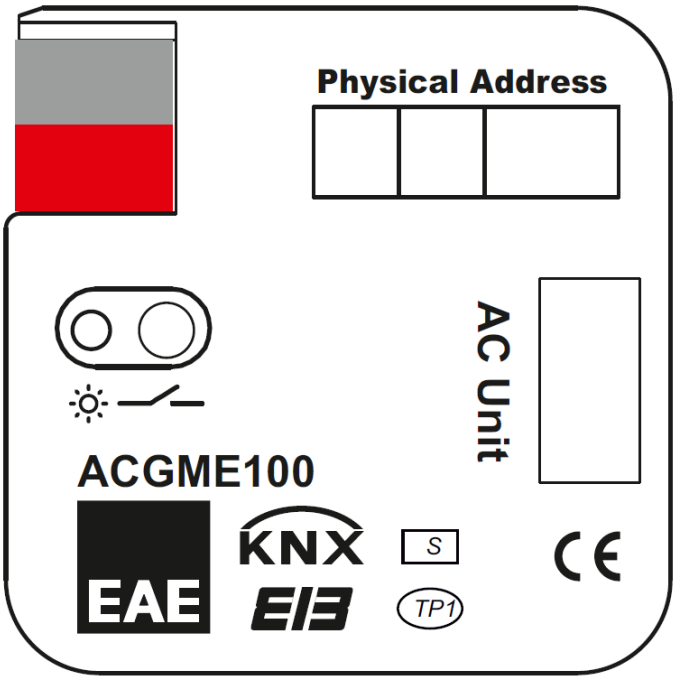
EAE KNX ACGME100

Product Manual AC Gateway Mitsubishi Electric



Contents

1. General

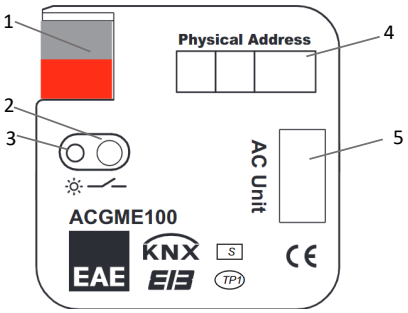
Mitsubishi Climate Controller allows your Mitsubishi brand AC units to integrate with other KNX devices. Thanks to its energy saver function, it allows you to reduce energy. Device has following functions below;

1. Customizable AC functions for optimum control
2. Operating Hours & Alarm
3. Remote Lock Funcitonality
4. Bus Return AC behaviors
5. Scene Function
6. Energy Saver function (according to Window/Door Sensor, Auto-OFF Timer)
7. Logic Function

NOTE: This device has been designed and manufactured to control Mitsubishi AC's by EAE Technology in Turkey.

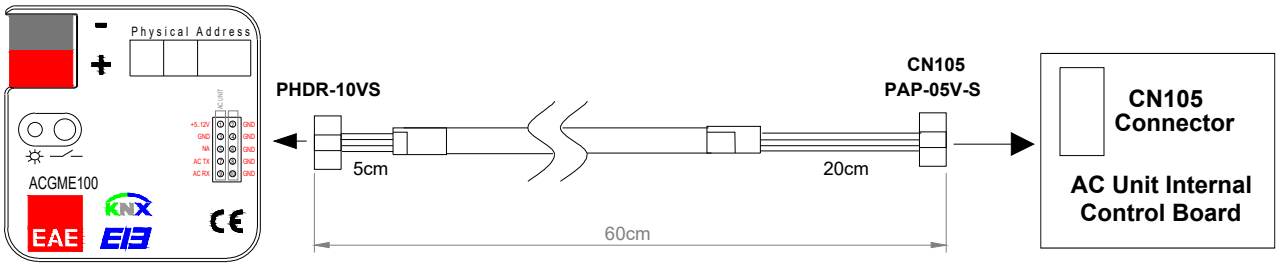
2. Device Technology

2.1. Functional Elements



1. KNX Connector
2. Address Prg. Button
3. Address Prg. LED
4. Physical Address Label
5. AC Com Connector

2.2. Connection Scheme



NOTE: Extending or shortening the connecting cable supplied with the device may cause it to malfunction. Keep the connection cable as far away from power cables and ground wire as possible.

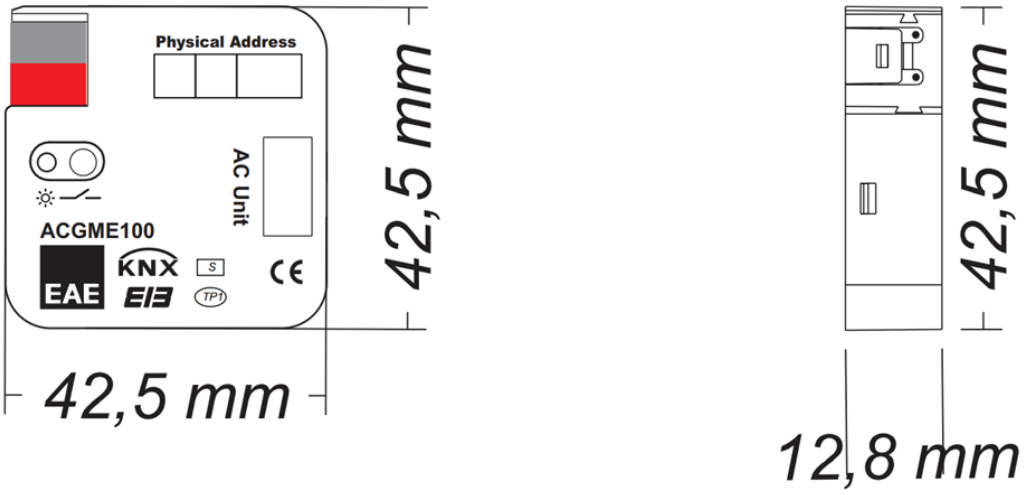
2.3. Connection Terminal Specifications

CONCEPT	DESCRIPTION
Cable Lengt	60 cm approx.
Number and section of wires	4 x 28 AWG (0.08 mm^2)
Connector pitch	2mm
Operation Voltage	5...12 VDC
Connection in Mitsubishi Electric Equipment	CN105 connector (in some boards,it can be CN92)
Connection in ACGME100 Equipment	PHDR-10VS connector (on the ACGME100 Gateway)

2.4. Technical Data

Safety Rating	IP20	EN 60 529
Safety Class	II	EN 61 140
Power supply :	Voltage	21V… 30V DC, via the KNX bus
	Current draw from bus voltage	10mA
Input/Output	Cable length	≤10 m
	Scanning voltage	3.3 V DC
	Input current	0.5 mA
Operating elements	LED (red) and button	For physical address
Connections	Input/Output	AC Communication Connector
	KNX	Bus connect terminal
Temperature range	Ambient	-5° C + 45° C
	Storage	-25° C + 55° C
Dimensions	42,5 x 42,5 x 12,8 mm	
Weight	0.06 kg	
Box	Plastic, policarbonate, colour grey	
CE	In accordance with the EMC guideline and low voltage directives.	

2.5. Dimensions



3. Communication Object Table

No	Object Name	Function	Data Point Type	Flags
0	Alive Beacon	0=Alive	1 bit DPT 1.017	CT
	Alive Beacon	1=Alive	1 bit DPT 1.017	CT
1	Control Lock	0=Unlock; 1=Lock	1 bit DPT 1.003	CWT
2	Control Lock (Status)	0=Unlocked; 1=Locked	1 bit DPT 1.011	CWT
3	On/Off	0=On; 1=Off	1 bit DPT 1.006	CT
3	On/Off	0=Off; 1=On	1 bit DPT 1.001	CT
4	On/Off (Status)	0=On; 1=Off	1 bit DPT 1.006	CT
4	On/Off (Status)	0=Off; 1=On	1 bit DPT 1.001	CT
7	Mode HVAC	0=Auto; 1=Heat; 3=Cool; 6=Off; 9=Fan; 14=Dry	1 byte DPT 20.105	CT
7	Mode HVAC	0=Auto; 1=Heat; 3=Cool; 9=Fan; 14=Dry	1 byte DPT 20.105	CT
8	Mode HVAC (Status)	0=Auto; 1=Heat; 3=Cool; 6=Off; 9=Fan; 14=Dry	1 byte DPT 20.105	CT
8	Mode HVAC (Status)	0=Auto; 1=Heat; 3=Cool; 9=Fan; 14=Dry	1 byte DPT 20.105	CT
9	Mode Heat/Cool	0=Heating; 1=Cooling	1 bit DPT 1.006	CT
9	Mode Heat/Cool	0=Cooling; 1=Heating	1 bit DPT 1.100	CT
10	Mode Heat/Cool (Status)	0=Heating; 1=Cooling	1 bit DPT 1.006	CT
10	Mode Heat/Cool (Status)	0=Cooling; 1=Heating	1 bit DPT 1.100	CT
11	Mode [+/-]	0=Auto > ... > Fan; 1=Fan >... > Auto	1 bit DPT 1.001	CT
11	Mode [+/-]	0=Fan > ... > Auto; 1=Auto >... > Fan	1 bit DPT 1.001	CT
12	Mode Auto	0=Activate	1 bit DPT 1.017	CW
12	Mode Auto	0, 1=Activate	1 bit DPT 1.017	CW
12	Mode Auto	1=Activate	1 bit DPT 1.017	CW
13	Mode Cool	0=Activate	1 bit DPT 1.017	CW
13	Mode Cool	0, 1=Activate	1 bit DPT 1.017	CW
13	Mode Cool	1=Activate	1 bit DPT 1.017	CW
14	Mode Dry	0=Activate	1 bit DPT 1.017	CW
14	Mode Dry	0, 1=Activate	1 bit DPT 1.017	CW
14	Mode Dry	1=Activate	1 bit DPT 1.017	CW
15	Mode Heat	0=Activate	1 bit DPT 1.017	CW
15	Mode Heat	0, 1=Activate	1 bit DPT 1.017	CW
15	Mode Heat	1=Activate	1 bit DPT 1.017	CW
16	Mode Fan	0=Activate	1 bit DPT 1.017	CW
16	Mode Fan	0, 1=Activate	1 bit DPT 1.017	CW
16	Mode Fan	1=Activate	1 bit DPT 1.017	CW
17	Mode Auto (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CT
18	Mode Cool (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CT
19	Mode Dry (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CT
20	Mode Heat (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CT
21	Mode Fan (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CT
22	Setpoint Temperature	°C	2 byte DPT 9.001	CW
23	Setpoint Temperature (Status)	°C	2 byte DPT 9.001	CT
24	Setpoint Temperature [+/-] 1°C	0=Increase; 1=Decrease	1 bit DPT 1.008	CW
24	Setpoint Temperature [+/-] 1°C	0=Decrease; 1=Increase	1 bit DPT 1.007	CW

No	Object Name	Function	Data Point Type	Flags
25	Setpoint Temperature [+/-] 0.5℃	0=Increase; 1=Decrease	1 bit DPT 1.008	CW
25	Setpoint Temperature [+/-] 0.5℃	0=Decrease; 1=Increase	1 bit DPT 1.007	CW
26	Setpoint Limit Min.	℃	2 byte DPT 9.001	CW
27	Setpoint Limit Min. (Status)	0...40 ℃	2 byte DPT 9.001	CRT
28	Setpoint Limit Max.	℃ (0 ℃ to deactivate limiter)	2 byte DPT 9.001	CW
29	Setpoint Limit Max. (Status)	0...40 ℃	2 byte DPT 9.001	CRT
30	AC Ambient Temperature	-63,5...63,5℃	2 byte DPT 9.001	CRT
31	Fan Speed	0=Auto; 1...5=Spd1...Spd5	1 byte DPT 5.100	CW
32	Fan Speed (Status)	0=Auto; 1...5=Spd1...Spd5	1 byte DPT 5.100	CRT
33	Fan Speed [+/-]	0=Increase; 1=Decrease	1 bit DPT 1.008	CW
33	Fan Speed [+/-]	0=Decrease; 1=Increase	1 bit DPT 1.007	CW
34	Fan Speed [%]	0%=Auto; [0,4...100]%=Spd1...Spd2	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto(NA); [0,4...100]%=Spd1...Spd2	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto; [0,4...100]%=Spd1...Spd3	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto(NA); [0,4...100]%=Spd1...Spd3	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto; [0,4...100]%=Spd1...Spd4	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto(NA); [0,4...100]%=Spd1...Spd4	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto; [0,4...100]%=Spd1...Spd5	1 byte DPT 5.001	CW
34	Fan Speed [%]	0%=Auto(NA); [0,4...100]%=Spd1...Spd5	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto; [0,4...100]%=Spd1...Spd2	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto(NA); [0,4...100]%=Spd1...Spd2	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto; [0,4...100]%=Spd1...Spd3	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto(NA); [0,4...100]%=Spd1...Spd3	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto; [0,4...100]%=Spd1...Spd4	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto(NA); [0,4...100]%=Spd1...Spd4	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto; [0,4...100]%=Spd1...Spd5	1 byte DPT 5.001	CW
35	Fan Speed [%] (Status)	0%=Auto(NA); [0,4...100]%=Spd1...Spd5	1 byte DPT 5.001	CW
36	Fan Speed Auto	0=Activate	1 bit DPT 1.017	CW
36	Fan Speed Auto	0, 1=Activate	1 bit DPT 1.017	CW
36	Fan Speed Auto	1=Activate	1 bit DPT 1.017	CW
37	Fan Speed 1	0=Activate	1 bit DPT 1.017	CW
37	Fan Speed 1	0, 1=Activate	1 bit DPT 1.017	CW
37	Fan Speed 1	1=Activate	1 bit DPT 1.017	CW
38	Fan Speed 2	0=Activate	1 bit DPT 1.017	CW
38	Fan Speed 2	0, 1=Activate	1 bit DPT 1.017	CW
38	Fan Speed 2	1=Activate	1 bit DPT 1.017	CW
39	Fan Speed 3	0=Activate	1 bit DPT 1.017	CW
39	Fan Speed 3	0, 1=Activate	1 bit DPT 1.017	CW
39	Fan Speed 3	1=Activate	1 bit DPT 1.017	CW
40	Fan Speed 4	0=Activate	1 bit DPT 1.017	CW
40	Fan Speed 4	0, 1=Activate	1 bit DPT 1.017	CW
40	Fan Speed 4	1=Activate	1 bit DPT 1.017	CW
41	Fan Speed 5	0=Activate	1 bit DPT 1.017	CW
41	Fan Speed 5	0, 1=Activate	1 bit DPT 1.017	CW

No	Object Name	Function	Data Point Type	Flags
41	Fan Speed 5	1=Activate	1 bit DPT 1.017	CW
43	Fan Speed Auto (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
44	Fan Speed 1 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
45	Fan Speed 2 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
46	Fan Speed 3 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
47	Fan Speed 4 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
48	Fan Speed 5 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
50	Vane	0=Auto; 1...5=Pos1(H)...Pos5; 7=Swing	1 byte DPT 5.000	CW
51	Vane (Status)	0=Auto; 1...5=Pos1(H)...Pos5; 7=Swing	1 byte DPT 5.000	CRT
52	Vane [+/-]	0=Increase; 1=Decrease(H)	1 bit DPT 1.006	CW
52	Vane [+/-]	0=Decrease(H); 1=Increase	1 bit DPT 1.007	CW
53	Text="Vane [%]	0%=Auto; [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto(NA); [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto(NA); [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto; [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Swing; [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Swing; [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto; [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto(NA); [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto(NA); [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Auto; [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Swing; [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CW
53	Text="Vane [%]	0%=Swing; [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CW
54	Text="Vane [%] (Status)	0%=Auto; [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto(NA); [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto(NA); [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto; [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Swing; [0,4...100]%=Pos1(H)...Pos4	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Swing; [0,4...100]%=Pos4...Pos1(H)	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto; [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto(NA); [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto(NA); [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Auto; [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Swing; [0,4...100]%=Pos1(H)...Pos5	1 byte DPT 5.001	CRT
54	Text="Vane [%] (Status)	0%=Swing; [0,4...100]%=Pos5...Pos1(H)	1 byte DPT 5.001	CRT
55	Vane Auto	0=Activate	1 bit DPT 1.017	CW
55	Vane Auto	0, 1=Activate	1 bit DPT 1.017	CW
55	Vane Auto	1=Activate	1 bit DPT 1.017	CW
56	Vane Position 1	0=Activate	1 bit DPT 1.017	CW
56	Vane Position 1	0, 1=Activate	1 bit DPT 1.017	CW
56	Vane Position 1	1=Activate	1 bit DPT 1.017	CW
57	Vane Position 2	0=Activate	1 bit DPT 1.017	CW
57	Vane Position 2	0, 1=Activate	1 bit DPT 1.017	CW
57	Vane Position 2	1=Activate	1 bit DPT 1.017	CW

No	Object Name	Function	Data Point Type	Flags
58	Vane Position 3	0=Activate	1 bit DPT 1.017	CW
58	Vane Position 3	0, 1=Activate	1 bit DPT 1.017	CW
58	Vane Position 3	1=Activate	1 bit DPT 1.017	CW
59	Vane Position 4	0=Activate	1 bit DPT 1.017	CW
59	Vane Position 4	0, 1=Activate	1 bit DPT 1.017	CW
59	Vane Position 4	1=Activate	1 bit DPT 1.017	CW
60	Vane Position 5	0=Activate	1 bit DPT 1.017	CW
60	Vane Position 5	0, 1=Activate	1 bit DPT 1.017	CW
60	Vane Position 5	1=Activate	1 bit DPT 1.017	CW
61 ?	?	?	?	?
62	Vane Swing	0=Activate	1 bit DPT 1.017	CW
62	Vane Swing	0, 1=Activate	1 bit DPT 1.017	CW
62	Vane Swing	1=Activate	1 bit DPT 1.017	CW
63	Vane Auto (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
64	Vane Position 1 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
65	Vane Position 2 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
66	Vane Position 3 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
67	Vane Position 4 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
68	Vane Position 5 (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
69 ?	?	?	?	?
70	Vane Swing (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
71	Wide Vane	1=Left; 2=C.Left 3=Center; 4=C.Right; 5=Right; 8=Sides; 12=Swing	1 byte DPT 5.000	CW
72	Wide Vane (Status)	1=Left; 2=C.Left 3=Center; 4=C.Right; 5=Right; 8=Sides; 12=Swing	1 byte DPT 5.000	CRT
73	Wide Vane [+/-]	0=Right; 1=Left	1 bit DPT 1.006	CW
73	Wide Vane [+/-]	0=Left; 1=Right	1 bit DPT 1.007	CW
74	Wide Vane Left	0=Activate	1 bit DPT 1.017	CW
74	Wide Vane Left	0, 1=Activate	1 bit DPT 1.017	CW
74	Wide Vane Left	1=Activate	1 bit DPT 1.017	CW
75	Wide Vane Center Left	0=Activate	1 bit DPT 1.017	CW
75	Wide Vane Center Left	0, 1=Activate	1 bit DPT 1.017	CW
75	Wide Vane Center Left	1=Activate	1 bit DPT 1.017	CW
76	Wide Vane Center	0=Activate	1 bit DPT 1.017	CW
76	Wide Vane Center	0, 1=Activate	1 bit DPT 1.017	CW
76	Wide Vane Center	1=Activate	1 bit DPT 1.017	CW
77	Wide Vane Center Right	0=Activate	1 bit DPT 1.017	CW
77	Wide Vane Center Right	0, 1=Activate	1 bit DPT 1.017	CW
77	Wide Vane Center Right	1=Activate	1 bit DPT 1.017	CW
78	Wide Vane Right	0=Activate	1 bit DPT 1.017	CW
78	Wide Vane Right	0, 1=Activate	1 bit DPT 1.017	CW
78	Wide Vane Right	1=Activate	1 bit DPT 1.017	CW
79	Wide Vane Sides	0=Activate	1 bit DPT 1.017	CW
79	Wide Vane Sides	0, 1=Activate	1 bit DPT 1.017	CW
79	Wide Vane Sides	1=Activate	1 bit DPT 1.017	CW

No	Object Name	Function	Data Point Type	Flags
80	Wide Vane Swing	0=Activate	1 bit DPT 1.017	CW
80	Wide Vane Swing	0, 1=Activate	1 bit DPT 1.017	CW
80	Wide Vane Swing	1=Activate	1 bit DPT 1.017	CW
81	Wide Vane Left (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
82	Wide Vane Center Left (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
83	Wide Vane Center (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
84	Wide Vane Center Right (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
85	Wide Vane Right (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
86	Wide Vane Sides (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
87	Wide Vane Swing (Status)	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
88	Remote Lock	0=Unlock; 1=Lock (Changes both current & default state)	1 bit DPT 1.003	CW
89	Remote Lock (Status)	0=Unlocked; 1=Locked (Current state of remote lock)	1 bit DPT 1.011	CRT
90	AC Error Code	8000=No Error	2 byte DPT 7.001	CRT
91	AC Error Code Text	8000=No Error	14 byte DPT 16.000	CRT
92	AC Error	0=No Error; 1=Error (Error in the AC Unit)	1 bit DPT 1.005	CRT
93	Communication Error	0=No Error; 1=Error (Can't communicate with the AC Unit)	1 bit DPT 1.005	CRT
94	AC or Communication Error	0=No Error; 1=Error	1 bit DPT 1.005	CRT
95	AC Unit Operating Status	0=Off,Standby; 1=Operating	1 bit DPT 1.011	CRT
96	Auto Mode Operating Status	0=Non-Auto; 1=Standby; 2=Heating; 3=Cooling	1 byte DPT 5.000	CRT
97	Ref. Ambient Temperature	°C (Write to activate Setpoint Reference Controller)	2 byte DPT 9.001	CW
98	AC Setpoint Temperature Status	0...40°C	2 byte DPT 9.001	CRT
99	Setpoint Reference Controller Status	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
100	Window/Door	0=Open; 1=Closed	1 bit DPT 1.006	CW
100	Window/Door	0=Closed; 1=Open	1 bit DPT 1.019	CW
101	Window/Door Energy Saver Status	0=Inactive; 1=Active	1 bit DPT 1.011	CRT
105	Auto-Off Timeout	0=Stop; 1...255=Start (Auto-Off in 1...255 minutes)	1 byte DPT 5.010	CW
106	Auto-Off Remaining	0=Stopped; 1...255=Auto Off in 1...255 minutes	1 byte DPT 5.010	CRT
107	Auto-Off	0=Start (Default Timeout); 1=Stop	1 bit DPT 1.006	CW
107	Auto-Off	0=Stop; 1=Start (Default timeout)	1 bit DPT 1.006	CW
108	Auto-Off Status	0=Stopped; 1=Running	1 bit DPT 1.011	CRT
112	AC On/Off Status	0=Off; 1=On	1 bit DPT 1.001	CRT
113	Scene Control	0...63=(Execute 1...8); 128...191=(Save 1...8)	1 byte DPT 18.001	CW
113	Scene Control	0...7=(Execute 1...8); 128...135=(Save 1...8)	1 byte DPT 18.001	CW
114	Scene Rewind	0, 1=Rewind	1 bit DPT 1.017	CW
115	Scene 1 Save	0=Save	1 bit DPT 1.017	CW
115	Scene 1 Save	0, 1=Save	1 bit DPT 1.017	CW
115	Scene 1 Save	1=Save	1 bit DPT 1.017	CW
116	Scene 2 Save	0=Save	1 bit DPT 1.017	CW
116	Scene 2 Save	0, 1=Save	1 bit DPT 1.017	CW
116	Scene 2 Save	1=Save	1 bit DPT 1.017	CW
117	Scene 3 Save	0=Save	1 bit DPT 1.017	CW
117	Scene 3 Save	0, 1=Save	1 bit DPT 1.017	CW
117	Scene 3 Save	1=Save	1 bit DPT 1.017	CW

No	Object Name	Function	Data Point Type	Flags
118	Scene 4 Save	0=Save	1 bit DPT 1.017	CW
118	Scene 4 Save	0, 1=Save	1 bit DPT 1.017	CW
118	Scene 4 Save	1=Save	1 bit DPT 1.017	CW
119	Scene 5 Save	0=Save	1 bit DPT 1.017	CW
119	Scene 5 Save	0, 1=Save	1 bit DPT 1.017	CW
119	Scene 5 Save	1=Save	1 bit DPT 1.017	CW
120	Scene 6 Save	0=Save	1 bit DPT 1.017	CW
120	Scene 6 Save	0, 1=Save	1 bit DPT 1.017	CW
120	Scene 6 Save	1=Save	1 bit DPT 1.017	CW
121	Scene 7 Save	0=Save	1 bit DPT 1.017	CW
121	Scene 7 Save	0, 1=Save	1 bit DPT 1.017	CW
121	Scene 7 Save	1=Save	1 bit DPT 1.017	CW
122	Scene 8 Save	0=Save	1 bit DPT 1.017	CW
122	Scene 8 Save	0, 1=Save	1 bit DPT 1.017	CW
122	Scene 8 Save	1=Save	1 bit DPT 1.017	CW
123	Scene 1 Execute	0=Execute	1 bit DPT 1.017	CW
123	Scene 1 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
123	Scene 1 Execute	0, 1=Execute	1 bit DPT 1.017	CW
123	Scene 1 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
123	Scene 1 Execute	1=Execute	1 bit DPT 1.017	CW
124	Scene 2 Execute	0=Execute	1 bit DPT 1.017	CW
124	Scene 2 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
124	Scene 2 Execute	0, 1=Execute	1 bit DPT 1.017	CW
124	Scene 2 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
124	Scene 2 Execute	1=Execute	1 bit DPT 1.017	CW
125	Scene 3 Execute	0=Execute	1 bit DPT 1.017	CW
125	Scene 3 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
125	Scene 3 Execute	0, 1=Execute	1 bit DPT 1.017	CW
125	Scene 3 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
125	Scene 3 Execute	1=Execute	1 bit DPT 1.017	CW
126	Scene 4 Execute	0=Execute	1 bit DPT 1.017	CW
126	Scene 4 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
126	Scene 4 Execute	0, 1=Execute	1 bit DPT 1.017	CW
126	Scene 4 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
126	Scene 4 Execute	1=Execute	1 bit DPT 1.017	CW
127	Scene 5 Execute	0=Execute	1 bit DPT 1.017	CW
127	Scene 5 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
127	Scene 5 Execute	0, 1=Execute	1 bit DPT 1.017	CW
127	Scene 5 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
127	Scene 5 Execute	1=Execute	1 bit DPT 1.017	CW

No	Object Name	Function	Data Point Type	Flags
128	Scene 6 Execute	0=Execute	1 bit DPT 1.017	CW
128	Scene 6 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
128	Scene 6 Execute	0, 1=Execute	1 bit DPT 1.017	CW
128	Scene 6 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
128	Scene 6 Execute	1=Execute	1 bit DPT 1.017	CW
129	Scene 7 Execute	0=Execute	1 bit DPT 1.017	CW
129	Scene 7 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
129	Scene 7 Execute	0, 1=Execute	1 bit DPT 1.017	CW
129	Scene 7 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
129	Scene 7 Execute	1=Execute	1 bit DPT 1.017	CW
130	Scene 8 Execute	0=Execute	1 bit DPT 1.017	CW
130	Scene 8 Execute	0=Execute; 1=Rewind	1 bit DPT 1.017	CW
130	Scene 8 Execute	0, 1=Execute	1 bit DPT 1.017	CW
130	Scene 8 Execute	1=Execute; 0=Rewind	1 bit DPT 1.017	CW
130	Scene 8 Execute	1=Execute	1 bit DPT 1.017	CW
131	Operating Hours	AC On hours	2 byte DPT 7.007	CRT
131	Operating Hours	AC Operating hours	2 byte DPT 7.007	CRT
132	Operating Hours Alarm	1=Alarm	1 bit DPT 1.005	CRT
133	Operating Hours Reset	0=Reset	1 bit DPT 1.017	CW
133	Operating Hours Reset	0, 1=Reset	1 bit DPT 1.017	CW
133	Operating Hours Reset	1=Reset	1 bit DPT 1.015	CW
134	[LB1] IN1	Input	1 bit DPT 1.002	CW
134	[LB1] IN1	Input	1 byte DPT 5.010	CW
134	[LB1] IN1	Input	2 bit DPT 2.002	CW
135	[LB1] IN2	Input	1 bit DPT 1.002	CW
135	[LB1] IN2	Input	1 byte DPT 5.010	CW
135	[LB1] IN2	Input	2 bit DPT 2.002	CW
135	[LB1] OUT15	Output	1 bit DPT 1.002	CRT
135	[LB1] OUT15	Output	1 byte DPT 5.010	CRT
135	[LB1] OUT15	Output	2 bit DPT 2.002	CRT
136	[LB1] IN3	Input	1 bit DPT 1.002	CW
136	[LB1] IN3	Input	1 byte DPT 5.010	CW
136	[LB1] IN3	Input	2 bit DPT 2.002	CW
136	[LB1] OUT14	Output	1 bit DPT 1.002	CRT
136	[LB1] OUT14	Output	1 byte DPT 5.010	CRT
136	[LB1] OUT14	Output	2 bit DPT 2.002	CRT
137	[LB1] IN4	Input	1 bit DPT 1.002	CW
137	[LB1] IN4	Input	1 byte DPT 5.010	CW
137	[LB1] IN4	Input	2 bit DPT 2.002	CW
137	[LB1] OUT13	Output	1 bit DPT 1.002	CRT
137	[LB1] OUT13	Output	1 byte DPT 5.010	CRT
137	[LB1] OUT13	Output	2 bit DPT 2.002	CRT

No	Object Name	Function	Data Point Type	Flags
138	[LB1] IN5	Input	1 bit DPT 1.002	CW
138	[LB1] IN5	Input	1 byte DPT 5.010	CW
138	[LB1] IN5	Input	2 bit DPT 2.002	CW
138	[LB1] OUT12	Output	1 bit DPT 1.002	CRT
138	[LB1] OUT12	Output	1 byte DPT 5.010	CRT
138	[LB1] OUT12	Output	2 bit DPT 2.002	CRT
139	[LB1] IN6	Input	1 bit DPT 1.002	CW
139	[LB1] IN6	Input	1 byte DPT 5.010	CW
139	[LB1] IN6	Input	2 bit DPT 2.002	CW
139	[LB1] OUT11	Output	1 bit DPT 1.002	CRT
139	[LB1] OUT11	Output	1 byte DPT 5.010	CRT
139	[LB1] OUT11	Output	2 bit DPT 2.002	CRT
140	[LB1] IN7	Input	1 bit DPT 1.002	CW
140	[LB1] IN7	Input	1 byte DPT 5.010	CW
140	[LB1] IN7	Input	2 bit DPT 2.002	CW
140	[LB1] OUT10	Output	1 bit DPT 1.002	CRT
140	[LB1] OUT10	Output	1 byte DPT 5.010	CRT
140	[LB1] OUT10	Output	2 bit DPT 2.002	CRT
141	[LB1] IN8	Input	1 bit DPT 1.002	CW
141	[LB1] IN8	Input	1 byte DPT 5.010	CW
141	[LB1] IN8	Input	2 bit DPT 2.002	CW
141	[LB1] OUT9	Output	1 bit DPT 1.002	CRT
141	[LB1] OUT9	Output	1 byte DPT 5.010	CRT
141	[LB1] OUT9	Output	2 bit DPT 2.002	CRT
142	[LB1] IN9	Input	1 bit DPT 1.002	CW
142	[LB1] IN9	Input	1 byte DPT 5.010	CW
142	[LB1] IN9	Input	2 bit DPT 2.002	CW
142	[LB1] OUT8	Output	1 bit DPT 1.002	CRT
142	[LB1] OUT8	Output	1 byte DPT 5.010	CRT
142	[LB1] OUT8	Output	2 bit DPT 2.002	CRT
143	[LB1] IN10	Input	1 bit DPT 1.002	CW
143	[LB1] IN10	Input	1 byte DPT 5.010	CW
143	[LB1] IN10	Input	2 bit DPT 2.002	CW
143	[LB1] OUT7	Output	1 bit DPT 1.002	CRT
143	[LB1] OUT7	Output	1 byte DPT 5.010	CRT
143	[LB1] OUT7	Output	2 bit DPT 2.002	CRT
144	[LB1] IN11	Input	1 bit DPT 1.002	CW
144	[LB1] IN11	Input	1 byte DPT 5.010	CW
144	[LB1] IN11	Input	2 bit DPT 2.002	CW
144	[LB1] OUT6	Output	1 bit DPT 1.002	CRT
144	[LB1] OUT6	Output	1 byte DPT 5.010	CRT
144	[LB1] OUT6	Output	2 bit DPT 2.002	CRT

No	Object Name	Function	Data Point Type	Flags
145	[LB1] IN12	Input	1 bit DPT 1.002	CW
145	[LB1] IN12	Input	1 byte DPT 5.010	CW
145	[LB1] IN12	Input	2 bit DPT 2.002	CW
145	[LB1] OUT5	Output	1 bit DPT 1.002	CRT
145	[LB1] OUT5	Output	1 byte DPT 5.010	CRT
145	[LB1] OUT5	Output	2 bit DPT 2.002	CRT
146	[LB1] IN13	Input	1 bit DPT 1.002	CW
146	[LB1] IN13	Input	1 byte DPT 5.010	CW
146	[LB1] IN13	Input	2 bit DPT 2.002	CW
146	[LB1] OUT4	Output	1 bit DPT 1.002	CRT
146	[LB1] OUT4	Output	1 byte DPT 5.010	CRT
146	[LB1] OUT4	Output	2 bit DPT 2.002	CRT
147	[LB1] IN14	Input	1 bit DPT 1.002	CW
147	[LB1] IN14	Input	1 byte DPT 5.010	CW
147	[LB1] IN14	Input	2 bit DPT 2.002	CW
147	[LB1] OUT3	Output	1 bit DPT 1.002	CRT
147	[LB1] OUT3	Output	1 byte DPT 5.010	CRT
147	[LB1] OUT3	Output	2 bit DPT 2.002	CRT
148	[LB1] IN15	Input	1 bit DPT 1.002	CW
148	[LB1] IN15	Input	1 byte DPT 5.010	CW
148	[LB1] IN15	Input	2 bit DPT 2.002	CW
148	[LB1] OUT2	Output	1 bit DPT 1.002	CRT
148	[LB1] OUT2	Output	1 byte DPT 5.010	CRT
148	[LB1] OUT2	Output	2 bit DPT 2.002	CRT
149	[LB1] OUT1	Output	1 bit DPT 1.002	CRT
149	[LB1] OUT1	Output	1 byte DPT 5.010	CRT
149	[LB1] OUT1	Output	2 bit DPT 2.002	CRT
150	[LB2] IN1	Input	1 bit DPT 1.002	CW
150	[LB2] IN1	Input	1 byte DPT 5.010	CW
150	[LB2] IN1	Input	2 bit DPT 2.002	CW
151	[LB2] IN2	Input	1 bit DPT 1.002	CW
151	[LB2] IN2	Input	1 byte DPT 5.010	CW
151	[LB2] IN2	Input	2 bit DPT 2.002	CW
151	[LB2] OUT15	Output	1 bit DPT 1.002	CRT
151	[LB2] OUT15	Output	1 byte DPT 5.010	CRT
151	[LB2] OUT15	Output	2 bit DPT 2.002	CRT
152	[LB2] IN3	Input	1 bit DPT 1.002	CW
152	[LB2] IN3	Input	1 byte DPT 5.010	CW
152	[LB2] IN3	Input	2 bit DPT 2.002	CW
152	[LB2] OUT14	Output	1 bit DPT 1.002	CRT
152	[LB2] OUT14	Output	1 byte DPT 5.010	CRT
152	[LB2] OUT14	Output	2 bit DPT 2.002	CRT

No	Object Name	Function	Data Point Type	Flags
153	[LB2] IN4	Input	1 bit DPT 1.002	CW
153	[LB2] IN4	Input	1 byte DPT 5.010	CW
153	[LB2] IN4	Input	2 bit DPT 2.002	CW
153	[LB2] OUT13	Output	1 bit DPT 1.002	CRT
153	[LB2] OUT13	Output	1 byte DPT 5.010	CRT
153	[LB2] OUT13	Output	2 bit DPT 2.002	CRT
154	[LB2] IN5	Input	1 bit DPT 1.002	CW
154	[LB2] IN5	Input	1 byte DPT 5.010	CW
154	[LB2] IN5	Input	2 bit DPT 2.002	CW
154	[LB2] OUT12	Output	1 bit DPT 1.002	CRT
154	[LB2] OUT12	Output	1 byte DPT 5.010	CRT
154	[LB2] OUT12	Output	2 bit DPT 2.002	CRT
155	[LB2] IN6	Input	1 bit DPT 1.002	CW
155	[LB2] IN6	Input	1 byte DPT 5.010	CW
155	[LB2] IN6	Input	2 bit DPT 2.002	CW
155	[LB2] OUT11	Output	1 bit DPT 1.002	CRT
155	[LB2] OUT11	Output	1 byte DPT 5.010	CRT
155	[LB2] OUT11	Output	2 bit DPT 2.002	CRT
156	[LB2] IN7	Input	1 bit DPT 1.002	CW
156	[LB2] IN7	Input	1 byte DPT 5.010	CW
156	[LB2] IN7	Input	2 bit DPT 2.002	CW
156	[LB2] OUT10	Output	1 bit DPT 1.002	CRT
156	[LB2] OUT10	Output	1 byte DPT 5.010	CRT
156	[LB2] OUT10	Output	2 bit DPT 2.002	CRT
157	[LB2] IN8	Input	1 bit DPT 1.002	CW
157	[LB2] IN8	Input	1 byte DPT 5.010	CW
157	[LB2] IN8	Input	2 bit DPT 2.002	CW
157	[LB2] OUT9	Output	1 bit DPT 1.002	CRT
157	[LB2] OUT9	Output	1 byte DPT 5.010	CRT
157	[LB2] OUT9	Output	2 bit DPT 2.002	CRT
158	[LB2] IN9	Input	1 bit DPT 1.002	CW
158	[LB2] IN9	Input	1 byte DPT 5.010	CW
158	[LB2] IN9	Input	2 bit DPT 2.002	CW
158	[LB2] OUT8	Output	1 bit DPT 1.002	CRT
158	[LB2] OUT8	Output	1 byte DPT 5.010	CRT
158	[LB2] OUT8	Output	2 bit DPT 2.002	CRT
159	[LB2] IN10	Input	1 bit DPT 1.002	CW
159	[LB2] IN10	Input	1 byte DPT 5.010	CW
159	[LB2] IN10	Input	2 bit DPT 2.002	CW
159	[LB2] OUT7	Output	1 bit DPT 1.002	CRT
159	[LB2] OUT7	Output	1 byte DPT 5.010	CRT
159	[LB2] OUT7	Output	2 bit DPT 2.002	CRT

No	Object Name	Function	Data Point Type	Flags
160	[LB2] IN11	Input	1 bit DPT 1.002	CW
160	[LB2] IN11	Input	1 byte DPT 5.010	CW
160	[LB2] IN11	Input	2 bit DPT 2.002	CW
160	[LB2] OUT6	Output	1 bit DPT 1.002	CRT
160	[LB2] OUT6	Output	1 byte DPT 5.010	CRT
160	[LB2] OUT6	Output	2 bit DPT 2.002	CRT
161	[LB2] IN12	Input	1 bit DPT 1.002	CW
161	[LB2] IN12	Input	1 byte DPT 5.010	CW
161	[LB2] IN12	Input	2 bit DPT 2.002	CW
161	[LB2] OUT5	Output	1 bit DPT 1.002	CRT
161	[LB2] OUT5	Output	1 byte DPT 5.010	CRT
161	[LB2] OUT5	Output	2 bit DPT 2.002	CRT
162	[LB2] IN13	Input	1 bit DPT 1.002	CW
162	[LB2] IN13	Input	1 byte DPT 5.010	CW
162	[LB2] IN13	Input	2 bit DPT 2.002	CW
162	[LB2] OUT4	Output	1 bit DPT 1.002	CRT
162	[LB2] OUT4	Output	1 byte DPT 5.010	CRT
162	[LB2] OUT4	Output	2 bit DPT 2.002	CRT
163	[LB2] IN14	Input	1 bit DPT 1.002	CW
163	[LB2] IN14	Input	1 byte DPT 5.010	CW
163	[LB2] IN14	Input	2 bit DPT 2.002	CW
163	[LB2] OUT3	Output	1 bit DPT 1.002	CRT
163	[LB2] OUT3	Output	1 byte DPT 5.010	CRT
163	[LB2] OUT3	Output	2 bit DPT 2.002	CRT
164	[LB2] IN15	Input	1 bit DPT 1.002	CW
164	[LB2] IN15	Input	1 byte DPT 5.010	CW
164	[LB2] IN15	Input	2 bit DPT 2.002	CW
164	[LB2] OUT2	Output	1 bit DPT 1.002	CRT
164	[LB2] OUT2	Output	1 byte DPT 5.010	CRT
164	[LB2] OUT2	Output	2 bit DPT 2.002	CRT
165	[LB2] OUT1	Output	1 bit DPT 1.002	CRT
165	[LB2] OUT1	Output	1 byte DPT 5.010	CRT
165	[LB2] OUT1	Output	2 bit DPT 2.002	CRT

4. Parameters

4.1. General

General parameters include;

- Alive Beacon (In Operation) Function
- Telegram Limit Function
- Telegram Transmission Delay
- Bit Objects Status Sending Type
- Feedback
- Logic
- Diagnostics

4.1.1. Parameters

Parameters	Settings	Description
GENERAL		
Alive Beacon	checked/**unchecked**	Alive Beacon can be used to ensure that device is alive and connected to KNX line.
Value	0/**1**	Visible when "Alive Beacon" checked. Selected value will be sent as device alive operation.
Period	10…**60**…65535 s	Visible when "Alive Beacon" checked. Cyclic time period for sending in operation value.
Telegram Limiter	checked/**unchecked**	Limits the number of telegrams to send in certain time period.
Telegram Limit Period	**50ms**, 100ms, …, 30s, 1min	Visible when "Telegram Limiter" checked. Determine the period for sending telegram.
Max. Number of Transmitted Telegrams (within a period)	**1**…255	Visible when "Telegram Limiter" checked. Maximum number of telegrams to send in telegram limit period duration.
Telegram Transmission Delay	**1**…255	This parameter is used to set delay for sending the first telegram when device powered on.
FEEDBACK		
AC Settings Status Feedback	On Write and Change **On Change**	This parameter is used to select AC settings status sending type.
Bit Objects Status Feedback	Pair (Active and Active->Inactive) **Only Active** All (Inactive and Active)	This parameter is used to select bit objects status sending type.
LOGIC		
Logic Blocks	**None**, 1, 2	Logic Blocks Menu will be shown.
DIAGNOSTICS		
Firmware Version	**Read Firmware Version**	Device Firmware version will be shown.
Hardware Type		Device Hardware type will be shown
Uptime	**Read Uptime**	Device up time since the device energized.

4.2. AC Model Configuration

This function is used to select AC Model to control. If desired unit model is not on the list, various configurations can be done by Manual option of the following parameters.

4.2.1. Parameters

Parameters	Settings	Description
AC Unit Model	36 characters are allowed	Any name can be written here such as AC Model name
Supported Modes of Operation		
Auto	**checked**/unchecked	Auto mode can be used for AC Unit.
Cool	**checked**/unchecked	Cool mode can be used for AC Unit.
Dry	**checked**/unchecked	Dry mode can be used for AC Unit.
Heat	**checked**/unchecked	Heating mode can be used for AC Unit.
Fan	**checked**/unchecked	Fan mode can be used for AC Unit.
Fan Speeds	1…**5**	It shows how many FAN levels of the AC Unit.
“Auto” Fan	**checked**/unchecked	Automatic Fan control mode can be used for AC Unit.
Vane	**checked**/unchecked	It shows if AC Unit supports vane movement.
Vane Positions	4/**5**	It shows how many vane positions does AC Unit have.
“Auto” Vane	**checked**/unchecked	Automatic Vane control mode can be used for AC Unit.
Wide Vane	**checked**/unchecked	It shows if AC Unit supports wide vane movement.
“Sides” Position	checked/**unchecked**	It shows if AC Unit has support of position of the wide vanes.

4.3. Configuration

Ac Unit start-up parameters, operating hour, remote lock ve error object configuration can be done in this page.

4.3.1. Parameters

Parameters	Settings	Description
AC INITIAL SETTINGS		
AC Initial Settings (after KNX bus recovery)	**No Change** No Change (Turned Off) Last Last (Turned Off) Scene Custom	AC behavior can be set after device energized.
Scene Number	**1**…8	Shown If "AC Initial Settings" is selected as "Scene". It determines the scene number of device which will be recalled after device energized.
On/Off	**Last**/Off/On	Shown If "AC Initial Settings" is selected as "Custom". It determines the On/Off state command for AC which will be sent after device energized.
Mode	**Last**/Auto/Heat/ Cool/Dry/Fan	Shown If "AC Initial Settings" is selected as "Custom". It determines the Mode state command for AC which will be sent after device energized.
Setpoint Temperature	**Last**/Set Value	Shown If "AC Initial Settings" is selected as "Custom". It determines the Setpoint Value command for AC which will be sent after device energized.
Value	0,0…**23**…40,0 °C	It is used to select custom value for setpoint.
Fan Speed	**Last**/Auto/1…5	Shown If "AC Initial Settings" is selected as "Custom". It determines the Fan Speed command for AC which will be sent after device energized.
Vane	**Last**/Auto/Swing/ Position 1(H)…5	Shown If "AC Initial Settings" is selected as "Custom". It determines the Vane Position command for AC which will be sent after device energized.
Wide Vane	**Last**/Left/Center Left/ Center/Center Right/ Right/Sides/Swing	Shown If "AC Initial Settings" is selected as "Custom". It determines the Wide Vane position command for AC which will be sent after device energized.
OPERATING HOURS & ALARM		
Operating Hours	checked/**unchecked**	It is used to activate operating hour counter of AC unit.
Initial Operating Hours	**Keep Current Value**/ Set Value	Counter value can be set or kept the current value.
Value	**0**…65534 h	Counter value can be written manually.
Hours accumulate when	**Ac is On**/ Ac is Operating	It is used to select the way of counting.
Alarm	checked/**unchecked**	It is used to send Alarm command when threshold value is reached.
Threshold	1…**1000**…65535 h	This parameter determines the limit level of operating hour. When written value is reached, alarm will be triggered.
Reset Object Trigger	0/**1**/0 or 1	It is used to select the counter reset method.
IR REMOTE CONTROL LOCK		
Remote Lock Functionality	checked/**unchecked**	It is used to lock remote controller commands.
"Remote Lock" enabled by Default	checked/**unchecked**	If checked, following locking properties will be blocked as soon as ETS download is finished.

Parameters	Settings	Description
Locking Properties		
On/Off*	**checked**/unchecked	Checked properties will be blocked if the command is sent from remote controller.
Mode	**checked**/unchecked	
Setpoint Temperature	**checked**/unchecked	
* Locking On/Off also disables remote controller timer functionality.		
“Control Lock” Object	checked/**unchecked**	Selected locking properties will be able to enable/disable by additional communication object.
Error Objects	checked/**unchecked**	It is used to send information to the KNX in case of AC or communication failure.

4.4. Mode

These parameters are used to configure on/off, mode and extended status objects.

4.4.1. Parameters

Parameters	Settings	Description
ON/OFF OBJECT		
DPT On/Off Object	**0=Off; 1=On [DPT_Switch]** 0=On; 1=Off	It is used to select the values for AC ON and OFF.
MODE OBJECTS		
HVAC Object	**checked only**	If AC has at least one mode such as Auto or Heat or etc, this parameter will be activated automatically. Disabling is not allowed.
On(Auto)/Off through HVAC Object	checked/**unchecked**	It is used switch the AC ON or OFF via Mode HVAC communication object.
Off Status through HVAC Object	checked/**unchecked**	It is used send switch status of the AC OFF via Mode HVAC (Status) communication object.
Heat/Cool Object	checked/**unchecked**	It is used to switch Heat/Cool modes via an additional 1-bit communication object.
DPT Heat/Cool Object	**0=Cooling; 1=Heating [DPT_Heat/Cool]** 0=Heating; 1=Cooling	Selects the values for Heat & Cool switching.
"Auto" Mode Heating/Cooling Status through Heat/Cool Object	checked/**unchecked**	Sends the Heat/Cool status from Heat/Cool Status communication object when AC mode is in Auto mode.
Step [+/-] Object	checked/**unchecked**	Allows to change modes step by step via 1-bit object.
Step Direction	**0=Fan->Auto; 1=Auto-> Fan [DPT_Step]** 0=Auto->Fan; 1=Fan->Auto	It is used to step direction of modes.
Sequence is	Non-Cyclic/**Cyclic**	If Cyclic selected, modes can be switched always for every step mode changing by ist own step object.
Preview (0 < - > 1) (if Non-Cyclic)	Auto <--> Cool <--> Dry <--> Heat <--> Fan	
Preview (0 < - > 1) (if Cyclic)	…<--> Auto <--> Cool <--> Dry <--> Heat <--> Fan <-->…	
Bit Objects	checked/**unchecked**	If checked, AC modes can be activated via 1-bit com objects.
Activation Trigger	0/**1**/0 or 1	It is used to determine the mode activation value.
EXTENDED STATUS OBJECTS		
"AC Unit Operating Status" Object	checked/**unchecked**	It is used to show AC unit operating state by an additional com object.
"Auto Mode Operating Status" Object	checked/**unchecked**	It is used to show AC unit HVAC state in Auto Mode state by an additional com object.

4.5. Temperature

This parameter page is used to change temperature reading style and setpoint functions.

4.5.1. Parameters

Parameters	Settings	Description
SETPOINT TEMPERATURE		
Step [+/-] Object	checked/**unchecked**	It is used to increase/decrease the setpoint value step by step via Step com object.
Step Direction	**0=Decrease; 1=Increase [DPT_Step]** 0=Increase; 1=Decrease	It is used to determine the increase/decrease step value of the setpoint temperature.
Setpoint Limit Objects	checked/**unchecked**	It is used to limit setpoint for controlled AC Unit.
Min.	**0,0**…40,0 °C	Minimum value of target setpoint.
Max.	**0,0**…40,0 °C	Maximum value of target setpoint.
Limiter Status	Deactive (Max=0) Deactive (Min > Max) Active	This parameter shows the limiter status. It will be deactivated if min. and max. levels are both 0(zero) or min. value is higher than max. value.
AC UNIT MEASURE AMBIENT TEMPERATURE		
Monitoring	checked/**unchecked**	It is used to show ambient temp information from AC unit.
Sending Type	**On Change** Periodic On Change & Periodic	It is used to select sending type of temp information from
Normalize*	checked/**unchecked**	In some AC models the ambient temperature reading changes when the operating mode is changed, selecting this option will correct the reading by +/- 1°C so that it gives the same reading accross both modes.
SETPOINT REFERENCE CONTROLLER		
Show Help	checked/**unchecked**	Opens help notes for following parameters in this page.
Reference Controller	checked/**unchecked**	Writing to the "Ref Ambient Temperature' object starts the reference controller: the "Setpoint Temperature" object will be treated as the target setpoint and the "AC Setpoint Temperature" will be changed on demand to reach this target.
"Ref. Ambient Temperature" Timeout (also interval of update)	15…**180**…255 s	If a new value to "Ref. Ambient Temperature" object is not written for <timeout> seconds, the reference controller will be disabled until the "Ref. Ambient Temperature" is updated again.
KNX Update (Ref. Ambient Temperature)	checked/**unchecked**	If "Ref. Ambient Temperature" object is not written until the end of the <timeout>, then an update/read request for the object will be send to the KNX bus.
Valid Ambient Temperature Difference	5…15 °C	If difference between "AC Ambient Temperature" and "Ref. Ambient Temperature" exceed this value, reference controller will be disabled until it falls in range again.
Remote Setpoint Control	checked/**unchecked**	When AC setpoint is changed by a remote controller it will be taken as the new target setpoint; otherwise any AC setpoint change done through a remote controller will be overridden by the gateway unit at the next "Ref. Ambient Temperature" update.
Show "AC Setpoint Temperature Status" Object	checked/**unchecked**	When reference controller is deactive: "AC Setpoint Temperature" = "Setpoint Temperature"; but when active: the "AC Setpoint Temperature" is changed on demand and may not be the same as the "Setpoint Temperature".

4.6. Fan

This page allows to configure fan speed parameters.

4.6.1. Parameters

Parameters	Settings	Description
Step [+/-] Object	checked/**unchecked**	It is used to switch the fan speeds via step object.
Step Direction	**0=Decrease; 1=Increase [DPT_Step]** 0=Increase; 1=Decrease	It is used to select step direction for Fan Speed Step com object.
Sequence is	Non-Cyclic/**Cyclic**	It is used to select whether turn back to start after end of the step order.
“Auto” in Sequence	checked/**unchecked**	It is used to add Auto mode in the step order.
Preview (0<->1)(if Non-Cyclic)	*Auto<-->Spd1<->…<->Spd5	*Shown If ““Auto” in Sequence” is “checked.
Preview (0<->1) (if Cyclic)	…<->*Auto<->Spd1<->…<->Spd5<->…	*Shown If ““Auto” in Sequence” is “checked.
Scaling [%] Object	checked/**unchecked**	It is used to swtich fan speeds via percentage object.
Preview	0%=Auto; [0,4…100]%=Spd1…Spd5	Fan speed percentage com object values.
Bit Objects	checked/**unchecked**	It is used to switch fan speeds via separated com objects.
Activation Trigger	0/**1**/0 or 1	It used to determine the activation value of the 1-bit fan speed com objects.

4.7. Vane

This page allows to configure vane parameters.

4.7.1. Parameters

Parameters	Settings	Description
Step [+/-] Object	checked/**unchecked**	It is used to switch the vane via step object.
Step Direction	**0=Decrease(H); 1=Increase [DPT_Step]** 0=Increase; 1=Decrease	It is used to select step direction for Vane Step com object.
Sequence is	Non-Cyclic/**Cyclic**	It is used to select whether turn back to start after end of the step order.
“Auto” in Sequence	checked/**unchecked**	It is used to add Auto mode in the step order.
“Swing” in Sequence	checked/**unchecked**	It is used to add Swing mode in the step order.
Preview (0<->1)(if Non-Cyclic)	*Auto<-->Pos1(H)<->…<->Pos5<->**Swing	*Shown If ““Auto” in Sequence” is “checked. **Shown If ““Swing” in Sequence” is “checked.
Preview (0<->1) (if Cyclic)	…<->*Auto<->Spd1<->…<->Spd5<->**Swing <->…	*Shown If ““Auto” in Sequence” is “checked. **Shown If ““Swing” in Sequence” is “checked.
Scaling [%] Object	checked/**unchecked**	It is used to swtich the vane via percentage object.
Scale reversed	checked/**unchecked**	It is used to invert the scaling values.
“Swing” is 0%	checked/**unchecked**	If checked, 0% value will be Swing mode instead of Auto mode.
Preview	0%=Auto; [0,4…100]%=Pos1(H)…Pos5	Vane percentage com object values.
Preview (if Scale reversed)	0%=Auto; [0,4…100]%=Pos5…Pos1(H)	
Preview (if “Swing” is 0%)	0%=Swing; [0,4…100]%=Pos1(H)…Pos5	
Preview (if both)	0%=Swing; [0,4…100]%=Pos5…Pos1(H)	
Bit Objects	checked/**unchecked**	It is used to switch the vane via separated com objects.
Activation Trigger	0/**1**/0 or 1	It used to determine the activation value of the 1-bit vane com objects.

4.8. Wide Vane

This page allows to configure wide vane parameters.

4.8.1. Parameters

Parameters	Settings	Description
Step [+/-] Object	checked/**unchecked**	It is used to switch the wide vane via step object.
Step Direction	**0=Left; 1=Right [DPT_Step]** 0=Right; 1=Left	It is used to select step direction for Wide Vane Step com object.
Sequence is	Non-Cyclic/**Cyclic**	It is used to select whether turn back to start after end of the step order.
“Swing” in Sequence	checked/**unchecked**	It is used to add Swing mode in the step order.
Preview (0<->1)(if Non-Cyclic)	<-->Left<->…<->Right<->*Swing	*Shown If ““Swing” in Sequence” is “checked.
Preview (0<->1) (if Cyclic)	…<->Left<->…<->Right<->*Swing <->…	*Shown If ““Swing” in Sequence” is “checked.
Bit Objects	checked/**unchecked**	It is used to switch the wide vane via separated com objects.
Activation Trigger	0/**1**/0 or 1	It used to determine the activation value of the 1-bit wide vane com objects.

4.9. Scenes

This page allows to configure the scenes.

4.9.1. Parameters

Parameters	Settings	Description
Scenes	Enabled/**Disabled**	It is used to activate/deactivate the scene function.
SCENE SETTINGS		
Scene Storage	**Keep Previous** Overwrite	It is used to keep the scenes on device or overwrite it after ETS download.
Scene Number Access*	1:1 (Default)/**Modulo**	If modulo selected, relevant scene can be called with adding 8 to scene number including the original scene nr. E.g. Scene Nr. 8 can be called with 8, 16, 24, 32, 40 and etc..
Scene Rewind**	checked/**unchecked**	If scene has changed via com object, this com object reverts the scene parameters back as last ETS download.
Bit Objects	checked/**unchecked**	It is used to recall/save the scenes via 1-bit com objects.
Save Trigger	0/**1**/0 or 1	Value for 1-bit scene save com object.
Execute Trigger	0/**1**/0 or 1	Value for 1-bit scene recall com object.
Reverse Trigger Rewind		If scene rewind applied already, this object can revert the rewind action.
SCENE CONFIGURATION		
Scene 1…8	checked/**unchecked**	Up to 8 scenes can be enabled via this parameter.
Name		Scene name can be written up to 48 characters.
Modifiable	checked/**unchecked**	If checked, the relevant scene can be overwritten by com object. (via save function)
On/Off	**No Change**/Off/On	On/Off state of AC unit
Mode	**No Change**/Auto/Heat/Cool/ Dry/Fan	Mode state of AC unit
Setpoint Temperature	**No Change**/Set Value	Target Setpoint of AC unit
Value	0,0…**23,0**…40,0 °C	
Fan	**No Change**/Auto/1…5	Fan Level of AC unit
Vane	**No Change**/Auto/ Pos1(H)…5/ Swing	Vane Position of AC unit
Wide Vane	**No Change**/Left/Center Left/ Center/Center Right/Right/ Sides/Swing	Wide Vane position of AC unit

4.10. Energy Saver

Energy saving functions can be parameterized in this page.

4.10.1. Parameters

Parameters	Settings	Description
WINDOW/DOOR STATE ENERGY SAVING		
Window/Door	checked/**unchecked**	If enabled Window/Door com object will be appeared on the group object list.
DPT Window/Door Object	**0=Closed; 1=Open [DPT_Window_Door]** 0=Open; 1=Closed	It is used to select values for Windows/Door Open and Closed state.
Delay for Open Action (Turn-Off)	**0**…255 min	It is used to delay time to activate Window/Door function while the object state is Open.
Prevent AC “On” while “Open”	checked/**unchecked**	If checked, AC unit will not be activated until Closed command received by Window/Door object.
Show “AC On/Off Status” Object*	checked/**unchecked**	When window energy saving is deactive: “AC On/Off” = “On/Off”; but when active: “AC On/Off” is the real AC status, and “On/Off” is the set value which will be restored when window is closed.
If AC turned “On” by Remote Controller while “Open”	**Exit energy saving** Turn-off after timeout	It is used to select behavior if AC turned “On” by remote controller.
Timeout	**0**…255 min	This parameter will be shown if the parameter is selected “Turn-off after timeout” above. AC unit will be switched Off when timeout is ended.
AUTO-OFF TIMER		
Auto-Off	checked/**unchecked**	It is used to switch Off the AC unit at the end of timer.
DPT Auto-Off Object	**0=Stop; 1=Start [DPT_Start]** 0=Start; 1=Stop	Timer start/stop value can be selected.
Timer is stopped if AC turned off by Remote Controller	checked/**unchecked**	If checked, timer will be stopped when AC is turned off by Remote Controller.
Timer is stopped if AC turned off by KNX	checked/**unchecked**	If checked, timer will be stopped when AC is turned off by KNX com object.
Leave AC in “Off” state after KNX bus recovery if Auto-Off Timer was running	checked/**unchecked**	If checked, AC unit will be remained Off after bus recovery if the Auto-Off timer was running before bus failure.
Default Timeout	1...**30**...255 min	Auto-Off timer duration

4.11. Logic Block 1…2

4.11.1. I/O Configuration

Logic Input and Output counts should be selected in this page.

Parameters	Settings	Description
I/O Config	1 Input / 15 Output 2 Input / 14 Output 3 Input / 13 Output 4 Input / 12 Output 5 Input / 11 Output 6 Input / 10 Output 7 Input / 9 Output 8 Input / 8 Output 9 Input / 7 Output 10 Input / 6 Output 11 Input / 5 Output 12 Input / 4 Output 13 Input / 3 Output 14 Input / 2 Output **15 Input / 1 Output**	Logic Input and Output configuration can be selected.

4.11.2. Inputs

4.11.2.1. IN1…15

Parameters	Settings	Description
Name	25 chracters are allowed. (Optional)	Any name can be defined for each Input. Name will be shown in ETS Parameters and Group Objects page.
Data Type	**1 bit** / 1 byte	Logic Input Data Type can be selected.
Preprocess (if Data Type : 1 bit)	**Passthrough**, NOT, always True, always False	Passthrough: Input will be proccessed as it is. NOT: Input will be reverted. always True: Process will always be True regardless to input value. always False: Process will always be False regardless to input value.
Preprocess (if Data Type : 1 byte)	**Passthrough**, NOT, always True, always False, equal, NOT equal, in range, NOT in range, matches any of two, NOT matches any of two, bits SET, NOT bits SET, bits CLEAR, NOT bits CLEAR, thresholds, NOT thresholds	Passthrough: Input will be proccessed as it is. 0 is OFF, 1…255 is ON NOT: Input will be reverted. 0 is ON, 1…255 is OFF always True: Process will always be True regardless to input value. always False: Process will always be False regardless to input value. equal: If the Input value is equal to ETS written value, the result will be “True”. NOT equal: If the Input value is NOT equal to ETS written value, the result will be “True”. in range: If the Input value is in range between written values on ETS, the result will be “True”. NOT in range: If the Input value is NOT in range between written values on ETS, the result will be “True”. matches any of two: If the Input value matches with the any of values on ETS, the result will be “True”. NOT matches any of two: If the Input value does NOT match with the any of values on ETS, the result will be “True”. bits SET: If all masked bits of the Input Value is set, the result will be “True”. NOT bits SET: If all masked bits of the input value is set, the result will be “False” bits CLEAR: If all masked bits of the Input Value is clear, the result will be “True”. NOT bits CLEAR: If all masked bits of the Input Value is clear, the result will be “False”.

		thresholds: Input value must be; equal or greater than “True if > =” value for result “True”. equal or lower than “False < =” value fo result “False. NOT thresholds: Input value must be; equal or greater than “True if > =” value for result “False”. equal or lower than “False < =” value fo result “True”.
Initial State	**False** / True	This parameter is used to select initial value of related input when device energized(or reset).
State after KNX bus recovery	**Initial** / Last	This parameter is used to select the related input state after bus voltage recovery.

4.11.3. Outputs

4.11.3.1. OUT1…15

Parameters	Settings	Description
Name	25 chracters are allowed. (Optional)	Any name can be defined for each Output. Name will be shown in ETS Parameters and Group Objects page.
Register	checked/ **unchecked**	This function is used to set the chosen output as Input Operand. Result of relevant output can be used as input for another Output.
OPERANDS		
IN1…IN15	checked/ **unchecked**	This parameter is used to select Logic Input(s) which needs for reletad Output operation.
STATE	checked/ **unchecked**	This parameter defines the value of result. It can be used as operand in Output operation.
FUNCTION		
Description	80 chracters are allowed. (Optional)	Any name can be defined for description of function. Description will **not** shown anywhere.
Data Type	**1 bit** / 1 byte	Output operation data type can be selected individually.
Operation	**Passthrough (unary)** NOT (unary) AND NAND OR NOR XOR XNOR Sum is 1 NOT Sum is 1 Sum is 0 or 1 NOT Sum is 0 or 1 All 0's or All 1's NOT All 0's or All 1's	Passthrough: It should be used with single operand only. Result will be the same as related operand value. NOT: It should be used with single operand only. Result will be reverted according to related operand value. AND: Selected Inputs will be multiplied consecutively and result value will be sent after. NAND: Selected Inputs will be multiplied consecutively and result value will be sent as inverted after. OR: Selected Inputs will be summed consecutively and result value will be sent after. NOR: Selected Inputs will be summed consecutively and result value will be sent as inverted after. XOR: Selected inputs will be summed according to EX-OR gate and result value will be sent after. XNOR: Selected inputs will be summed according to EX-OR gate and result value will be sent as inverted after. Sum is 1: If the one of the Input is "True" and rest of all is "False" the result will be "True". If multiple inputs are "True" or all "False", then result will be "False". NOT Sum is 1: If the one of the Input is "True" and rest of all is "False" the result will be "False". If multiple inputs are "True" or all "False", then result will be "True". Sum is 1 or 0: If the one of the input is "True" and rest of all are "False" or all inputs are "False", the result will be "True". If 2 or more inputs are "True", the result will be "False". NOT Sum is 1 or 0: If the one of the input is "True" and rest of all are "False" or all inputs are "False", the result will be "False". If 2 or more inputs are "True", the result will be "True".

Parameters	Settings	Description
Operation (continues..)	continues…	All 0's or All 1's: If all inputs are "False" or "True", the result will be "True". NOT All 0's or All 1's: If all inputs are "False" or "True", the result will be "False".
Trigger	**operand update** operand update with blocking condition operand update with set/reset STATE input select	operand update: Output will be processed If any operand value changed. operand update with blocking condition: Output won't be processed regardless to operand change, if blocking operand is active. operand update with set/reset STATE: This function should be used with STATE operand. This function allows to change the output state according to selected Input or Registered Output(if exist) value. input select: Output will be processed if the selected Input or Registered Output(if exist) has trigger value.
Sending blocked when	**IN1** … 15 or REG OUT 1…15	This function is used to block the output sending If selected Input or Registered Output has its selected value.
Send pending telegram after unblocking	**unchecked**/checked	This function is used to send output state after unblocking.
Send value when expression is	False True **True or False**	This function is used to send the output result if the Output expression value is as selected.
False Value (1 bit) True Value (1 bit)	**0** / 1 0 / **1**	
False Value (1 Byte) True Value (1 Byte)	**0**…255 0…**1**…255	
Send only on change	**unchecked**/checked	This function is used select the type of output sending.
Send initial state after KNX bus recovery	**unchecked**/checked	This function is used to send initial state of related output after KNX bus recovery.
Initial state	**False** / True	This parameter is used to select initial value of related output when device energized(or reset).
State after KNX bus recovery	**Initial** / Last	This parameter is used to select the related output state after KNX bus recovery.
Timer	**none** delayed sending periodical sending state hold timeout	delayed sending: This parameter is used to determine delay for output sending. periodical sending: This parameter is used to send the output state cyclically. state hold timeout: This parameter allows to keep the state in case of state changes.