether you want to use Datapoint DPT 1.007 (0 = Decrease) or DTP 1.008 (0 = Increase).

Object number	**11: Control Mode +/-**	
Description	This allows you to modify the system's operating mode	
Values	0 -> Decrease 1 -> Increase	0 -> Increase 1 -> Decrease
Type of access to the Bus	Write	
Data point identification	1.007 (DPT_Step)	1.008 (DPT_UpDown)

- Enable use of text object for Mode

Object number	**59: Status Mode Text**
Description	This displays the AC unit's operating mode
Values	ASCII String
Type of access to the Bus	Reading
Data point identification	16.001 (DPT_String_8859_1)

Fan configuration

- DPT object type for fan speed

Select whether you want to use Datapoint DPT 5.001 (percentage control) or DTP 5.010 (number control) for controlling and reading the AC unit's ventilation speed status:

5.001 (DPT_Scalling)	5.010 (DPT_Enumerated)
0...49% -> Speed 1	1 -> Speed 1
50...82% -> Speed 2	2 -> Speed 2
83...100% -> Speed 3	3 -> Speed 3

- Enable use of bit-type Fan Speed objects

Object number	**13: Control Fan Speed Man/Auto**
Description	This allows you to switch the AC unit's ventilation mode between Manual and Auto by changing the value of the object
Values	1 -> Auto
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**14: Control Fan Speed 1**
Description	This allows you to activate the ventilation speed 1 in the AC unit
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**15: Control Fan Speed 2**
Description	This allows you to activate the ventilation speed 2 in the AC unit
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**16: Control Fan Speed 3**
Description	This allows you to activate the ventilation speed 3 in the AC unit
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**61: Status Fan Speed Manual/Auto**
Description	This shows whether the AC unit's ventilation speed is set to Manual or Auto
Values	0 -> Manual 1 -> Auto
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**62: Status Fan Speed 1**
Description	This shows whether the AC unit's ventilation speed is set to Speed 1
Values	1 -> Speed 1
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**63: Status Fan Speed 2**
Description	This shows whether the AC unit's ventilation speed is set to Speed 2
Values	1 -> Speed 2
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**64: Status Fan Speed 3**
Description	This shows whether the AC unit's ventilation speed is set to Speed 3
Values	1 -> Speed 3
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

- Enable use of +/- object for fan speed

Select whether you want to use Datapoint DPT 1.007 (0 = Decrease) or DTP 1.008 (0 = Increase).

Object number	**17: Control Fan Speed +/-**	
Description	This allows you to control the AC unit's ventilation speed	
Values	0 -> Decrease 1 -> Increase	0 -> Increase 1 -> Decrease
Type of access to the Bus	Write	
Data point identification	1.007 (DPT_Step)	1.008 (DPT_UpDown)

- Enable use of Text object for fan speed

Object number	**65: Status Fan Speed Text**
Description	This displays the AC unit's ventilation speed
Values	ASCII String
Type of access to the Bus	Reading
Data point identification	16.001 (DPT_String_8859_1)

Vanes Up-Down configuration

- DPT object types for Vanes Up-Down

Select whether you want to use Datapoint DPT 5.001 (percentage control) or DTP 5.010 (number control) for controlling and reading the status of the AC unit's slats:

5.001 (DPT_Scalling)	5.010 (DPT_Enumerated)
0%...29% -> Position 1	1 -> Position 1
30%...49% -> Position 2	2 -> Position 2
50%...69% -> Position 3	3 -> Position 3
70%...89% -> Position 4	4 -> Position 4
90%...100% -> Position 5	5 -> Position 5

- Enable use of bit-type Vanes Up-Down objects

Object number	**19: Control Vanes U-D Standby**
Description	This allows you to activate the Standby function for the AC unit's slats
Values	0 -> Deactivated 1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**20: Control Vanes U-D Pos 1**
Description	This allows you activate Position 1 for the AC unit's slats
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**21: Control Vanes U-D Pos 2**
Description	This allows you activate Position 2 for the AC unit's slats
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**22: Control Vanes U-D Pos 3**
Description	This allows you activate Position 3 for the AC unit's slats
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**23: Control Vanes U-D Pos 4**
Description	This allows you activate Position 4 for the AC unit's slats
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**24: Control Vanes U-D Pos 5**
Description	This allows you activate Position 5 for the AC unit's slats
Values	1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**25: Control Vanes U-D swing**
Description	This allows you activate the Swing function for the AC unit's slats
Values	0 -> Deactivated 1 -> Activated
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**67: Status Vanes U-D Standby**
Description	This shows whether the Standby function is activated for the AC unit's slats
Values	0 -> Deactivated 1 -> Activated
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**68: Status Vanes U-D Pos 1**
Description	This shows whether the AC unit's slats are in Position 1
Values	1 -> Position 1
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**69: Status Vanes U-D Pos 2**
Description	This shows whether the AC unit's slats are in Position 2
Values	1 -> Position 2
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**70: Status Vanes U-D Pos 3**
Description	This shows whether the AC unit's slats are in Position 3
Values	1 -> Position 3
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**71: Status Vanes U-D Pos 4**
Description	This shows whether the AC unit's slats are in Position 4
Values	1 -> Position 4
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**72: Status Vanes U-D Pos 5**
Description	This shows whether the AC unit's slats are in Position 5
Values	1 -> Position 5
Type of access to the Bus	Reading
Data point identification	1.002 (DPT_Bool)

Object number	**73: Status Vanes U-D Swing**	
Description	This shows whether the Swing function is activated for the AC unit's slats	
Values	0 -> Deactivated	1 -> Activated
Type of access to the Bus	Reading	
Data point identification	1.002 (DPT_Bool)	

- Enable use of +/- Object for Vanes Up-Down

Select whether you want to use Datapoint DPT 1.007 (0 = Decrease) or DTP 1.008 (0 = Increase).

Object number	**26: Control Vanes U-D +/-**	
Description	This allows you to control the AC unit's slats.	
Values	0 -> Decrease 1 -> Increase	0 -> Increase 1 -> Decrease
Type of access to the Bus	Write	
Data point identification	1.007 (DPT_Step)	1.008 (DPT_UpDown)

- Enable use of text object for Vanes Up-Down

Object number	**74: Status Vanes U-D texto**
Description	This displays the position of the AC unit's slats
Values	ASCII String
Type of access to the Bus	Reading
Data point identification	16.001 (DPT_String_8859_1)

Object number	**28: Control Setpoint Temperature +/-**	
Description	This allows you to raise or lower the setpoint temperature of the AC unit in increments of 1°C	
Values	0 -> Decrease 1 -> Increase	0 -> Increase 1 -> Decrease
Type of access to the Bus	Write	
Data point identification	1.007 (DPT_Step)	1.008 (DPT_UpDown)

- Enable limits on Control_Setpoint obj

Select the minimum and maximum setpoint temperature that can be set for the AC unit (in increments of 1°C).

Object number	**30: Control Setpoint limitation**	
Description	This allows you to enable the function to limit the AC unit's setpoint temperature	
Values	0 -> Disabled	1 -> Enabled
Type of access to the Bus	Write	
Data point identification	1.001 (DTP_Switch)	

Object number	**80: Status Setpoint limitation**	
Description	This shows whether the function to limit the AC unit's setpoint temperature is enabled	
Values	0 -> Disabled	1 -> Enabled
Type of access to the Bus	Reading	
Data point identification	1.001 (DTP_Switch)	

- Ambient temperature is provided from KNX

This enables/disables ambient temperature reading from a KNX device.

Object number	**29: Control Ambient Temperature**
Description	This sends the ambient temperature measured from a KNX device to the indoor unit
Values	(°C)
Type of access to the Bus	Write
Data point identification	9.001 (DTP_Value_Temp)

Object number	**32: Control Window Contact Status**	
Description	This displays the window contact status	
Values	0 -> Open	1 -> Closed
Type of access to the Bus	Write	
Data point identification	1.009 (DPT_OpenClose)	

- Enable use of Switch off timeout function. If you select Yes, object 33 will be enabled.
    - ◊ AC switch-off timeout (min). Select the time after which the AC unit will turn off, following the receipt of a warning that the switch has been activated (1) (from 0 to 255 minutes). If the switch is deactivated (0) during this time, the timer will be canceled.
    - ◊ Disallow On/Off operation when timeout is elapsed. Select whether you want to allow the AC unit to be switched on/off when the selected timeout has elapsed.

Object number	**33: Control Switch Off timeout**	
Description	This allows you to activate a timer for switching off the AC unit	
Values	0 -> Stop	1 -> Start
Type of access to the Bus	Write	
Data point identification	1.010 (DPT_Start)	

Object number	**34: Control Occupancy**	
Description	This allows you to activate the Unoccupied function in order to switch the AC unit off or put it into unoccupied mode	
Values	0 -> Not occupied	1 -> Occupied
Type of access to the Bus	Write	
Data point identification	1.018 (DPT_Occupancy)	

Object number	**35: Control timeout Sleep**
Description	This allows you to activate a timer for switching off the AC unit
Values	0 -> Stop 1 -> Start
Type of access to the Bus	Write
Data point identification	1.010 (DPT_Start)

- Enable use of scenes

Object number	**37: Control save / scene**
Description	This allows you to save or execute scenes. Changing the value of the object will change the function and scene number
Values	0...4 -> Exe Scene 1 to 5 128...132 -> Save Scene 1 to 5
Type of access to the Bus	Write
Data point identification	18.001 (DPT_SceneControl)

Object number	**86: Status Current Scene**
Description	This displays the current scene being executed
Values	0...4 -> 1 to 5 63 -> No scene
Type of access to the Bus	Reading
Data point identification	17.001 (DPT_SceneNumber)

- Enable use of bit object for storing scenes (you must have the Enable use of scenes parameter enabled)

Object number	**38: Control Save Scene 1**
Description	This saves the AC unit's settings as Scene 1
Values	1 -> Store Scene 1
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)
Object number	**39: Control Save Scene 2**
Description	This saves the AC unit's settings as Scene 2
Values	1 -> Store Scene 2
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**40: Control Save Scene 3**
Description	This saves the AC unit's settings as Scene 3
Values	1 -> Store Scene 3
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**41: Control Save Scene 4**
Description	This saves the AC unit's settings as Scene 4
Values	1 -> Store Scene 4
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**42: Control Save Scene 5**
Description	This saves the AC unit's settings as Scene 5
Values	1 -> Store Scene 5
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**45: Execute Scene 3**
Description	This executes Scene 3
Values	1-> Execute Scene 3
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**46: Execute Scene 4**
Description	This executes Scene 4
Values	1-> Execute Scene 4
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Object number	**47: Execute Scene 5**
Description	This executes Scene 5
Values	1-> Execute Scene 5
Type of access to the Bus	Write
Data point identification	1.002 (DPT_Bool)

Enable use of scenes

Scene 1 / 2 / 3 / 4 (you must have the Enable use of scenes parameter enabled). Select the scene ID (values available from 0 to 63). If you wish to configure each scene from ETS, activate the System Preset parameter and configure the values of each parameter for the desired AC unit:

- Value for On-Off: Select if you want to turn the AC unit on/off, or if you do not want to carry out any action.
- Value for mode: Select if you want to change the AC unit's operating mode, or if you do not want to carry out any action.
- Value for fan speed: Select if you want to change the AC unit's ventilation speed, or if you do not want to carry out any action.
- Value vanes U-D: Select if you want to modify the position of the AC unit's slats, or if you do not want to carry out any action.
- Value for Setpoint: Select if you want to change the AC unit's setpoint temperature (16 – 30°C), or if you do not want to carry out any action.

Inputs configuration

Enable the use of the Aidoo KNX digital inputs:

- Input 1: Communication objects 87 and 88.
- Input 2: Communication objects 89 and 90.
- Input 3: Communication objects 91 and 92.

The objects will behave differently depending on the configuration of each input.
Parameters available for configuring each digital input:

- Contact type. Defines the contact logic as Normally Open or Normally Closed.
- Debounce time. Select the debounce time (in milliseconds) required for the system to recognize there has been a change in the contact.

- Disabling input object. Select whether or not you want to enable the object that allows the input to be disabled if necessary (communication objects 48, 49 and 50). If yes, select whether you want to use Datapoint DPT 1.002 (0 = False) or DTP 1.003 (0 = Disable).
- **Function. Select the digital input function of the Aidoo KNX:**
    - **Switching**
        - Send telegram after bus recovery. Select the action to be performed on this digital input after bus recovery (after a power failure): no action, off (0), on (1) or current status.
        - Sending delay after bus recovery. If an action is selected, indicate the time delay for sending the telegram (in seconds).
        - Value on raising Edge (contact activated). Select the action to be sent to the associated communication object, if it produces a rising edge (activated input): no action, off (0), on (1) or toggle.
        - Value on falling Edge (Contact deactivated). Select the action to be sent to the associated communication object, if it produces a falling edge (deactivated input): no action, off (0), on (1) or toggle.
        - Cyclical sending. Select if you want cyclical sending to occur depending on the status of the digital input: never, always, when the output value is Off, or when the output value is On.
            - Period for cyclical sending (s). If cyclical sending is selected, indicate the time period (in seconds) for this cycle.
    - **Dimming**
        - Send telegram after bus recovery. Select the action to be performed on this digital input after bus recovery (after a power failure): no action, off (0) or on (1).
            - Sending delay after bus recovery. If an action is selected, indicate the time delay for sending the telegram (in seconds).
        - Mode for short (long) operation. Select the action for a short operation to be sent on a rising edge (activated input): toggle, off/decrease (0) or on/increase (1). A press and hold will result in either an increasing step or a decreasing step.
        - Increasing step. Select the percentage of the increasing step that will be sent for a long operation.
        - Decreasing step. Select the percentage of the decreasing step that will be sent for a long operation.
        - Short/long operation limit (ms). Defines the time that must elapse for the object to interpret that a long operation has occurred (in milliseconds).
        - Cyclical sending period in long operation (0-No cyclical sending) (ms). Defines the time (in seconds) during which the long operation must be executed.
    - **Shutter/blind**
        - Send telegram after bus recovery. Select the action to be performed on this digital input after bus recovery (after a power failure): no action, increase (0) or decrease (1).
        - Sending delay after bus recovery. If an action is selected, indicate the time delay for sending the telegram (in seconds).
        - Operation. Select the action to be sent on a rising edge (activated input): increase (0), decrease (1) or toggle.
        - Method. Select the operating method for the shutter/blind: step-move-step or move-step.
            - Step-Move-Step. On a rising edge (activated input) a step telegram will be sent and the

counter defined in “Short/long operation limit (ms)” (counter 1) will start. Note: No action will be taken if a falling edge (deactivated input) occurs during this time. If the rising edge is maintained for longer than the time defined in counter 1, a move telegram will be sent and a second counter, defined in “Vanes adjustment time (ms)” (counter 2), will start. If a falling edge (deactivated input) occurs during the time specified in this second counter, a step telegram will be sent. Note: No action will be taken if a falling edge (deactivated input) occurs after this time.

- Move-Step. On a rising edge (activated input), a move telegram will be sent and counter 2 will start (“Vanes adjustment time” (ms)). If a falling edge (deactivated input) occurs during this time, a stop telegram will be sent. Note: No action will be taken if a falling edge (deactivated input) occurs after this time.

- Shot/long operation limit (ms). Defines the time that must elapse (counter 1) between a short operation and a long operation (in milliseconds).
- Vanes adjustment time (ms). Defines the time that must elapse (counter 2) before adjusting the slats or moving the shutter/blind (in milliseconds).

- **Value**
  - Send telegram after bus recovery. Select if you want to send an action (fixed value) on this digital input after bus recovery (after a power failure) or if you do not want to send any action.
    - Sending delay after bus recovery. If an action is selected, indicate the time delay for sending this telegram (in seconds).
  - DTP to be sent. Select the type of DTP to be sent:
    - DTP 5.010 (1 byte unsigned). Values: 0 … 255
    - DTP 7.001 (2 bytes unsigned). Values: 0 … 655335
    - DTP 8.001 (2 bytes signed). Values: -32768 … 32767
    - DTP 9.001 (temperature). Values: 0 … 255
    - DTP 12.001 (4 bytes unsigned). Values: 0 … 4294967295
  - Value on raising edge (when contact activated). Defines the value to be sent when the contact is activated.
- Scene (internal). Activates a scene by activating the configured digital input.
  - Scene when contact is activated. Select the scene that will be activated when the digital input is activated.
- Occupancy (internaal). Switches to Occupied mode when the configured digital input is activated.
- Window (internal). Activates the Window Contact timer when this digital input is activated.

Communication objects

Digital input status

Digital input I1

Object number	87: Status In1		
	Switching	**Dimming On/Off**	**Blind step**
Description	Displays the status of digital input I1 of the Aidoo KNX		
Values	0 -> Off 1 -> On	0 -> Off 1 -> On	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	1.001 (DTP_Switch)	1.001 (DTP_Switch)	1.008 (DTP_UpDown)

Object number	88: Status In1		
	Value	**Dimming step**	**Blind move**
Description	Shows the value generated according to the behavior of the defined input		
Values	0 ... 255 0 ... 655335 -32768 ... 32767 0 ... 255 0 ... 4294967295	Regulation step	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	5.010 (DTP_Value_1_Ucount) 7.001 (DTP_Value_2_Ucount) 8.001 (DTP_Value_2_Count) 9.001 (DTP_Value_Temp) 12.001 (DTP_Value_4_Ucount)	3.007 (DTP_Control_Dimm.)	1.008 (DTP_UpDown)

Digital input I2

Object number	89: Status In2		
	Switching	**Dimmind On/Off**	**Blind step**
Description	Displays the status of digital input I2 of the Aidoo KNX		
Values	0 -> Off 1 -> On	0 -> Off 1 -> On	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	1.001 (DTP_Switch)	1.001 (DTP_Switch)	1.008 (DTP_UpDown)

Object number	90: Status In2		
	Value	**Dimming step**	**Blind move**
Description	Shows the value generated according to the behavior of the defined input		
Values	0 ... 255 0 ... 655335 -32768 ... 32767 0 ... 255 0 ... 4294967295	Regulation step	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	5.010 (DTP_Value_1_Ucount) 7.001 (DTP_Value_2_Ucount) 8.001 (DTP_Value_2_Count) 9.001 (DTP_Value_Temp) 12.001 (DTP_Value_4_Ucount)	3.007 (DTP_Control_Dimm.)	1.008 (DTP_UpDown)

Digital input I3

Object number	91: Status In3		
	Switching	**Dimmind On/Off**	**Blind step**
Description	Displays the status of digital input I3 of the Aidoo KNX		
Values	0 -> Off 1 -> On	0 -> Off 1 -> On	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	1.001 (DTP_Switch)	1.001 (DTP_Switch)	1.008 (DTP_UpDown)

Object number	92: Status In3		
	Value	**Dimming step**	**Blind move**
Description	Shows the value generated according to the behavior of the defined input		
Values	0 ... 255 0 ... 655335 -32768 ... 32767 0 ... 255 0 ... 4294967295	Regulation step	0 -> Up 1 -> Down
Type of access to the Bus	Reading		
Data point identification	5.010 (DTP_Value_1_Ucount) 7.001 (DTP_Value_2_Ucount) 8.001 (DTP_Value_2_Count) 9.001 (DTP_Value_Temp) 12.001 (DTP_Value_4_Ucount)	3.007 (DTP_Control_Dimm.)	1.008 (DTP_UpDown)

- Disable digital inputs

Object number	48: Control Disable Input 1	
Description	This allows the use of input I1 of the Aidoo KNX to be disabled	
Values	0 -> False 1 -> True	0 -> Disabled 1 -> Enabled
Type of access to the Bus	Write	
Data point identification	1.002 (DPT_Bool)	1.003 (DTP_Enable)

Object number	49: Control Disable Input 2	
Description	This allows the use of input I2 of the Aidoo KNX to be disabled	
Values	0 -> False 1 -> True	0 -> Disabled 1 -> Enabled
Type of access to the Bus	Write	
Data point identification	1.002 (DPT_Bool)	1.003 (DTP_Enable)

Object number	50: Control Disable Input 3	
Description	This allows the use of input I3 of the Aidoo KNX to be disabled	
Values	0 -> False 1 -> True	0 -> Disabled 1 -> Enabled
Type of access to the Bus	Write	
Data point identification	1.002 (DPT_Bool)	1.003 (DTP_Enable)

KNX parameters for LG

LGE PROTOCOL

3 Control Mode Cool / Heat W 1 -> Heat	DPT_Heat/Cool	1.100

0% -> Off 4 Control Mode Cool & On W 0.1% – 100% -> On + Cool			DPT_Scaling	5.001
0% -> Off				
5 Control Mode Heat & On	0.1% – 100% -> On + Heat	W	DPT_Scaling	5.001
6 Control Mode Auto	1 -> Auto	W	DPT_Bool	1.002
7 Control Mode Heat	1 -> Heat	W	DPT_Bool	1.002
8 Control Mode Cool	1 -> Cool	W	DPT_Bool	1.002
9 Control Mode Fan	1 -> Fan	W	DPT_Bool	1.002
10 Control Mode Dry	1 -> Dry	W	DPT_Bool	1.002
	0 -> Decrease			
	W 1 -> Increase		DPT_Step	1.007
11 Control Mode + / –	0 -> Increase W 1-> Decrease		DPT_UpDown	1.008
	0% – 49% -> Speed 1			
50% – 82% -> Speed 2	W		DPT_Scaling	5.001
12 Control Fan Speed / 3 Speeds	83% – 100% -> Speed 3 1 -> Speed 1			
	2 -> Speed 2	W	DPT_Enumerated	5.010
	3 -> Speed 3			
13 Control Fan Speed Man / Aut o	1 -> Auto	W	DPT_Bool	1.002
14 Control Fan Speed 1	1 -> Activated	W	DPT_Bool	1.002
15 Control Fan Speed 2	1 -> Activated	W	DPT_Bool	1.002
16 Control Fan Speed 3	1 -> Activated	W	DPT_Bool	1.002
	0 -> Decrease			

19	Control Vanes U-D Standby
25	Control Vanes U-D Swing
27	Control Setpoint Temperature

		0 -> Auto			
		1 -> Heat			
52	Status Mode	3 -> Cool Mode 20.105	R	DPT_HVACContr	
		9 -> Fan			
		14 -> Dry			
		0 -> Cool			
53	Status Mode Cool / Heat	1 -> Heat	R	DPT_Heat/Cool	1.100
54	Status Mode Auto	1 -> Auto	R	DPT_Bool	1.002
55	Status Mode Heat	1 -> Heat	R	DPT_Bool	1.002
56	Status Mode Cool	1 -> Cool	R	DPT_Bool	1.002
57	Status Mode Fan	1 -> Fan	R	DPT_Bool	1.002
58	Status Mode Dry	1 -> Dry	R	DPT_Bool	1.002
59	Status Mode Text	ASCII String	R	DPT_String_8859_1	16.001
		33% -> Speed 1			
		67% -> Speed 2	R	DPT_Scaling	5.001
60	100% -> Speed 3 Status Fan Speed / 3 Speeds				
1 -> Speed 1 2 -> Speed 2			R	DPT_Enumerated	5.010
		3 -> Speed 3 0 -> Manual			

61 Status Fan Speed Manual / Auto	1 -> Auto	R	DPT_Bool	1.002
62 Status Fan Speed 1	1 -> Speed 1	R	DPT_Bool	1.002
63 Status Fan Speed 2	1 -> Speed 2	R	DPT_Bool	1.002
64 Status Fan Speed 3	1 -> Speed 3	R	DPT_Bool	1.002
65 Status Fan Speed Text	ASCII String	R	DPT_String_8859_1	16.001
0 -> Deactivated 73 Status Vanes U-D Swing R 1 -> Activated			DPT_Bool	1.002
75 Status AC Setpoint Temperature Varies depending on manufacturer R			DPT_Value_Temp	9.001
76 Status AC Return Temperature Varies depending on manufacturer R			DPT_Value_Temp	9.001
77 Internal probe temperature Varies depending on manufacturer R			DPT_Value_Temp	9.001
0 -> No alarm 79 Status Reset Filter R 1 -> Alarm			DPT_Bool	1.002

Object **Name** **Values** **Flags**		**Datapoint**	
0 -> Disabled 80 Status Setpoint limitation R 1 -> Enabled	DPT_Switch		1.001
0 -> No error / alarm 81 Status Error / Alarm R 1 -> An error / alarm has occurred	DPT_Alarm		1.005

82	Error text code cturer R		Varies depending on manufa	DPT_String_8859_1	16.001
	0 Status In1 – Switching R 1		-> Off -> On	DPT_Switch	1.001
87	0 Status In1 – Dimming On / Off R 1		-> Off -> On	DPT_Switch	1.001
0 -> Up					
	Status In1 – Blind Step	1 -> Down	R	DPT_UpDown	1.008
	Status In1 – Value	1 byte unsigned	R	DPT_Value_1_Ucount	5.010
	Status In1 – Value	2 byte unsigned	R	DPT_Value_2_Ucount	7.001
	Status In1 – Value	2 byte signed	R	DPT_Value_2_Count	8.001
	Status In1 – Value	Temperature (ºC)	R	DPT_Value_Temp	9.001
88	Status In1 – Value	4 byte unsigned	R	DPT_Value_4_Ucount	12.001
	Status In1 – Dimming Step	Dimming step	R	DPT_Control_Dimm.	3.007
	0 Status In1 – Blind Move R 1		-> Up -> Down	DPT_UpDown	1.008
	0 Status In2 – Switching R 1		-> Off -> On	DPT_Switch	1.001
89	0 Status In2 – Dimming On / Off R 1		-> Off -> On	DPT_Switch	1.001

		0 -> Up				
	Status In2 – Blind Step	1 -> Down	R	DPT_UpDown		1.008
	Status In2 – Value	1 byte unsigned	R	DPT_Value_1_Ucount		5.010
	Status In2 – Value	2 byte unsigned	R	DPT_Value_2_Ucount		7.001
	Status In2 – Value	2 byte signed	R	DPT_Value_2_Count		8.001
	Status In2 – Value	Temperature (ºC)	R	DPT_Value_Temp		9.001
90	Status In2 – Value	4 byte unsigned	R	DPT_Value_4_Ucount		12.001
	Status In2 – Dimming Step	Dimming step	R	DPT_Control_Dimm.		3.007
	0 -> Up Status In2 – Blind Move R 1 -> Down			DPT_UpDown	1.008	
	0 -> Off Status In3 – Switching R 1 -> On			DPT_Switch	1.001	
91	0 -> Off Status In3 – Dimming On / Off R 1 -> On			DPT_Switch	1.001	
		0 -> Up				
	Status In3 – Blind Step	1 -> Down	R	DPT_UpDown		1.008
	Status In3 – Value	1 byte unsigned	R	DPT_Value_1_Ucount		5.010
	Status In3 – Value	2 byte unsigned	R	DPT_Value_2_Ucount		7.001
	Status In3 – Value	2 byte signed	R	DPT_Value_2_Count		8.001
	Status In3 – Value	Temperature (ºC)	R	DPT_Value_Temp		9.001
92	Status In3 – Value	4 byte unsigned	R	DPT_Value_4_Ucount		12.001
	Status In3 – Dimming Step	Dimming step	R	DPT_Control_Dimm.		3.007

0 -> Up Status In3 – Blind Move R				DPT_UpDown	1.008	
		1 -> Down				

Documents / Resources

	AIRZONE Aidoo KNX Controller [pdf] Instruction Manual Aidoo KNX Controller, Aidoo, KNX Controller, Controller