

Technical Manual



KNX Gateway for Mitsubishi air conditioning units

SCN-ACG0MIT.01

Further Documents:

Datasheet:

https://www.mdt.de/EN_Downloads_Datasheets.html

Assembly and Operation Instructions:

https://www.mdt.de/EN_Downloads_Instructions.html

Solution Proposals for MDT products:

https://www.mdt.de/EN_Downloads_Solutions.html

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2 Overview

2.1 Overview devices

The description refers to the following devices (article number printed in **bold**):

- **SCN-ACG0MIT.01** KNX Gateway for Mitsubishi air conditioning units, flush mounted

2.2 Functions

Fan speed control

The fan speed of the air conditioning unit can be conveniently adjusted via KNX. Depending on the connected indoor unit, 2, 3 or 4 fan speeds are available.

The fan can be set to the preferred level. If the air conditioning unit supports automatic fan control, it is easy to switch between manual setting and automatic operation.

The current fan status is reported back and can, for example, be displayed in a visualisation.

Vanes control

For air conditioning units with adjustable vanes, the air distribution can be adjusted. Depending on the connected indoor unit, 4 or 5 vanes positions are available.

The vanes can be moved directly to the preferred position. Additionally, if supported by the air conditioning unit, automatic vanes adjustment or the swing function can be used.

The status of the vanes will be reported back and, for example, displayed in a visualisation.

Temperature functions

The desired target temperature of the air conditioning unit can be set via the bus. Additionally, stepwise adjustment of the target temperature (“+” / “-”) is possible.

The set temperature as well as the room or return-air temperature detected by the air conditioning unit can be reported and displayed in a visualisation.

If required, an external room temperature can also be used as a reference value.

Scene function

The gateway supports up to five scenes. This allows frequently used settings such as operating mode, fan speed, set temperature, vanes position and switching state to be saved and centrally recalled.

Window contact function

Via the window contact function, the air conditioning unit can be switched off automatically as soon as a window is opened. This prevents unnecessary heating or cooling when the window is open. The switch-off can be set to occur after an adjustable delay.

After closing the window, the air conditioning unit can, if desired, return to its previous on/off state.

Lock functions

The local remote control of the air conditioning unit can be locked or unlocked as required. This prevents settings from being unintentionally changed directly on the air conditioning unit.

Alternatively, the operating functions of the gateway can be locked. This ensures that the current settings remain protected, for example in the case of centralised operating modes.

The latest selected lock states are retained even after a bus reset or a loss of bus voltage

Operating hours meter

The operating hours meter records the operating time of the air conditioning unit. The recorded values can be read out and used, for example, for maintenance or service notifications.

If required, the meter readings can be reset. The stored values are retained even after a bus reset.

Diagnosis and error messages

For monitoring the air conditioning unit, error and alarm messages can be issued. This allows you to quickly identify whether there is a fault with the air conditioning unit.

If required, the error code reported by the air conditioning unit can also be transmitted to the bus. The information can be displayed in a visualisation or used for further notifications and automations.

2.3 Wiring diagram

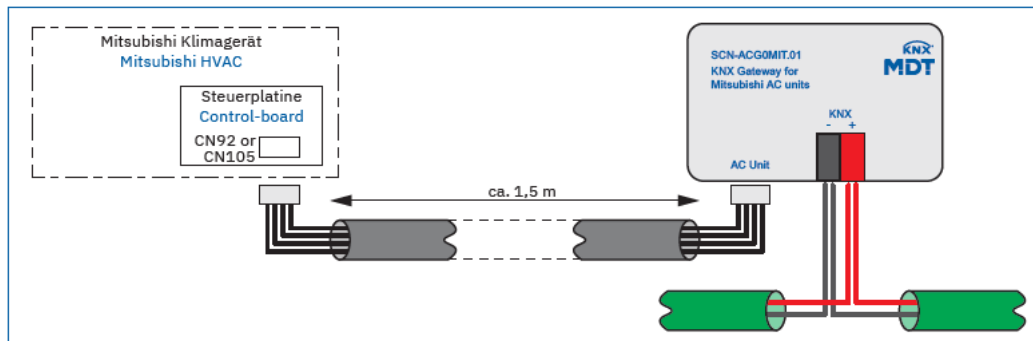


Figure 1: Wiring diagram

2.4 Structure & Handling

The following picture shows the structure of the device:

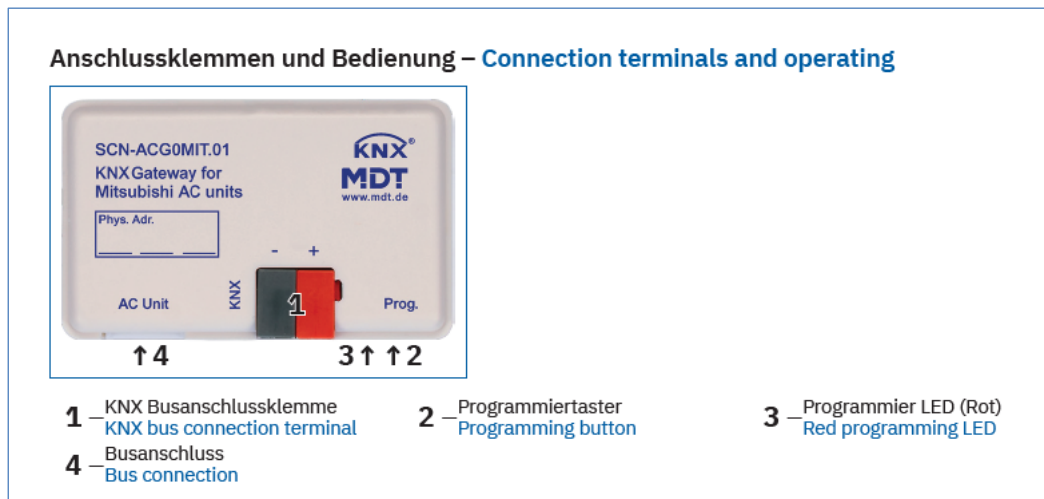


Figure 2: Structure & Handling

2.5 Commissioning

1. Wire the device according to the connection diagram.
2. Connect the programming interface to the bus.
3. Switch-on bus voltage.
4. Press the programming button on the device (Red programming LED lights up continuously).
5. Set and programme the physical address in the ETS (Programming LED turns off).
6. Configure and programme the settings in the application program.

3 Communication objects

3.1 Standard settings of the communication objects

Standard settings – Control objects									
No.	Name	Object function	Length	C	R	W	T	U	
0	Control_ On/Off	0-Off;1-On	1 Bit	X		X	X		
1	Control_ Mode	0-Aut;1-Hea;3-Coo;9-Fan;14-Dry	1 Byte	X		X	X		
2	Control_ Mode Cool/Heat	0-Cool;1-Heat	1 Bit	X		X	X		
3	Control_ Mode Auto	1-Set AUTO mode	1 Bit	X		X	X		
4	Control_ Mode Heat	1-Set HEAT mode	1 Bit	X		X	X		
5	Control_ Mode Cool	1-Set COOL mode	1 Bit	X		X	X		
6	Control_ Mode Fan	1-Set FAN mode	1 Bit	X		X	X		
7	Control_ Mode Dry	1-Set DRY mode	1 Bit	X		X	X		
8	Control_ Mode +/-	0-Up;1-Down	1 Bit	X		X			
8	Control_ Mode -/+	0-Decrease;1-Increase	1 Bit	X		X			
9	Control_ Fan Speed / 2 (3) (4) Speeds	Speed values: 1,2,(3),(4)	1 Byte	X		X	X		
10	Control_ Fan Speed / 2 (3) (4) Speeds	Thresholds: 75% (2) Thresholds: 50% and 83% (3) Thresholds: 38%, 63% and 88% (4)	1 Byte	X		X	X		
11	Control_ Fan Speed Manual/Auto	0-Manual;1-Auto	1 Bit	X		X	X		
12	Control_ Fan Speed 1	1-Set Fan Speed 1	1 Bit	X		X	X		
13	Control_ Fan Speed 2	1-Set Fan Speed 2	1 Bit	X		X	X		
14	Control_ Fan Speed 3	1-Set Fan Speed 3	1 Bit	X		X	X		
15	Control_ Fan Speed 4	1-Set Fan Speed 4	1 Bit	X		X	X		
16	Control_ Fan Speed -/+	0-Decrease;1-Increase	1 Bit	X		X			
16	Control_ Fan Speed +/-	0-Up;1-Down	1 Bit	X		X			
17	Control_ Vanes U-D / 4 (5) pos	Position values: 1,2,3,4,(5)	1 Byte	X		X	X		
18	Control_ Vanes U-D / 4 (5) pos	Thresholds: 38%, 63% and 88% (4) Thresholds: 30%, 50%, 70% and 90% (5)	1 Byte	X		X	X		
19	Control_ Vanes U-D Man/Auto	0-Manual;1-Auto	1 Bit	X		X	X		
20	Control_ Vanes U-D Pos1	1-Set Position 1	1 Bit	X		X	X		
21	Control_ Vanes U-D Pos2	1-Set Position 2	1 Bit	X		X	X		
22	Control_ Vanes U-D Pos3	1-Set Position 3	1 Bit	X		X	X		
23	Control_ Vanes U-D Pos4	1-Set Position 4	1 Bit	X		X	X		
24	Control_ Vanes U-D Pos5	1-Set Position 5	1 Bit	X		X	X		
25	Control_ Vanes U-D Swing	0-Off;1-Swing	1 Bit	X		X	X		
26	Control_ Vanes U-D -/+ Control_ Vanes U-D +/-	0-Decrease;1-Increase 0-Up;1-Down	1 Bit	X		X	X		
27	Control_ Setpoint Temperature	(°C)	2 Byte	X		X	X		
28	Control_ Setpoint Temp -/+ Control_ Setpoint Temp +/-	0-Decrease;1-Increase 0-Up;1-Down	1 Bit	X		X			
29	Control_ Ambient Temperature	(°C)	2 Byte	X		X	X		
30	Status_ Operation Hour Counter	Number of operating hours	2 Byte	X		X	X		

31	Status_ Operation Second Counter	Number of operating seconds	4 Byte	X		X	X	
32	Control_ Window Contact Status	0-Open;1-Closed	1 Bit	X		X	X	
33	Control_ Lock Remote Control	0-Unlocked;1-Locked	1 Bit	X		X	X	
34	Control_ Lock Control Objects	0-Unlocked;1-Locked	1 Bit	X		X	X	
35	Control_ Store/Execute Scene	0...4-Exec1-5;128...132-Save1-5	1 Byte	X		X	X	
36	Control_ Store Scene 1	1-Store Scene 1	1 Bit	X		X		
37	Control_ Store Scene 2	1-Store Scene 2	1 Bit	X		X		
38	Control_ Store Scene 3	1-Store Scene 3	1 Bit	X		X		
39	Control_ Store Scene 4	1-Store Scene 4	1 Bit	X		X		
40	Control_ Store Scene 5	1-Store Scene 5	1 Bit	X		X		
41	Control_ Execute Scene 1	1-Execute Scene 1	1 Bit	X		X	X	
42	Control_ Execute Scene 2	1-Execute Scene 2	1 Bit	X		X	X	
43	Control_ Execute Scene 3	1-Execute Scene 3	1 Bit	X		X	X	
44	Control_ Execute Scene 4	1-Execute Scene 4	1 Bit	X		X	X	
45	Control_ Execute Scene 5	1-Execute Scene 5	1 Bit	X		X	X	

Standard settings – Status objects								
No.	Name	Object function	Length	C	R	W	T	U
46	Status_ On/Off	0-Off;1-On	1 Bit	X	X		X	
47	Status_ Mode	0-Aut;1-Hea;3-Coo;9-Fan;14-Dry	1 Byte	X	X		X	
48	Status_ Mode Cool/Heat	0-Cool;1-Heat	1 Bit	X	X		X	
49	Status_ Mode Auto	1-AUTO mode is active	1 Bit	X	X		X	
50	Status_ Mode Heat	1-HEAT mode is active	1 Bit	X	X		X	
51	Status_ Mode Cool	1-COOL mode is active	1 Bit	X	X		X	
52	Status_ Mode Fan	1-FAN mode is active	1 Bit	X	X		X	
53	Status_ Mode Dry	1-DRY mode is active	1 Bit	X	X		X	
54	Status_ Mode Text	ASCII String	14 Byte	X	X		X	
55	Status_ Fan Speed / 2 (3) (4) Speeds	Speed values: 1,2,(3),(4)	1 Byte	X	X		X	
56	Status_ Fan Speed / 2 (3) (4) Speeds	50% and 100% (2) 33%, 67% and 100% (3) 25%, 50%, 75% and 100% (4)	1 Byte	X	X		X	
57	Status_ Fan Speed Man/Auto	0-Manual;1-Auto	1 Bit	X	X		X	
58	Status_ Fan Speed 1	1-Fan in speed 1	1 Bit	X	X		X	
59	Status_ Fan Speed 2	1-Fan in speed 2	1 Bit	X	X		X	
60	Status_ Fan Speed 3	1-Fan in speed 3	1 Bit	X	X		X	
61	Status_ Fan Speed 4	1-Fan in speed 4	1 Bit	X	X		X	
62	Status_ Fan Speed Text	ASCII String	14 Byte	X	X		X	
63	Status_ Vanes U-D / 4 (5) pos	Position values: 1,2,3,4,(5)	1 Byte	X	X		X	
64	Status_ Vanes U-D / 4 (5) pos	25%, 50%, 75% and 100% (4) 20%, 40%, 60%, 80% and 100% (5)	1 Byte	X	X		X	
65	Status_ Vanes U-D Man/Auto	0-Manual;1-Auto	1 Bit	X	X		X	
66	Status_ Vanes U-D Pos1	1-Vanes in Position 1	1 Bit	X	X		X	
67	Status_ Vanes U-D Pos2	1-Vanes in Position 2	1 Bit	X	X		X	
68	Status_ Vanes U-D Pos3	1-Vanes in Position 3	1 Bit	X	X		X	
69	Status_ Vanes U-D Pos4	1-Vanes in Position 4	1 Bit	X	X		X	

70	Status_ Vanes U-D Pos5	1-Vanes in Position 5	1 Bit	X	X		X	
71	Status_ Vanes U-D Swing	0-Off;1-Swing	1 Bit	X	X		X	
72	Status_ Vanes U-D Text	ASCII String	14 Byte	X	X		X	
73	Status_ AC Setpoint Temperature	(°C)	2 Byte	X	X		X	
74	Status_ AC Return Temperature	(°C)	2 Byte	X	X		X	
75	Status_ Error/Alarm	0-No Alarm;1-Alarm	1 Bit	X	X		X	
76	Status_ Error Code	AC Unit Error Code	2 Byte	X	X		X	
77	Status_ Operation Hour Counter	Number of operating hours	2 Byte	X	X		X	
78	Status_ Operation Second Counter	Number of operating seconds	4 Byte	X	X		X	
79	Status_ Lock Remote Control	0-Unlocked;1-Locked	1 Bit	X	X		X	
80	Status_ Lock Control Objects	0-Unlocked;1-Locked	1 Bit	X	X		X	
81	Status_ Current Scene	0..4-Scene X+1;63-No Scene	1 Byte	X	X		X	
82	Legacy_ Mode	0-Aut;1-Hea;2-Dry;3-Fan;4-Coo	1 Byte	X	X	X	X	
83	Legacy_ Fan Speed	0-Auto; 1..4-speed 1..4	1 Byte	X	X	X	X	
84	Legacy_ Vanes	0-Auto; 1..5-pos1..5; 6-Swing	1 Byte	X	X	X	X	

The table above shows the preset default settings. The priority of the individual communications objects and the flags can be adjusted by the user as required. The flags assign the communication objects their respective tasks in programming, where C stands for communication, R for read, W for write, T for transmit and U for update.

4 ETS-Parameters

The following figure shows the menu for the general settings:

General	Send READs for Control_ objects on bus recovery (T & U flags must be active)	☐ Yes ☒ No
Mode Configuration	Enable "Lock Remote Control" objects	☒ Yes ☐ No
Fan Speed Configuration	Enable "Lock Control Objects" objects	☒ Yes ☐ No
Vanes Up-Down Configuration	Enable func "Operating Hours Counter"	☒ Yes ☐ No
Temperature Configuration	Enable object "Error Code [2byte]"	☒ Yes ☐ No
Scene Configuration		
Window Contact Configuration		

With this configuration it's possible to send On/Off (*Control_ On/Off*), change the AC Mode (*Control_ Mode*), the Fan Speed (*Control_ Fan Speed*) and also the Setpoint Temperature (*Control_ Setpoint Temperature*). The Status_ objects, for the mentioned Control_ objects, are also available to use if needed. Also objects *Status_ AC Setpoint Temp* and *Status_ Error/Alarm* are shown.

-  0: Control_ On/Off [DPT_1.001] - 0-Off;1-On
-  1: Control_ Mode [DPT_20.105] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
-  9: Control_ Fan Speed / 3 Speeds [DPT_5.010] - Speed values: 1,2,3
-  10: Control_ Fan Speed / 3 Speeds [DPT_5.001] - Thresholds: 50% and 83%
-  27: Control_ Setpoint Temperature [DPT_9.001] - (°C)
-  46: Status_ On/Off [DPT_1.001] - 0-Off;1-On
-  47: Status_ Mode [DPT_20.105] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
-  55: Status_ Fan Speed / 3 Speeds [DPT_5.010] - Speed Values: 1,2,3
-  56: Status_ Fan Speed / 3 Speeds [DPT_5.001] - 33%, 67% and 100%
-  73: Status_ AC Setpoint Temperature [DPT_9.001] - (°C)
-  74: Status_ AC Return Temperature [DPT_9.001] - (°C)
-  75: Status_ Error/Alarm [DPT_1.005] - 0-No alarm;1-Alarm

4.1 General dialog

Inside this dialog it is possible to activate or change the parameters shown under **4 ETS Parameters**

4.1.1 Send READs for Control_ objects on bus recovery

When this parameter is enabled, the device will send READ telegrams for the group addresses associated with its *Control_* objects on bus recovery or application reset/start-up.

- If set to **“No”**, the gateway will not perform any action.
- If set to **“Yes”**, all *Control_* objects with both Transmit (**T**) and Update (**U**) flags enabled will send READs and their values will be updated with the response when received.

Send READs for Control_ objects on bus recovery (T & U flags must be active)

☒ Yes ☐ No

> Delay before sending READs (sec)

10

➤ Delay before sending READs (sec):

With this parameter, a delay can be configured between 0 and 30 seconds for the READs sent by the *Control_* objects. This is to give time to other KNX devices on the bus to start-up before sending the READs.

4.1.2 Enable “Lock Remote Control” objects

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Lock Remote Control* object will appear.

 33: Control_ Lock Remote Control [DPT_1.002] - 0-Unlocked;1-Locked

 79: Status_ Lock Remote Control [DPT_1.002] - 0-Unlocked;1-Locked

- When a **“1”** value is sent to this communication object, the remote controller is locked. To be unlocked, a **“0”** value must be sent. The gateway remembers the last value received even if a KNX bus reset or failure happens.

 **Important:** *If an initial scene is enabled and it has (unchanged) or unlocked as the Value for Remote Lock, this would unlock the remote controller because the initial scene has priority over the Control_ Lock Remote Control communication object.*

4.1.3 Enable “Lock Control Objects” objects

This parameter shows/hides the *Control_ Lock Control Objects* communication object which, depending on the sent value, locks or unlocks ALL the *Control_* communication objects except itself.

 34: Control_ Lock Control Objects [DPT_1.002] - 0-Unlocked;1-Locked

 80: Status_ Lock Control Objects [DPT_1.002] - 0-Unlocked;1-Locked

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Lock Control Objects* object will appear.
 - When a **“1”** value is sent to this communication object, all the *Control_* objects will be locked. To unlock these, a **“0”** value must be sent. The gateway remembers the last value received even if a KNX bus reset/failure happens.

4.1.4 Enable func “Operating Hours Counter”

This parameter shows/hides the *Control_/Status_ Operation Hour Counter* and the *Control_/Status_ Operation Second Counter* communication objects, which count the number of operating hours and seconds for the device.

-  30: Control_ Operation Hour Counter [DPT_7.001] - Number of operating hours
-  31: Control_ Operation Second Counter [DPT_13.100] - Number of operating seconds
-  77: Status_ Operation Hour Counter [DPT_7.001] - Number of operating hours
-  78: Status_ Operation Second Counter [DPT_13.100] - Number of operating seconds

- If set to “No”, the object will not be shown.
- If set to “Yes”, the *Control_/Status_ Operation Hour Counter* objects and the *Control_/Status_ Operation Second Counter* objects will appear.
 - The status objects can be read, and they send their status every time an hour or second, respectively, is counted. The gateway keeps that count in memory and the status is also sent after a KNX bus reset or failure. To update the counter when needed, use the *Control_* objects. To reset any of the counters, write a “0” value.

 **Important:** This object will return its status every time a value is written, but only if it's different from the existing one.

 **Important:** The gateway will not send the status to KNX if the stored value is zero.

4.1.5 Enable object “Error Code [2byte]”

This parameter shows/hides the *Status_ Error Code* communication object which shows the indoor unit errors, if occurred, in numeric format.

-  76: Status_ Error Code [2byte] - AC Unit Error Code

- If set to “No”, the object will not be shown.
- If set to “Yes”, the *Status_ Error Code [2byte]* object will appear.
 - This object can be read, and it also sends the indoor unit error, if occurred, in a numeric format. A “0” value means no error.

4.2 Mode Configuration dialog

General	Indoor unit has FAN mode (see docum. for your indoor unit)	☒ Yes ☐ No
Mode Configuration	Enable "Mode Cool/Heat" objects (for Control and Status)	☐ Yes ☒ No
Fan Speed Configuration	Enable use of +/- object for Mode	☐ Yes ☒ No
Vanes Up-Down Configuration	Enable use of bit-type Mode objects (for Control)	☐ Yes ☒ No
Temperature Configuration	Enable use of bit-type Mode objects (for Status)	☐ Yes ☒ No
Scene Configuration	Enable use of Text object for Mode	☐ Yes ☒ No
Window Contact Configuration	Enable use of Legacy_ object for Mode	☐ Yes ☒ No

All the parameters in this section are related to the different mode properties and communication objects.

 1: Control_Mode [DPT_20.105] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry

The byte-type communication object for Mode works with the DTP_20.105. Auto mode will be enabled with a “0” value, Heat mode with a “1” value, Cool mode with a “3” value, Fan mode with a “9” value and Dry mode with a “14” value.

4.2.1 Indoor unit has FAN mode

This parameter is used to indicate if the indoor unit has the *fan mode* available.

- If set to “No”, the indoor unit doesn’t have the *fan mode* available.
- If set to “Yes”, the indoor unit has the *fan mode* available.

 **Important:** To check if your indoor unit has a FAN mode available, refer to the indoor unit documentation.

4.2.2 Enable “Mode Cool/Heat” objects (for Control and status)

This parameter shows/hides the *Control_* and *Status_ Mode Cool/Heat* communication objects.

 2: Control_ Mode Cool/Heat [DPT_1.100] - 0-Cool;1-Heat

 48: Status_ Mode Cool/Heat [DPT_1.100] - 0-Cool;1-Heat

- If set to “No”, the objects will not be shown.
- If set to “Yes”, the *Control_* and *Status_ Mode Cool/Heat* objects will appear.
 - When a “1” value is sent to the *Control_* communication object, **Heat mode** will be enabled in the indoor unit, and the *Status_* object will return its value.
 - When a “0” value is sent to the *Control_* communication object, **Cool mode** will be enabled in the indoor unit, and the *Status_* object will return its value.

4.2.3 Enable use of + / - object for Mode

This parameter shows/hides the *Control_ Mode +/-* communication object which lets change the indoor unit mode by using two different datapoint types.

 8: Control_ Mode +/- [DPT_1.007] - 0-Decrease;1-Increase

- If set to “No”, the object will not be shown.
- If set to “Yes”, the *Control_ Mode +/-* object and a new parameter will appear.

Enable use of +/- object for Mode	☒ Yes ☐ No
> DPT type for +/- Mode Object	☒ 0-Decrease / 1-Increase [DPT_1.007] ☐ 0-Up / 1-Down [DPT_1.008]

➤ DPT type for +/- Mode Object

This parameter lets choose between the datapoints **0-Up / 1-Down [DPT_1.008]** and **0-Decrease / 1-Increase [DPT_1.007]** for the *Control_ Mode +/-* object.

The sequence followed when using this object is shown below:



- Up / Increase
- Down / Decrease

⚠ **Important:** To check if your indoor unit has a FAN mode available, refer to the indoor unit documentation.

4.2.4 Enable use of bit-type Mode objects (for Control)

This parameter shows/hides the bit-type *Control_ Mode* objects.

-  3: Control_ Mode Auto [DPT_1.002] - 1-Set AUTO mode
-  4: Control_ Mode Heat [DPT_1.002] - 1-Set HEAT mode
-  5: Control_ Mode Cool [DPT_1.002] - 1-Set COOL mode
-  6: Control_ Mode Fan [DPT_1.002] - 1-Set FAN mode
-  7: Control_ Mode Dry [DPT_1.002] - 1-Set DRY mode

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ Mode* objects for Auto, Heat, Cool, Fan and Dry will appear. To activate a mode by using these objects, a **“1”** value must be sent.

4.2.5 Enable use of bit-type Mode objects (for Status)

This parameter shows/hides the bit-type *Status_ Mode* objects.

-  49: Status_ Mode Auto [DPT_1.002] - 1-AUTO mode is active
-  50: Status_ Mode Heat [DPT_1.002] - 1-HEAT mode is active
-  51: Status_ Mode Cool [DPT_1.002] - 1-COOL mode is active
-  52: Status_ Mode Fan [DPT_1.002] - 1-FAN mode is active
-  53: Status_ Mode Dry [DPT_1.002] - 1-DRY mode is active

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Status_ Mode* objects for Auto, Heat, Cool, Fan and Dry will appear. When enabled, a mode will return a **“1”** through its bit-type object.

4.2.6 Enable use of Text object for Mode

This parameter shows/hides the *Status_ Mode Text* communication object.

 54: Status_ Mode Text [DPT_16.001] - ASCII String

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Status_ Mode Text* object will appear. Also, five text fields will be shown in the parameter section, one for each mode. Use these text fields to modify the text string that will be displayed by the *Status_ Mode Text* for each mode.

Enable use of Text object for Mode	☒ Yes ☐ No
ASCII strings shown in comm object "Status_ Mode Text"	<< 14-byte string values >>
> String when mode is AUTO	AUTO
> String when mode is HEAT	HEAT
> String when mode is COOL	COOL
> String when mode is FAN	FAN
> String when mode is DRY	DRY

4.2.7 Enable use of Legacy_ object for Mode

This parameter shows/hides the bit-type *Legacy_ Mode* object.

 82: Legacy_ Mode [1byte] - 0-Aut;1-Hea;2-Dry;3-Fan;4-Coo

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Legacy_ Mode* communication object will appear. This object is used to change the indoor unit mode using a different datapoint type. It is used to maintain compatibility with certain older indoor unit models.

4.3 Fan Speed Configuration dialog

General	Fan is accessible in Indoor unit (see docum. for your indoor unit)	☒ Yes ☐ No
Mode Configuration	Available fanspeeds in Indoor Unit (see docum. for your indoor unit)	3
Fan Speed Configuration	Indoor unit has AUTO fan speed (see docum. for your indoor unit)	☐ Yes ☒ No
Vanes Up-Down Configuration	Enable use of +/- object for Fan Speed	☐ Yes ☒ No
Temperature Configuration	Enable use of bit-type Fan Speed objects (for Control)	☐ Yes ☒ No
Scene Configuration	Enable use of bit-type Fan Speed objects (for Status)	☐ Yes ☒ No
Window Contact Configuration	Enable use of Text object for Fan Speed	☐ Yes ☒ No
	Enable use of Legacy_ object for Fan	☐ Yes ☒ No

All the parameters in this section are related to the Fan Speed properties and communication objects.

4.3.1 Fan is accessible in Indoor unit

Use this parameter to define whether the unit has a Fan Speed control available or not.

-  9: Control_ Fan Speed / 3 Speeds [DPT_5.010] - Speed values: 1,2,3
-  10: Control_ Fan Speed / 3 Speeds [DPT_5.001] - Thresholds: 50% and 83%
-  55: Status_ Fan Speed / 3 Speeds [DPT_5.010] - Speed Values: 1,2,3
-  56: Status_ Fan Speed / 3 Speeds [DPT_5.001] - 33%, 67% and 100%

- If set to **“No”**, all the parameters and communication objects for the Fan Speed will not be shown.
- If set to **“Yes”**, all the fan speed-related parameters and communication objects enabled in the parameters dialog will be shown.

 **Important:** To check if your indoor unit has fan speeds available, refer to the indoor unit documentation.

4.3.2 Available fan speeds in Indoor unit

Use this parameter to define how many fan speeds are available in the indoor unit.

Available fanspeeds in Indoor Unit (see docum. for your indoor unit)	3
---	---

 **Important:** To check if your indoor unit has fan speeds available, refer to the indoor unit documentation.

4.3.3 Indoor unit has AUTO fan speed

Use this parameter to define whether the indoor unit has Auto Fan Speed available or not.

- If set to **“No”**, the parameter and the communication objects for the Auto Fan Speed will not be shown.
- If set to **“Yes”**, a new parameter will appear. Find more information on section *Enable “Fan Speed Manual/Auto” objects* on the next page.

Enable "Fan Speed Man/Auto" objects
(for Control and Status) ☐ Yes ☒ No

 **Important:** To check if your indoor unit has Auto fan speed available, refer to the indoor unit documentation.

4.3.4 Enable use of +/- object for Fan Speed

This parameter shows/hides the *Control_ Fan Speed +/-* communication object which lets increase/decrease the indoor unit fan speed by using two different datapoint types.

 16: Control_ Fan Speed +/- [DPT_1.007] - 0-Decrease;1-Increase

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Fan Speed +/-* object and a new parameter will appear.

Enable use of +/- object for Fan Speed ☒ Yes ☐ No

> DPT type for +/- Fan Speed object ☒ 0-Decrease / 1-Increase [DPT_1.007]
☐ 0-Up / 1-Down [DPT_1.008]

➤ DPT type for +/- Fan Speed object

This parameter lets choose between the datapoints **0-Up / 1-Down [DPT_1.008]** and **0-Decrease / 1-Increase [DPT_1.007]** for the *Control_ Fan Speed +/-* object.

4.3.5 Enable “Fan Speed Man/Auto” objects (for Control and Status)

This parameter appears when previous *Indoor unit has AUTO fan speed* parameter is set to **“Yes”**.

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ and Status_ Fan Speed Manual/Auto* objects will appear.

 11: Control_ Fan Speed Man/Auto [DPT_1.002] - 0-Manual;1-Auto

 57: Status_ Fan Speed Man/Auto [DPT_1.002] - 0-Manual;1-Auto

4.3.6 Enable use of bit-type Fan Speed objects (for Control)

This parameter shows/hides the bit-type *Control_ Fan Speed* objects.

-  12: Control_ Fan Speed 1 [DPT_1.002] - 1-Set Fan Speed 1
-  13: Control_ Fan Speed 2 [DPT_1.002] - 1-Set Fan Speed 2
-  14: Control_ Fan Speed 3 [DPT_1.002] - 1-Set Fan Speed 3
-  15: Control_ Fan Speed 4 [DPT_1.002] - 1-Set Fan Speed 4

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ Fan Speed* objects for Speed 1, Speed 2, Speed 3 (if available), and Speed 4 (if available) will appear. To activate a Fan Speed by using these objects, a **“1”** value must be sent.

4.3.7 Enable use of bit-type Fan Speed objects (for Status)

This parameter shows/hides the bit-type *Status_ Fan Speed* objects.

-  58: Status_ Fan Speed 1 [DPT_1.002] - 1-Fan in speed 1
-  59: Status_ Fan Speed 2 [DPT_1.002] - 1-Fan in speed 2
-  60: Status_ Fan Speed 3 [DPT_1.002] - 1-Fan in speed 3
-  61: Status_ Fan Speed 4 [DPT_1.002] - 1-Fan in speed 4

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Status_ Fan Speed* objects for Speed 1, Speed 2, Speed 3 (if available), and Speed 4 (if available) will appear. When a Fan Speed is enabled, a **“1”** value is returned through its bit-type object.

4.3.8 Enable use of Text object for Fan Speed

This parameter shows/hides the *Status_ Fan Speed Text* communication object.

 62: Status_ Fan Speed Text [DPT_16.001] - ASCII String

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Status_ Fan Speed Text* object will appear. Also, in the parameters, five text fields will be shown, one for each Fan Speed. Use these fields to modify the text string that will be displayed by the *Status_ Fan Speed Text* for each fan speed.

ASCII strings shown in comm object "Status_ Fan Speed Text"	<< 14-byte string values >>
> String when fan speed is AUTO	AUTO
> String when fan speed is 1	SPEED 1
> String when fan speed is 2	SPEED 2
> String when fan speed is 3	SPEED 3
> String when fan speed is 4	SPEED 4

4.3.9 Enable use of Legacy_ object for Fan Speed

This parameter shows/hides the *Legacy_ Fan Speed* communication object.

 83: Legacy_ Fan Speed [1byte] - 0 - Auto; 1..4 - speed 1..4

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Legacy_ Fan Speed* object will appear. This object is used to change the indoor unit fan speed, but using a different data type. It is used to maintain compatibility with older indoor unit models.

4.4 Vanes Up-Down Configuration dialog

General	Indoor unit has U-D Vanes (see docum. for your indoor unit)	☒ Yes ☐ No
Mode Configuration	Available positions in Indoor Unit (see docum. for your indoor unit)	5
Fan Speed Configuration	Indoor unit has AUTO Vanes U-D (see docum. for your indoor unit)	☐ Yes ☒ No
Vanes Up-Down Configuration	Enable "Vanes U-D Swing" objects (for Control and Status)	☐ Yes ☒ No
Temperature Configuration	Enable use of +/- object for Vanes U-D	☐ Yes ☒ No
Scene Configuration	Enable use of bit-type Vanes U-D objects (for Control)	☐ Yes ☒ No
Window Contact Configuration	Enable use of bit-type Vanes U-D objects (for Status)	☐ Yes ☒ No
	Enable use of Text object for Vanes U-D	☐ Yes ☒ No
	Enable use of Legacy_ object for Vanes	☐ Yes ☒ No

All the parameters in this section are related to the Vanes Up-Down properties and communication objects.

4.4.1 Indoor unit has U-D Vanes

This parameter lets choose if the unit has U-D Vanes available or not.

Indoor unit has U-D Vanes (see docum. for your indoor unit)	☒ Yes ☐ No
--	---

- If set to **"No"**, all the parameters and communication objects for the U-D Vanes will not be shown.
- If set to **"Yes"**, all the parameters and communication objects (if enabled in the parameters dialog) for the U-D Vanes will be shown.

⚠ Important: Read the documentation of your indoor unit to check if U-D Vanes are available.

4.4.2 Available positions in Indoor unit

Use this parameter to select how many vane positions (4 or 5) are available in the indoor unit.

Available positions in Indoor Unit (see docum. for your indoor unit)	5
---	---

⚠ Important: To check how many vane positions are available, read the indoor unit documentation.

4.4.3 Indoor unit has AUTO Vanes U-D

Use this parameter to define whether the indoor unit has Auto Vanes U-D available or not.

Indoor unit has AUTO Vanes U-D
(see docum. for your indoor unit)

☐ Yes ☒ No

- If set to **“No”**, all the parameters and communication objects for the AUTO Vanes U-D will not be shown.
- If set to **“Yes”**, a new parameter will appear. Find more information about this parameter in the next chapter.

Enable "Vanes U-D Man/Auto" objects
(for Control and Status)

☒ Yes ☐ No

 **Important:** Read the documentation of your indoor unit to check if U-D Vanes are available.

4.4.4 Enable “Vanes U-D Man/Auto” objects (for Control and Status)

This parameter shows/hides the *Control_ Vanes U-D Man/Auto* and *Status_ Vanes U-D Man/Auto* communication objects.

 19: *Control_ Vanes U-D Man/Auto* [DPT_1.002] - 0-Manual;1-Auto

 65: *Status_ Vanes U-D Man/Auto* [DPT_1.002] - 0-Manual;1-Auto

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ Vanes U-D Man/Auto* and *Status_ Vanes U-D Man/Auto* objects will appear.
 - When a **“1”** value is sent to the *Control_* communication object, Vanes U-D will be in Auto mode, and the *Status_* object will return this value.
 - When a **“0”** value is sent to the *Control_* communication object, Vanes U-D will be in Manual mode and the first position will be enabled. The *Status_* object will return this value.

 **Important:** When in Auto Mode, the indoor unit will choose the most appropriate vanes U-D position, but this will be shown neither in KNX nor in the remote controller.

4.4.5 Enable “Vanes U-D Swing” objects (for Control and Status)

This parameter shows/hides the *Control_ Vanes U-D Swing* and *Status_ Vanes U-D Swing* communication objects.

 25: *Control_ Vanes U-D Swing* [DPT_1.002] - 0-Off;1-Swing

 71: *Status_ Vanes U-D Swing* [DPT_1.002] - 0-Off;1-Swing

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ Vanes U-D Swing* and *Status_ Vanes U-D Swing* objects will appear.
 - When a **“1”** value is sent to the *Control_* communication object, Vanes U-D Swing will be enabled, and the *Status_* object will return this value.
 - When a **“0”** value is sent to the *Control_* communication object, Vanes U-D Swing will be disabled. The *Status_* object will return this value.

4.4.6 Enable use of +/- object for Vanes U-D

This parameter shows/hides the *Control_ Vanes U-D +/-* communication object which lets change the indoor unit vane position by using two different datapoint types.

 26: Control_ Vanes U-D +/- [DPT_1.007] - 0-Decrease;1-Increase

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Vanes U-D +/-* object and a new parameter will appear.

Enable use of +/- object for Vanes U-D	☒ Yes ☐ No
> DPT type for +/- Vanes U-D object	☒ 0-Decrease / 1-Increase [DPT_1.007] ☐ 0-Up / 1-Down [DPT_1.008]

➤ DPT type for +/- Vanes U-D object

This parameter lets choose between the datapoints **0-Up / 1-Down [DPT_1.008]** and **0-Decrease / 1-Increase [DPT_1.007]** for the *Control_ Vanes U-D +/-* object.

4.4.7 Enable use of bit-type Vanes U-D objects (for Control)

This parameter shows/hides the bit-type *Control_ Vanes U-D Pos* objects.

 20: Control_ Vanes U-D Pos 1 [DPT_1.002] - 1-Set Position 1

 21: Control_ Vanes U-D Pos 2 [DPT_1.002] - 1-Set Position 2

 22: Control_ Vanes U-D Pos 3 [DPT_1.002] - 1-Set Position 3

 23: Control_ Vanes U-D Pos 4 [DPT_1.002] - 1-Set Position 4

 24: Control_ Vanes U-D Pos 5 [DPT_1.002] - 1-Set Position 5

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Control_ Vanes U-D Pos* objects for each Position (1 to 5) will appear. To activate a Vanes position by using these objects, a **“1”** value must be sent.

4.4.8 Enable use of bit-type Vanes U-D objects (for Status)

This parameter shows/hides the bit-type *Status_ Vanes U-D Pos* objects.

-  66: Status_ Vanes U-D Pos 1 [DPT_1.002] - 1-Vanes in Position 1
-  67: Status_ Vanes U-D Pos 2 [DPT_1.002] - 1-Vanes in Position 2
-  68: Status_ Vanes U-D Pos 3 [DPT_1.002] - 1-Vanes in Position 3
-  69: Status_ Vanes U-D Pos 4 [DPT_1.002] - 1-Vanes in Position 4
-  70: Status_ Vanes U-D Pos 5 [DPT_1.002] - 1-Vanes in Position 5

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the *Status_ Vanes U-D Pos* objects for each Position (1 to 5) will appear. When a Vanes Position is enabled, a **“1”** value is returned through its bit-type object.

4.4.9 Enable use of Text object for Vane U-D

This parameter shows/hides the *Status_ Vanes U-D Text* communication object.

-  72: Status_ Vanes U-D Text [DPT_16.001] - ASCII String

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Status_ Vanes U-D Text* object will appear. Then, seven text fields will be shown in the parameters section: One for the AUTO function, five for the different Vanes Positions, and one for the SWING function. Use these fields to modify the text string that will be displayed by the *Status_ Vanes U-D Text* for each possible value.

ASCII strings shown in comm object "Status_ Vanes U-D Text"	<< 14-byte string values >>
> String when vanes U-D in AUTO	U-D AUTO
> String when vanes U-D in POS 1	U-D POS 1
> String when vanes U-D in POS 2	U-D POS 2
> String when vanes U-D in POS 3	U-D POS 3
> String when vanes U-D in POS 4	U-D POS 4
> String when vanes U-D in POS 5	U-D POS 5
> String when vanes U-D in SWING	U-D SWING

4.4.10 Enable use of Legacy_ object for Vanes

This parameter shows/hides the *Legacy_ Vanes* object.

 84: Legacy_ Vanes [1byte] - 0-Auto; 1..5-pos1..5; 6-Swing

- If set to **“No”**, the objects will not be shown.
- If set to **“Yes”**, the communication object will appear. This object is used to change the indoor unit vanes behaviour but it uses a different data type. It is used to maintain compatibility with older indoor unit models.

4.5 Temperature Configuration dialog

General	Enable use of +/- obj for Setpoint Temp ☐ Yes ☒ No
Mode Configuration	Ambient temp. ref. is provided from KNX (carefully read User Guide if enabled) ☒ Yes ☐ No
Fan Speed Configuration	
Vanes Up-Down Configuration	
Temperature Configuration	
Scene Configuration	
Window Contact Configuration	

All the parameters in this chapter are related to the Temperature properties and communication objects.

4.5.1 Enable use of +/- obj for Setpoint Temp

This parameter shows/hides the *Control_ Setpoint Temperature +/-* communication object which is used to change the indoor unit setpoint temperature by using two different datapoint types.

 28: Control_ Setpoint Temperature +/- [DPT_1.007] - 0-Decrease;1-Increase

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Setpoint Temperature +/-* object and a new parameter will appear.

Enable use of +/- obj for Setpoint Temp	☒ Yes ☐ No
> DPT type for +/- Setp Temp object	☒ 0-Decrease / 1-Increase [DPT_1.007] ☐ 0-Up / 1-Down [DPT_1.008]

➤ DPT type for +/- Setp Temp object

This parameter is used to select between the datapoints **0-Up / 1-Down [DPT_1.008]** and **0-Decrease / 1-Increase [DPT_1.007]** for the *Control_ Setpoint Temperature +/-* object.

(Lower limit) 16°C  17°C  ...  31°C  32°C (Upper limit)

- Up / Increase
- Down / Decrease

4.5.2 Ambient temp. ref. is provided from KNX

Note: Carefully read the User Guide if enabled!

This parameter shows/hides the *Control_ Ambient Temperature* communication object which is used to contain an ambient temperature reference provided by a KNX device.

29: Control_ Ambient Temperature [DPT_9.001] - (°C)

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Ambient Temperature* object will appear. Meant to be enabled when you want the temperature provided by a KNX sensor to be the reference ambient temperature for the air conditioner. Then, the following formula applies for calculation of real *Control_ Setpoint Temperature* sent to the AC unit:

“AC Setp. Temp” = “AC Ret. Temp” - (“KNX Amb. Temp.” - “KNX Setp. Temp”)

- AC Setp. Temp: AC indoor unit setpoint temperature
- AC Ret. Temp: AC indoor unit return temperature
- KNX Amb. Temp: Ambient temperature provided from KNX
- KNX Setp. Temp: Setpoint temperature provided from KNX

As an example, consider the following situation:

User wants: **19°C** (“KNX Setp. Temp.”)

User sensor (a KNX sensor) reads: **21°C** (“KNX Amb Temp.”)

The ambient temperature read by the Mitsubishi system is: **24°C** (“AC Ret. Temp”)

In this example, the final setpoint temperature that the KNX Gateway will send out to the indoor unit (shown in “AC Setp. Temp.”) will become $19^{\circ}\text{C} - (21^{\circ}\text{C} - 19^{\circ}\text{C})/2 = \mathbf{18^{\circ}\text{C}}$. This is the setpoint that will actually be requested to Mitsubishi Electric unit.

This formula will be applied as soon as the *Control_ Setpoint Temperature* and *Control_ Ambient Temperature* objects are written at least once from the KNX installation. After that, they are kept always consistent.

Note: That this formula will always drive the AC indoor unit demand in the *right* direction, regardless of the operation mode (Heat, Cool or Auto).

4.6 Scene Configuration dialog

General	Enable use of scenes	☒ Yes ☐ No
Mode Configuration	Enable use of bit objects for storing scenes	☒ Yes ☐ No
Fan Speed Configuration	Enable use of bit objects for scene execution	☒ Yes ☐ No
Vanes Up-Down Configuration		
Temperature Configuration		
Scene Configuration		
Window Contact Configuration		

All the parameters in this section are related with the Scene properties and communication objects. A scene contains values of: On/Off, Mode, Fan speed, Vane position, Setpoint Temperature and Remote Controller Disablement.

4.6.1 Enable use of scenes

This parameter shows/hides the scene configuration parameters and communication objects.

 35: Control_ Store/Execute Scene [DPT_18.001] - 0..4-Exec1-5;128..132-Save1-5

 81: Status_ Current Scene [DPT_17.001] - 0..4-Scene X+1;63-No Scene

- If set to **“No”**, the scene parameters and communication objects will not be shown.
- If set to **“Yes”**, the scene parameters and communication objects will be shown. To execute a scene through the byte-type object, a value from **“0”** to **“4”** has to be sent, each one corresponding to a different scene (i.e. **“0”** = Scene 1; ... **“4”** = Scene 5).

4.6.2 Enable use of bit objects for scene execution

This parameter shows/hides the *Control_ Execute Scene* bit-type communication objects.

 41: Control_ Execute Scene 1 [DPT_1.002] - 1-Execute Scene 1

 42: Control_ Execute Scene 2 [DPT_1.002] - 1-Execute Scene 2

 43: Control_ Execute Scene 3 [DPT_1.002] - 1-Execute Scene 3

 44: Control_ Execute Scene 4 [DPT_1.002] - 1-Execute Scene 4

 45: Control_ Execute Scene 5 [DPT_1.002] - 1-Execute Scene 5

- If set to **“No”**, the communication objects will not be shown.
- If set to **“Yes”**, the communication objects will appear. To execute a scene by using these objects, a **“1”** value must be sent to the scene’s object to be executed (i.e. to execute scene 4, send **“1”** to the *Control_ Execute Scene 4* object).

4.6.3 Enable use of bit objects for storing scenes

This parameter shows/hides the *Control_ Execute Scene* bit-type communication objects.

-  36: Control_ Store Scene 1 [DPT_1.002] - 1-Store Scene 1
-  37: Control_ Store Scene 2 [DPT_1.002] - 1-Store Scene 2
-  38: Control_ Store Scene 3 [DPT_1.002] - 1-Store Scene 3
-  39: Control_ Store Scene 4 [DPT_1.002] - 1-Store Scene 4
-  40: Control_ Store Scene 5 [DPT_1.002] - 1-Store Scene 5

- If set to **“No”**, the communication objects will not be shown.
- If set to **“Yes”**, the Control_ Store Scene objects for storing scenes will appear. To store a scene by using these objects, send a **“1”** value to the corresponding scene object (i.e., to store scene 4, send a **“1”** to the Control_ Store Scene 4 object).

4.7 Window Contact Configuration dialog

General	Enable use of Open Window function	☒ Yes ☐ No
Mode Configuration	> AC switch-off timeout (min)	10
Fan Speed Configuration	> Reload last On/Off val once window is Closed	☐ Yes ☒ No
Vanes Up-Down Configuration		
Temperature Configuration		
Scene Configuration		
Window Contact Configuration		

This parameter shows/hides the *Control_ Window Contact Status* communication object, which is used to report when a window is opened or closed to start/stop a timeout to switch off the indoor unit.

4.7.1 Enable use of Open Window function

This parameter shows/hides the Open Window configuration parameters and communication objects.

-  32: Control_ Window Contact Status [DPT_1.009] - 0-Open;1-Closed

- If set to **“No”**, the object will not be shown.
- If set to **“Yes”**, the *Control_ Window Contact Status* object and two additional parameters will appear. When this object receives a value of **“0”**, it indicates that the window is open. If the indoor unit is currently on, the switch-off timeout will start. When the object receives a value of **“1”**, it indicates that the window is closed, and the switch-off timeout will be canceled.

4.7.2 AC switch-off timeout (min)

Use this parameter to specify how long it takes, in minutes, before switching off the indoor unit.

4.7.3 Reload last On/Off val once window is Closed

- If set to **“No”**, once the switch-off timeout is stopped, any value will be reloaded.
- If set to **“Yes”**, once the window is closed, the last On/Off value sent will be reloaded.
 - When a **“1”** value is sent to the *Control_ Switch Off Timeout* object after the timeout period, the indoor unit will **turn on**.
 - When a **“0”** value is sent to the *Control_ Switch Off Timeout* after the timeout period, no action will be performed.

5 Error Codes

Error Code	Description
-1	Communication error between the gateway and the AC unit
0	No active error
0001	Communication error with the AC unit
1102	Discharge Temperature high
1108	Internal thermostat detector working (49C)
1110	Outdoor unit fail
1300	Pressure low
1302	Pressure high (High pressure probe working 63H)
1503	Protection against freeze or battery high temperature
1504	Protection against freeze or battery high temperature
1504	Overheating protection
1509	High pressure error (ball valve closed)
1520	Super heating anomaly due to low temp. of discharge. (TH4)
2500	Erroneous operation of drain pump
2502	Erroneous operation of drain pump
2503	Drain sensor anomaly (DS)
4030	Serial transmission error
4100	Compressor pause due to excess of current (initial block)
4101	Compressor pause due to excess of current (overload)
4102	Phase detection opened
4103	Anti-phase detection
4108	Phase opened in phase L2 or connector 51CM opened
4118	Error in the anti-phase detector (electronic board)
4124	Connector 49L opened
4210	Cut due to over-current of compressor
4220	Voltage anomaly
4230	Radiator panel temperature anomaly (TH8)
5101	Ambient temperature probe anomaly (TH1), indoor unit
5102	Liquid probe anomaly (TH2)
5103	Cond/Evap probe anomaly (TH5)
5104	Error detection in discharge temperature
5105	Outdoor probe error TH3
5106	Outdoor probe error TH7
5107	Outdoor probe error TH6
5110	Outdoor probe error TH8
5202	Connector 63L opened
5300	Current probe error
6600	MNET duplicated address definition
6602	MNET Line transmission hardware error
6603	MNET BUS busy
6606	MNET Line transmission error
6607	MNET transmission error
6607	MNET without ack
6608	MNET transmission error
6608	MNET without response
6831	IR remote control transmission error (reception error)
6832	IR remote control transmission error (transmission error)
6840	Transmission error with the indoor/outdoor unit (reception error)
6841	Transmission error with the indoor/outdoor unit (transmission error)
6844	Error in inter-connection cable in the indoor/outdoor unit, indoor unit number deactivated (5 min or more)
6845	Error in inter-connection cable in the indoor/outdoor unit (cabling error, disconnection)
6846	Initial timer deactivated

In case you detect an error code not listed, contact your nearest Mitsubishi Electric technical support service for more information on the error meaning.

6 Appendix

6.1 Statutory requirements

The devices described above must not be used in conjunction with devices which directly or indirectly serve human, health, or life-safety purposes. Furthermore, the devices described must not be used if their use may cause danger to people, animals, or property. Do not leave the packaging material carelessly lying around. Plastic foils/ bags etc. can become a dangerous toy for children.

6.2 Disposal



Do not dispose of the old devices in the household waste. The device contains electrical components that must be disposed of as electronic waste. The housing is made of recyclable plastic.

6.3 Assembly



Danger to life from electric current!

All work on the device may only be carried out by qualified electricians. Country-specific regulations as well as the valid KNX guidelines must be observed.

The devices are approved for operation in the EU and the United Kingdom. The products are respectively marked with the CE and UKCA symbols.

Use in the USA and Canada is prohibited!

6.4 History

V1.0 First Version of Technical Manual

07/2026