

INTERFACE SPECIFICATION

KNX CONVERTOR
UTY-VKSX

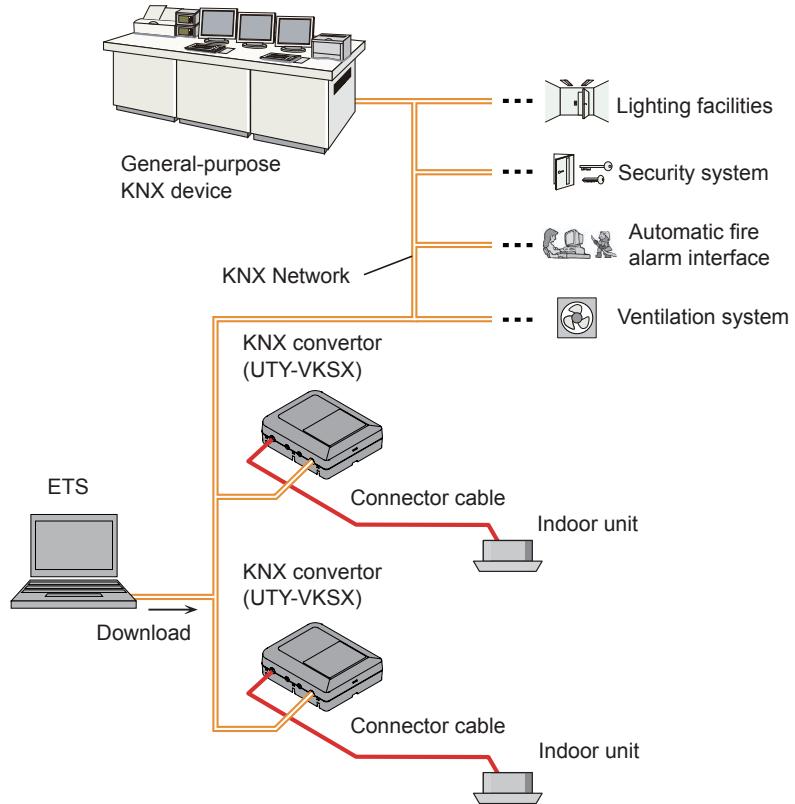
PART NO. 9708438061

FUJITSU GENERAL LIMITED

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1 SYSTEM OUTLINE



(1) What is the KNX Convertor ?

The convertor for connecting our Indoor Unit to the system built by KNX, an open network, to manage the Indoor Unit.

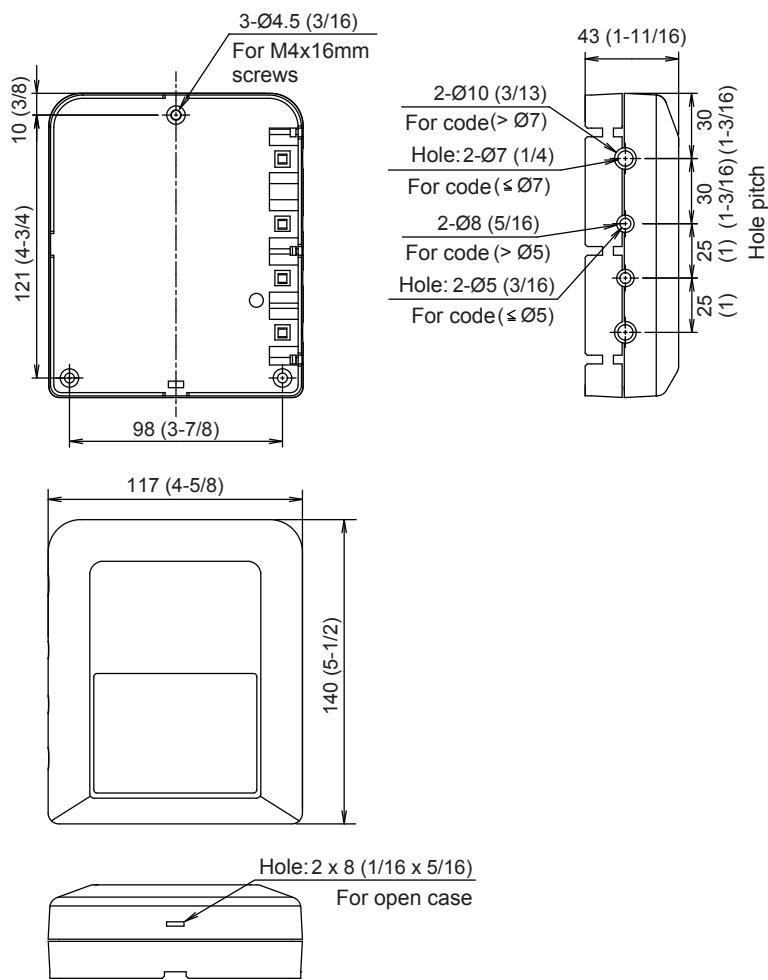
(2) Maximum Connectable number per 1 KNX Convertor.

Indoor Unit	1
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2 DIMENSION

The KNX convertor is comprised of a body and cover.

Unit : mm (in)



3 SPECIFICATION

3-1. Operating Environment

Power consumption (W)		0.6
Temperature °C (°F)	Operating	0–46 (32–114)
	Packaged	-10–60 (14–140)
Humidity (%)	Packaged	0–95 (RH); No condensation
Dimensions H × W × D mm (in)	43 x 117 x 140 (1-11/16 x 4-5/8 x 5-1/2)	
Weight g (oz)	215 (8)	

3-2. Transmission (Hardware)

Use	Size		Wire type	Remarks
KNX cable	Maximum	0.8 mm ² (18AWG)	AWG18-20 2wire twisted pair	KNX TP1 (Twister Pair 1) cable
	Minimum	0.5 mm ² (20AWG)		

3-3. Function

Item ^{*1}	Control ^{*2}	Monitor Information ^{*3}	Convertor
	Indoor Unit	Indoor Unit	
ON/OFF command	●	●	
Operation mode setting	●	●	
Temperature setting	●	●	
Airflow mode setting	●	●	
Thermostat off setting	●	●	
Centrally control (Filter reset)	●	●	
Centrally control (All mode)	●	●	
Centrally control (Timer mode)	●	●	
Centrally control (Set temperature mode)	●	●	
Centrally control (ON/OFF mode)	●	●	
Centrally control (ON mode)	●	●	
Centrally control (Operation mode)	●	●	
Filter sign reset	●	●	
Energy save mode setting	●	●	
Vertical/horizontal airflow direction louver setting	●	●	
Room temperature		●	
Error status / Error code		●	●
Specific status		●	
Model name			●
Software version			●
Demand status		●	
Human detection auto save	●	●	
Human detection auto off	●	●	
Scene control	●	●	

^{*1} Refer to the product manuals for each function.

^{*2} KNX network → Indoor Unit

^{*3} Indoor Unit → KNX network

4 CONFIGURATION AND SETUP

This is a fully compatible KNX device which must be configured and setup using standard KNX tool ETS.

ETS database for this device can be downloaded from:

<http://fujitsu-general.com/global/support/downloads/split/index.html>

5 ETS PARAMETERS

When imported into the ETS software for the first time, the default parameter configuration of the gateway is shown below:

15.15.255 KNX Convertor for Indoor > Mode		
Mode	Enable use of 8-bit unsigned value object (for Setting and Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of bit-type objects (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	Enable use of bit-type objects (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	Enable use of +/- object (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction	Enable use of Text object (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Centrally Control		
Energy Saving Function		
Support Function		
Specific status monitoring		
Scene		
Convertor Information		

In this configuration, the operation mode (Setting_Operation Mode), operation on/off (Setting_Operation ON/OFF), set temperature (Setting_Set Temperature), and airflow (Setting_Airflow) settings can be configured.

Monitoring objects can monitor the status of operation mode (Monitoring_Operation Mode), operation on/off (Monitoring_Operation ON/OFF), set temperature (Monitoring_Set Temperature), airflow (Monitoring_Airflow), room temperature (Monitoring_Room Temperature), and error (Monitoring_Error Status).

1	Inner_Setting_Operation Mode [HVAC]	0 - Auto; 1 - Heat; 3 - Cool; 9 - Fan; 14 - Dry
9	Inner_Setting_Operation On/Off	0 - Off; 1 - On
10	Inner_Setting_Set Temperature	(°C)
12	Inner_Setting_Airflow	0%-13% - Auto; 14%-27% - Quiet; 28%-41% - Low; 42%-55% - Med-Low; 56%-70% - Med; 71%-85% - Med-High; 86%-100% - High
55	Inner_Monitoring_Operation Mode [HVAC]	0 - Auto; 1 - Heat; 3 - Cool; 9 - Fan; 14 - Dry
63	Inner_Monitoring_Operation On/Off	0 - Off; 1-On
64	Inner_Monitoring_Set Temperature	(°C)
65	Inner_Monitoring_Airflow	13% - Auto; 27% - Quiet; 41% - Low; 55% - Med-Low; 70% - Med; 85% - Med-High; 100% - High
74	Inner_Monitoring_Room Temperature	(°C)
75	Inner_Monitoring_Error Status Error/No error	0 - No error; 1 - Error
76	Inner_Monitoring_Error Status Error Code	(Error code section)(Error code subsection)

5-1. Mode dialog

15.15.255 KNX Convertor for Indoor > Mode		
Mode	Enable use of 8-bit unsigned value object (for Setting and Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of bit-type objects (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	Enable use of bit-type objects (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	Enable use of +/- object (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction	Enable use of Text object (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Centrally Control		
Energy Saving Function		
Support Function		
Specific status monitoring		
Scene		
Convertor Information		

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

5-1-1. Enable use of 8-bit unsigned value object

This parameter shows/hides the 8-bit unsigned value Setting_ and Monitoring_ Operation Mode communication objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the 8-bit unsigned value Setting_ and Monitoring_ Operation Mode objects will appear. Fields to select the DPT setting will also appear.

Enable use of 8-bit unsigned value object (for Setting and Monitoring)

No Yes

> DPT selection Scaling Enumerated

5-1-2. DPT object type for Operation Mode objects

This parameter changes the DPT setting of the 8-bit unsigned value Setting_ and Monitoring_ Operation Mode objects.

For datapoints, Scaling and Enumerated are selectable.

- When “Enumerated” is selected, Setting_ and Monitoring_ Operation Mode communication objects for this DPT will appear.

2 Inner_Setting_Operation Mode	1 - Auto; 2 - Heat; 3 - Cool; 4 - Fan; 5 - Dry
56 Inner_Monitoring_Operation Mode	1 - Auto; 2 - Heat; 3 - Cool; 4 - Fan; 5 - Dry

- When “Scaling” is selected, Setting_ and Monitoring_ Operation Mode communication objects for this DPT will appear.

2 Inner_Setting_Operation Mode	0%-20% - Auto; 21%-40% - Heat; 41%-60% - Cool; 61%-80% - Fan; 81%-100% - Dry
56 Inner_Monitoring_Operation Mode	20% - Auto; 40% - Heat; 60% - Cool; 80% - Fan; 100% - Dry

Table next shows the range of values that can be sent through the Setting_ object and the value returned by the Monitoring object.

	Auto	Heat	Cool	Fan	Dry
Setting_	0% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%
Monitoring_	20%	40%	60%	80%	100%

5-1-3. Enable use of bit-type Operation Mode objects (for setting)

This parameter shows/hides the bit-type Setting_ Operation Mode objects.

3 Inner_Setting_Operation Mode Auto	1 - Auto
4 Inner_Setting_Operation Mode Heat	1 - Heat
5 Inner_Setting_Operation Mode Cool	1 - Cool
6 Inner_Setting_Operation Mode Fan	1 - Fan
7 Inner_Setting_Operation Mode Dry	1 - Dry

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

5-1-4. Enable use of bit-type Operation Mode objects (for monitoring)

This parameter shows/hides the bit-type Monitoring_ Operation Mode objects.

57 Inner_Monitoring_Operation Mode Auto	1 - Auto
58 Inner_Monitoring_Operation Mode Heat	1 - Heat
59 Inner_Monitoring_Operation Mode Cool	1 - Cool
60 Inner_Monitoring_Operation Mode Fan	1 - Fan
61 Inner_Monitoring_Operation Mode Dry	1 - Dry

- If set to “No” the objects will not be shown.

- If set to “Yes” the bit-type Monitoring_Operation Mode objects for Auto, Heat, Cool, Fan and Dry will appear. When enabled, a mode will return a “1” through its bit-type object.

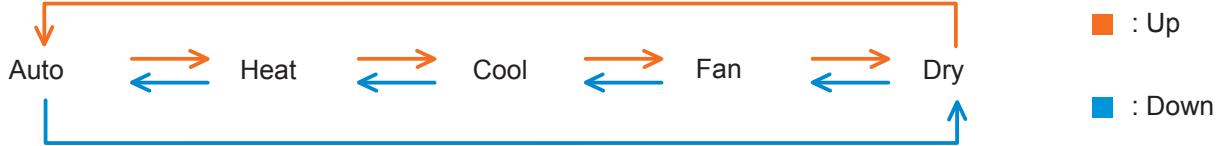
5-1-5. Enable use of +/- object for Operation Mode (for setting)

This parameter shows/hides the Setting_Operation Mode +/- communication object which lets change the indoor unit mode.

8 Inner_Setting_Operation Mode +/- 0 - Up; 1 - Down

- If set to “No” the object will not be shown.
- If set to “Yes” the Setting_Operation Mode +/- object will appear.
- DPT type for +/- Operation Mode Object

The sequence followed when using this object is shown below:



5-1-6. Enable use of Text object for Operation Mode (for Monitoring)

This parameter shows/hides the Monitoring_Operation Mode Text communication object.

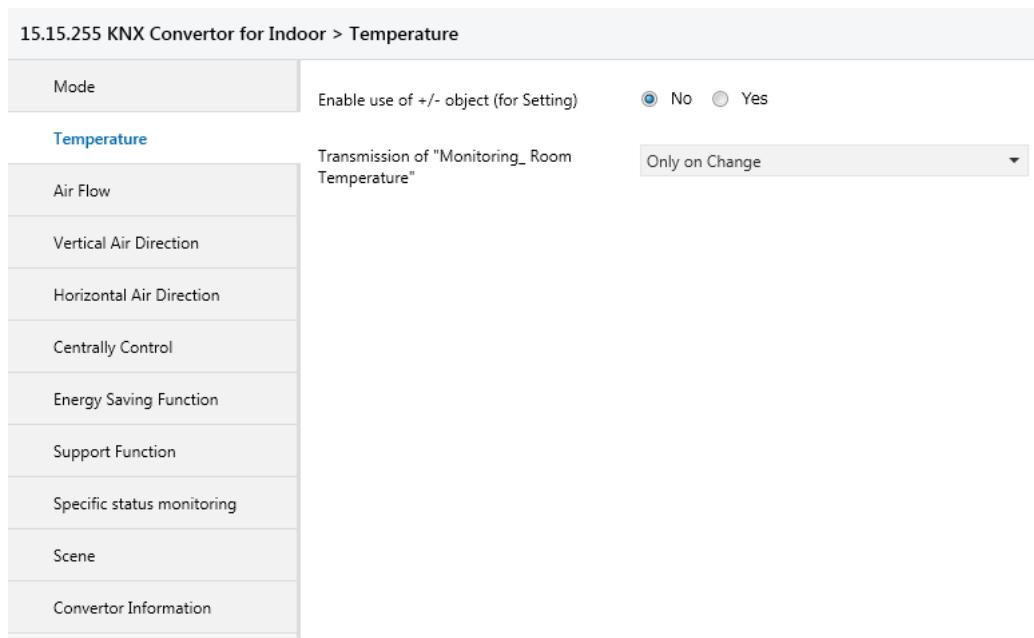
62 Inner_Monitoring_Operation Mode Text ASCII String

- If set to “No” the object will not be shown.
- If set to “Yes” the Monitoring_Operation Mode Text object will appear.

Also, in the parameters, will be shown five text fields, one for each mode, that will let modify the text string displayed by the Monitoring_Operation Mode Text when changing mode.

Enable use of Text object (for Monitoring)	<input type="radio"/> No	<input checked="" type="radio"/> Yes
> String when mode is Auto	<input type="text" value="AUTO"/>	
> String when mode is Cool	<input type="text" value="COOL"/>	
> String when mode is Heat	<input type="text" value="HEAT"/>	
> String when mode is Dry	<input type="text" value="DRY"/>	
> String when mode is Fan	<input type="text" value="FAN"/>	

5-2. Temperature dialog



5-2-1. Enable use of +/- object for Set Temperature (for setting)

This parameter shows/hides the Setting_Set Temperature +/- communication object which lets change the indoor unit set-point temperature.

11 Inner_Setting_Set Temperature +/- 0 - Up; 1 - Down

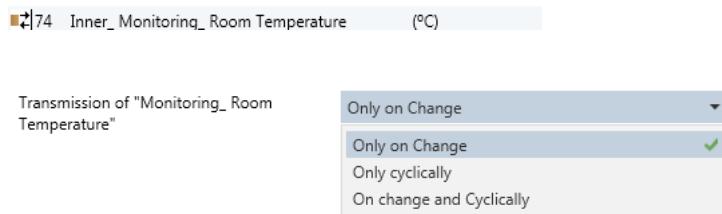
- If set to “No” the object will not be shown.
- If set to “Yes” the Setting_Set Temperature +/- object will appear.
- DPT type for +/- Set Temperature Object

The sequence followed when using this object is shown below:



5-2-2. Transmission of “Monitoring_Room Temperature”

This parameter lets you choose if the room temperature will be sent “Only on Change”, “Only cyclically” or “On change and Cyclically”.



- If set to “Only cyclically” or “On change and Cyclically” cyclic sending will appear.
- If “Only cyclically” or “On change and Cyclically” is set, cyclic sending of “Monitoring_Room Temperature” will appear.

5-2-3. Cyclic sending of “Monitoring_Room Temperature”

This parameter will only be available for the “only cyclically” and “cyclically and on change” options, and lets you change the interval of time (in seconds, from 1 to 255) at the end of which the room temperature is sent to the KNX bus.

5-3. Air Flow dialog

All the parameters in this section are related with the different air flow properties and communication objects.

5-3-1. DPT object type for Air Flow objects

This parameter changes the DPT setting of the 8-bit unsigned value Setting_ and Monitoring_Air Flow objects. For datapoints, Scaling and Enumerated are selectable.

- When “Enumerated” is selected, Setting_ and Monitoring_Air Flow communication objects for this DPT will appear.

12 Inner_Setting_Airflow	1 - Auto; 2 - Quiet; 3 - Low; 4 - Med-Low; 5 - Med; 6 - Med-High; 7 - High
65 Inner_Monitoring_Airflow	1 - Auto; 2 - Quiet; 3 - Low; 4 - Med-Low; 5 - Med; 6 - Med-High; 7 - High

- When “Scaling” is selected, Setting_ and Monitoring_Air Flow communication objects for this DPT will appear.

12 Inner_Setting_Airflow	0%-13% - Auto; 14%-27% - Quiet; 28%-41% - Low; 42%-55% - Med-Low; 56%-70% - Med; 71%-85% - Med-High; 86%-100% - High
65 Inner_Monitoring_Airflow	13% - Auto; 27% - Quiet; 41% - Low; 55% - Med-Low; 70% - Med; 85% - Med-High; 100% - High

Table next shows the range of values that can be sent through the Setting_ object and the value returned by the Monitoring_ object.

	Auto	Quiet	Low	Med-Low	Med	Med-High	High
Setting_	0% - 13%	14% - 27%	28% - 41%	42% - 55%	56% - 70%	71% - 85%	86% - 100%
Monitoring_	13%	27%	41%	55%	70%	85%	100%

5-3-2. Enable use of bit-type Air Flow objects (for setting)

This parameter shows/hides the bit-type Setting_Air Flow objects.

13	Inner_Setting_Airflow Auto	1 - Auto
14	Inner_Setting_Airflow Quiet	1 - Quiet
15	Inner_Setting_Airflow Low	1 - Low
16	Inner_Setting_Airflow Med-Low	1 - Med-Low
17	Inner_Setting_Airflow Med	1 - Med
18	Inner_Setting_Airflow Med-High	1 - Med-High
19	Inner_Setting_Airflow High	1 - High

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Setting_Air Flow objects for Auto, Quiet, Low, Med-Low, Med, Med-High and High will appear. To activate an air flow by using these objects a "1" value has to be sent.

5-3-3. Enable use of bit-type Air Flow objects (for monitoring)

This parameter shows/hides the bit-type Monitoring_Air Flow objects.

66	Inner_Monitoring_Airflow Auto	1 - Auto
67	Inner_Monitoring_Airflow Quiet	1 - Quiet
68	Inner_Monitoring_Airflow Low	1 - Low
69	Inner_Monitoring_Airflow Med-Low	1 - Med-Low
70	Inner_Monitoring_Airflow Med	1 - Med
71	Inner_Monitoring_Airflow Med-High	1 - Med-High
72	Inner_Monitoring_Airflow High	1 - High

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Monitoring_Air Flow objects for Auto, Quiet, Low, Med-Low, Med, Med-High and High will appear. When enabled, an air flow will return a "1" through its bit-type object.

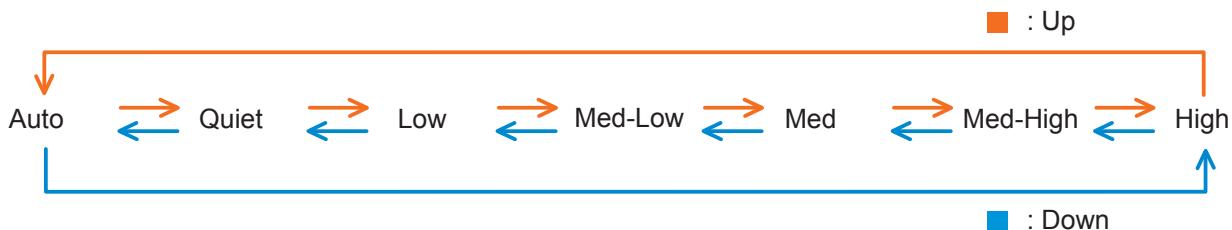
5-3-4. Enable use of +/- object for Air Flow (for setting)

This parameter shows/hides the Setting_Air Flow +/- communication object which lets change the indoor unit air flow.

20	Inner_Setting_Airflow +/-	0 - Up; 1 - Down
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- If set to "No" the object will not be shown.
- If set to "Yes" the Setting_Air Flow +/- object will appear.
- DPT type for +/- Air Flow Object

The sequence followed when using this object is shown below:



5-3-5. Enable use of Text object for Air Flow (for Monitoring)

This parameter shows/hides the Monitoring_Air Flow Text communication object.

73 Inner_Monitoring_Airflow Text	ASCII String
<ul style="list-style-type: none">If set to "No" the object will not be shown.If set to "Yes" the Monitoring_Air Flow Text object will appear.	
Also, in the parameters, will be shown seven text fields, one for each air flow, that will let modify the text string displayed by the Monitoring_Air Flow Text when changing air flow.	
Enable use of Text object (for Monitoring) <input type="radio"/> No <input checked="" type="radio"/> Yes	
> String when airflow is Auto	AUTO
> String when airflow is Quiet	QUIET
> String when airflow is Low	LOW
> String when airflow is Med-Low	MED-LOW
> String when airflow is Med	MED
> String when airflow is Med-High	MED-HIGH
> String when airflow is High	HIGH

5-4. Vertical Air Direction dialog

15.15.255 KNX Convertor for Indoor > Vertical Air Direction	
Mode	Enable use of Vertical Air Direction object <input checked="" type="radio"/> No <input type="radio"/> Yes (for Setting and Monitoring)
Temperature	
Air Flow	
Vertical Air Direction	
Horizontal Air Direction	
Centrally Control	
Energy Saving Function	
Support Function	
Specific status monitoring	
Scene	
Convertor Information	

All the parameters in this section are related with the different vertical air direction properties and communication objects.

5-4-1. Enable use of Vertical Air Direction objects (for Setting and Monitoring)

This parameter shows/hides the Setting_ and Monitoring Vertical Air Direction objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the 8-bit unsigned value Setting_ and Monitoring_ Vertical Air Direction objects will appear. Also, the field to select the DPT setting and field to set the Vertical Air Direction object setting will appear.

15.15.255 KNX Convertor for Indoor Unit > Vertical Air Direction

Mode	Enable use of Vertical Air Direction object (for Setting and Monitoring)	<input type="radio"/> No <input checked="" type="radio"/> Yes
Temperature	DPT selection	<input checked="" type="radio"/> Scaling <input type="radio"/> Enumerated
Air Flow	Enable use of bit-type objects (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	Enable use of bit-type objects (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction	Enable use of +/- object (for Setting)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Centrally Control	Enable use of Text object (for Monitoring)	<input checked="" type="radio"/> No <input type="radio"/> Yes
Energy Saving Function		
Support Function		
Specific status monitoring		
Scene		
Convertor Information		

5-4-2. DPT object type for Vertical Air Direction objects

This parameter changes the DPT setting of the 8-bit unsigned value Setting_ and Monitoring_ Vertical Air Direction object. For datapoints, Scaling and Enumerated are selectable.

- When “Enumerated” is selected, Setting_ and Monitoring_ Vertical Air Direction communication objects for this DPT will appear.

21 Inner_Setting_Virtual Air Direction 1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Swing

77 Inner_Monitoring_Virtual Air Direction 1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Swing

- When “Scaling” is selected, Setting_ and Monitoring_ Vertical Air Direction communication objects for this DPT will appear.

21 Inner_Setting_Virtual Air Direction 0%-20% - Position 1; 21%-40% - Position 2; 41%-60% - Position 3; 61%-80% - Position 4; 81%-100% - Swing

77 Inner_Monitoring_Virtual Air Direction 20% - Position 1; 40% - Position 2; 60% - Position 3; 80% - Position 4; 100% - Swing

Table next shows the range of values that can be sent through the Setting_ object and the value returned by the Monitoring_ object.

	Position 1	Position 2	Position 3	Position 4	Swing
Setting_	0% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%
Monitoring_	20%	40%	60%	80%	100%

5-4-3. Enable use of bit-type Vertical Air Direction objects (for setting)

This parameter shows/hides the bit-type Setting_ Vertical Air Direction objects.

22	Inner_Setting_Verical Air Direction Pos1	1 - Position 1
23	Inner_Setting_Verical Air Direction Pos2	1 - Position 2
24	Inner_Setting_Verical Air Direction Pos3	1 - Position 3
25	Inner_Setting_Verical Air Direction Pos4	1 - Position 4
26	Inner_Setting_Verical Air Direction Swing	1 - Swing

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Setting_ Vertical Air Direction objects for Position 1, Position 2, Position 3, Position 4 and Swing will appear. To activate a vertical air direction by using these objects a "1" value has to be sent.

5-4-4. Enable use of bit-type Vertical Air Direction objects (for monitoring)

This parameter shows/hides the bit-type Monitoring_ Vertical Air Direction objects.

78	Inner_Monitoring_Verical Air Direction Pos1	1 - Position 1
79	Inner_Monitoring_Verical Air Direction Pos2	1 - Position 2
80	Inner_Monitoring_Verical Air Direction Pos3	1 - Position 3
81	Inner_Monitoring_Verical Air Direction Pos4	1 - Position 4
82	Inner_Monitoring_Verical Air Direction Swing	1 - Swing

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Monitoring_ Vertical Air Direction objects for Position 1, Position 2, Position 3 and Position 4 will appear. When enabled, a vertical air direction will return a "1" through its bit-type object.

5-4-5. Enable use of +/- object for Vertical Air Direction (for setting)

This parameter shows/hides the Setting_ Vertical Air Direction +/- communication object which lets change the indoor unit vertical air direction.

27	Inner_Setting_Verical Air Direction +/-	0 - Up; 1 - Down
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- If set to "No" the object will not be shown.
- If set to "Yes" the Setting_ Vertical Air Direction +/- object will appear.
- DPT type for +/- Vertical Air Direction Object

The sequence followed when using this object is shown below:



5-4-6. Enable use of Text object for Vertical Air Direction (for Monitoring)

This parameter shows/hides the Monitoring_ Vertical Air Direction Text communication object.

83	Inner_Monitoring_Verical Air Direction Text	ASCII String
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- If set to "No" the object will not be shown.
- If set to "Yes" the Monitoring_ Vertical Air Direction Text object will appear. Also, in the parameters, will be shown five text fields, one for each vertical air direction, that will let modify the text string displayed by the Monitoring_ Vertical Air Direction Text when changing vertical air direction.

Enable use of Text object (for Monitoring) No Yes

> String when vertical air direction is Position 1	POSITION 1
> String when vertical air direction is Position 2	POSITION 2
> String when vertical air direction is Position 3	POSITION 3
> String when vertical air direction is Position 4	POSITION 4
> String when vertical air direction is Swing	SWING

5-5. Horizontal Air Direction dialog

15.15.255 KNX Convertor for Indoor > Horizontal Air Direction

Mode Temperature Air Flow Vertical Air Direction	Enable use of Horizontal Air Direction object <input type="radio"/> No <input checked="" type="radio"/> Yes (for Setting and Monitoring)
Horizontal Air Direction <ul style="list-style-type: none"> Centrally Control Energy Saving Function Support Function Specific status monitoring Scene Convertor Information 	

All the parameters in this section are related with the different horizontal air direction properties and communication objects.

5-5-1. Enable use of Horizontal Air Direction objects (for Setting and Monitoring)

This parameter shows/hides the Setting_ and Monitoring Horizontal Air Direction objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the 8-bit unsigned value Setting_ and Monitoring_ Horizontal Air Direction objects will appear. Also, the field to select the DPT setting and field to set the Horizontal Air Direction object setting will appear.

15.15.255 KNX Convertor for Indoor Unit > Horizontal Air Direction	
Mode	Enable use of Horizontal Air Direction object (for Setting and Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	DPT selection <input checked="" type="radio"/> Scaling <input type="radio"/> Enumerated
Air Flow	
Vertical Air Direction	Enable use of bit-type objects (for Setting) <input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction	Enable use of bit-type objects (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Centrally Control	Enable use of +/- object (for Setting) <input checked="" type="radio"/> No <input type="radio"/> Yes
Energy Saving Function	Enable use of Text object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Support Function	
Specific status monitoring	
Scene	
Convertor Information	

5-5-2. DPT object type for Horizontal Air Direction objects

This parameter changes the DPT setting of the 8-bit unsigned value Setting_ and Monitoring_ Horizontal Air Direction object. For datapoints, Scaling and Enumerated are selectable.

- When “Enumerated” is selected, Setting_ and Monitoring_ Horizontal Air Direction communication objects for this DPT will appear.

28 Inner_Setting_Horizontal Air Direction 1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Position 5; 6 - Swing

84 Inner_Monitoring_Horizontal Air Direction 1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Position 5; 6 - Swing

- When “Scaling” is selected, Setting_ and Monitoring_ Horizontal Air Direction communication objects for this DPT will appear.

28 Inner_Setting_Horizontal Air Direction 0%-16% - Position 1; 17%-32% - Position 2; 33%-49% - Position 3; 50%-66% - Position 4; 67%-83% - Position 5; 84%-100% - Swing

84 Inner_Monitoring_Horizontal Air Direction 16% - Position 1; 32% - Position 2; 49% - Position 3; 66% - Position 4; 83% - Position 5; 100% - Swing

Table next shows the range of values that can be sent through the Setting_ object and the value returned by the Monitoring_ object.

	Position 1	Position 2	Position 3	Position 4	Position 5	Swing
Setting_	0% - 16%	17% - 32%	33% - 49%	50% - 66%	67% - 83%	84% - 100%
Monitoring_	16%	32%	49%	66%	83%	100%

5-5-3. Enable use of bit-type Horizontal Air Direction objects (for setting)

This parameter shows/hides the bit-type Setting_ Horizontal Air Direction objects.

29	Inner_Setting_Horizontal Air Direction Pos1	1 - Position 1
30	Inner_Setting_Horizontal Air Direction Pos2	1 - Position 2
31	Inner_Setting_Horizontal Air Direction Pos3	1 - Position 3
32	Inner_Setting_Horizontal Air Direction Pos4	1 - Position 4
33	Inner_Setting_Horizontal Air Direction Pos5	1 - Position 5
34	Inner_Setting_Horizontal Air Direction Swing	1 - Swing

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Setting_ Horizontal Air Direction objects for Position 1, Position 2, Position 3, Position 4, Position 5 and Swing will appear. To activate a horizontal air direction by using these objects a "1" value has to be sent.

5-5-4. Enable use of bit-type Horizontal Air Direction objects (for monitoring)

This parameter shows/hides the bit-type Monitoring_ Horizontal Air Direction objects.

85	Inner_Monitoring_Horizontal Air Direction Pos1	1 - Position 1
86	Inner_Monitoring_Horizontal Air Direction Pos2	1 - Position 2
87	Inner_Monitoring_Horizontal Air Direction Pos3	1 - Position 3
88	Inner_Monitoring_Horizontal Air Direction Pos4	1 - Position 4
89	Inner_Monitoring_Horizontal Air Direction Pos5	1 - Position 5
90	Inner_Monitoring_Horizontal Air Direction Swing	1 - Swing

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Monitoring_ Horizontal Air Direction objects for Position 1, Position 2, Position 3, Position 4, Position 5 and Swing will appear. When enabled, a horizontal air direction will return a "1" through its bit-type object.

5-5-5. Enable use of +/- object for Horizontal Air Direction (for setting)

This parameter shows/hides the Setting_ Horizontal Air Direction +/- communication object which lets change the indoor unit horizontal air direction.

35	Inner_Setting_Horizontal Air Direction +/-	0 - Up; 1 - Down
----	--	------------------

- If set to "No" the object will not be shown.
- If set to "Yes" the Setting_ Horizontal Air Direction +/- object will appear.
- DPT type for +/- Horizontal Air Direction Object

The sequence followed when using this object is shown below:



5-5-6. Enable use of Text object for Horizontal Air Direction (for Monitoring)

This parameter shows/hides the Monitoring_ Horizontal Air Direction Text communication object.

91	Inner_Monitoring_Horizontal Air Direction Text	ASCII String
----	--	--------------

- If set to "No" the object will not be shown.
- If set to "Yes" the Monitoring_ Horizontal Air Direction Text object will appear. Also, in the parameters, will be shown six text fields, one for each horizontal air direction, that will let modify the text string displayed by the Monitoring_ Horizontal Air Direction Text when changing horizontal air direction.

Enable use of Text object (for Monitoring) No Yes

> String when horizontal air direction is Position 1	<input type="text" value="POSITION 1"/>
> String when horizontal air direction is Position 2	<input type="text" value="POSITION 2"/>
> String when horizontal air direction is Position 3	<input type="text" value="POSITION 3"/>
> String when horizontal air direction is Position 4	<input type="text" value="POSITION 4"/>
> String when horizontal air direction is Position 5	<input type="text" value="POSITION 5"/>
> String when horizontal air direction is Swing	<input type="text" value="SWING"/>

5-6. Centrally Control dialog

15.15.255 KNX Convertor for Indoor > Centrally Control

Mode	Enable use of Centrally Control objects (for Setting) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of Centrally Control objects (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	
Vertical Air Direction	
Horizontal Air Direction	

Centrally Control

Energy Saving Function
Support Function
Specific status monitoring
Scene
Convertor Information

5-6-1. Enable use of bit-type Centrally Control objects (for setting)

This parameter shows/hides the bit-type Setting_Centrally Control objects.

36	Inner_Setting_Centrally Control (All Mode)	0 - Not inhibit; 1 - Inhibit
37	Inner_Setting_Centrally Control (Timer Mode)	0 - Not inhibit; 1 - Inhibit
38	Inner_Setting_Centrally Control (Set Temp)	0 - Not inhibit; 1 - Inhibit
39	Inner_Setting_Centrally Control (Operation Mode)	0 - Not inhibit; 1 - Inhibit
40	Inner_Setting_Centrally Control (On/Off Mode)	0 - Not inhibit; 1 - Inhibit
41	Inner_Setting_Centrally Control (On Mode)	0 - Not inhibit; 1 - Inhibit
42	Inner_Setting_Centrally Control (Filter Reset)	0 - Not inhibit; 1 - Inhibit

- If set to "No" the objects will not be shown.
- If set to "Yes" the bit-type Setting_Centrally Control objects for All Mode, Timer Mode, Set Temp, Operation Mode, ON/OFF Mode, ON Mode and Filter Reset will appear. To activate an centrally control by using these objects a "1" value has to be sent.

5-6-2. Enable use of bit-type Centrally Control objects (for monitoring)

This parameter shows/hides the bit-type Monitoring_ Centrally Control objects.

92	Inner_Monitoring_Centrally Control (All Mode)	0 - Not inhibit; 1 - Inhibit
93	Inner_Monitoring_Centrally Control (Timer Mode)	0 - Not inhibit; 1 - Inhibit
94	Inner_Monitoring_Centrally Control (Set Temperature)	0 - Not inhibit; 1 - Inhibit
95	Inner_Monitoring_Centrally Control (Operation Mode)	0 - Not inhibit; 1 - Inhibit
96	Inner_Monitoring_Centrally Control (On/Off Mode)	0 - Not inhibit; 1 - Inhibit
97	Inner_Monitoring_Centrally Control (On Mode)	0 - Not inhibit; 1 - Inhibit
98	Inner_Monitoring_Centrally Control (Filter Reset)	0 - Not inhibit; 1 - Inhibit

- If set to “No” the objects will not be shown.
- If set to “Yes” the bit-type Monitoring_ Centrally Control objects for All Mode, Timer Mode, Set Temp, Operation Mode, ON/OFF Mode, ON Mode and Filter Reset will appear. When enabled, an centrally control will return a “1” through its bit-type object.

5-7. Energy Saving dialog

15.15.255 KNX Convertor for Indoor > Energy Saving Function

Mode	Enable use of Economy Mode objects (for Setting and Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of Thermostat Off objects (for Setting and Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	Enable use of Demand Control object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	Enable use of Human Detection objects (for Setting) <input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction	Enable use of Human Detection objects (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Centrally Control	Energy Saving Function
Support Function	
Specific status monitoring	
Scene	
Convertor Information	

5-7-1. Enable use of Economy Mode objects (for Setting and Monitoring)

This parameter shows/hides the Setting_ and Monitoring_ Economy Mode objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the bit-type Setting_ and Monitoring_ Economy Mode objects will appear. Sending “1” using the Setting_ Economy Mode object enables Economy Mode. Sending “0” using the Setting_ Economy Mode object disables Economy Mode. The Monitoring_ Economy Mode object is “1” when Economy Mode is enabled. The Monitoring_ Economy Mode object is “0” when Economy Mode is disabled.

44	Inner_Setting_Economy Mode Operation	0 - Normal operation; 1 - Save operation
100	Inner_Monitoring_Economy Mode Operation	0 - Normal operation; 1 - Save operation

5-7-2. Enable use of Thermostat Off objects (for Setting and Monitoring)

This parameter shows/hides the Setting_ and Monitoring Thermostat Off objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the bit-type Setting_ and Monitoring_ Thermostat Off objects will appear.
Sending “1” using the Setting_ Thermostat Off object sets the Thermostat Off state. Sending “0” using the Setting_ Thermostat Off object cancels the Thermostat Off state. The Monitoring_ Thermostat Off object is “1” when the Thermostat Off state is set. The Monitoring_ Thermostat Off object is “0” when the Thermostat Off state is not set.

■ 45 Inner_Setting_ Thermostat Off	0 - Release; 1 - Thermo-off
■ 104 Inner_Monitoring_ Thermostat Off	0 - Release; 1 - Thermo-off

5-7-3. Enable use of Demand Control object (for Monitoring)

This parameter shows/hides the Monitoring Demand Control object.

- If set to “No” the object will not be shown.
- If set to “Yes” the 8-bit unsigned value Monitoring_ Demand Control object will appear.

■ 105 Inner_Monitoring_ Demand Control	0 - No operation; 1 - DRM 1; 2 - DRM 2; 3 - DRM 3
--	---

5-7-4. Enable use of Human Detection objects (for Setting)

This parameter shows/hides the Setting_ Human Detection objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the Setting_ Human Detection objects will appear.
For the Setting_ Human Detection object, sending “1” enables the human detection function, and sending “0” disables the human detection function. The Setting_ Human Detection Time object sets the duration of time to wait before the human detection function starts operating.

■ 46 Inner_Setting_ Human Detection Auto Save	0 - No operation; 1 - Operation
■ 47 Inner_Setting_ Human Detection Auto Save Set Time	(minutes)
■ 48 Inner_Setting_ Human Detection Auto Off	0 - No operation; 1 - Operation
■ 49 Inner_Setting_ Human Detection Auto Off Time	(minutes)

5-7-5. Enable use of Human Detection objects (for Monitoring)

This parameter shows/hides the Monitoring_ Human Detection objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the Monitoring_ Human Detection objects will appear.
The Monitoring_ Human Detection object is “1” when the human detection function is enabled or “0” when the human detection function is disabled. The Monitoring_ Human Detection Time object indicates the setting value for the duration of time to wait before the human detection function starts operating.

■ 106 Inner_Monitoring_ Human Detection Auto Save	0 - No operation; 1 - Operation
■ 107 Inner_Monitoring_ Human Detection Auto Save Set Time	(minutes)
■ 108 Inner_Monitoring_ Human Detection Auto Off	0 - No operation; 1 - Operation
■ 109 Inner_Monitoring_ Human Detection Auto Off Set Time	(minutes)

5-8. Additional Function dialog

15.15.255 KNX Convertor for Indoor > Support Function

Mode	Enable use of Filter Sign objects (for Setting_ and Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	
Air Flow	
Vertical Air Direction	
Horizontal Air Direction	
Centrally Control	
Energy Saving Function	

Support Function

Specific status monitoring
Scene
Convertor Information

5-8-1. Enable use of Filter Sign objects (for Setting and Monitoring)

This parameter shows/hides the Setting_ and Monitoring Filter Sign objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the bit-type Setting_ and Monitoring_ Filter Sign objects will appear.
Sending “1” using the Setting_ Filter Sign Reset object resets Filter Sign. (Sending “0” using it changes nothing.)
The Monitoring_ Filter Sign object is “1” when there is any Filter Sign. The Monitoring_ Filter Sign object is “0” when there is no Filter Sign.

■ 43 Inner_Setting_Filter Sign Reset 0 - Not inhibit; 1 - Inhibit
■ 99 Inner_Monitoring_Filter Sign 0 - No sign; 1 - Filter sign

5-9. Specific status monitoring dialog

15.15.255 KNX Convertor for Indoor > Specific status monitoring

Mode	Enable use of Defrosting object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of Oil Recovery object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	Enable use of Pump Down object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	
Horizontal Air Direction	
Centrally Control	
Energy Saving Function	

Support Function

Scene
Convertor Information

5-9-1. Enable use of Defrosting object (for Monitoring)

This parameter shows/hides the Monitoring_ Specific Status Defrosting object.

- If set to "No" the object will not be shown.
- If set to "Yes" the Monitoring_ Specific Status Defrosting object will appear.

The Monitoring_ Specific Status Defrosting object is "1" in the case of the defroster-enabled state. The Monitoring_ Specific Status Defrosting object is "0" in the case of the defroster-disabled state.

101 Inner_Monitoring_Specific Status Defrosting 0 - No defrosting status; 1 - Defrosting status

5-9-2. Enable use of Oil Recovery object (for Monitoring)

This parameter shows/hides the Monitoring_ Specific Status Oil Recovery object.

- If set to "No" the object will not be shown.
- If set to "Yes" the Monitoring_ Specific Status Oil Recovery object will appear.

The Monitoring_ Specific Status Oil Recovery object is "1" in the case of the oil collection state. The Monitoring_ Specific Status Oil Recovery object is "1" not in the case of the oil collection state.

102 Inner_Monitoring_Specific Status Oil Recovery 0 - No oil recovery status; 1 - Oil recovery status

5-9-3. Enable use of Pump Down object (for Monitoring)

This parameter shows/hides the Monitoring_ Specific Status Pump Down object.

- If set to "No" the objects will not be shown.
- If set to "Yes" the Monitoring_ Specific Status Pump Down object will appear.

The Monitoring_ Specific Status Pump Down object is "1" in the case of the pump failure state. The Monitoring_ Specific Status Pump Down object is "0" not in the case of the pump failure state.

103 Inner_Monitoring_Specific Status Pump Down 0 - No pump down status; 1 - Pump down status

5-10. Scene Configuration dialog

15.15.255 KNX Convertor for Indoor > Scene

Mode	Enable use of scenes	<input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature		
Air Flow		
Vertical Air Direction		
Horizontal Air Direction		
Centrally Control		
Energy Saving Function		
Support Function		
Specific status monitoring		
Scene		
Convertor Information		

All the parameters in this section are related with the Scene properties and communication objects.

A scene contains values of: Operation Mode, Operation On/Off, Set Temperature, Airflow, Air Direction and Action time setting.

5-10-1. Enable use of scenes

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

- If set to “No” the objects will not be shown.
- If set to “Yes” the scene parameters and communication objects will be shown.

15.15.255 KNX Convertor for Indoor > Scene

Mode	Enable use of scenes	<input type="radio"/> No <input checked="" type="radio"/> Yes
Temperature	Enable use of bit-type objects (for Setting)	<input type="radio"/> No <input checked="" type="radio"/> Yes
Air Flow		
Vertical Air Direction	Scene 1 set	<input checked="" type="radio"/> No <input type="radio"/> Yes
Horizontal Air Direction		
Centrally Control	Scene 2 set	<input checked="" type="radio"/> No <input type="radio"/> Yes
Energy Saving Function		
Support Function	Scene 3 set	<input checked="" type="radio"/> No <input type="radio"/> Yes
Specific status monitoring		
Scene	Scene 4 set	<input checked="" type="radio"/> No <input type="radio"/> Yes
Convertor Information		

■ 50 Inner_Setting_Execute Scene 1 - Scene 1; 2 - Scene 2; 3 - Scene 3; 4 - Scene4; 5 - None

■ 110 Inner_Monitoring_Current Scene 1 - Scene 1; 2 - Scene 2; 3 - Scene 3; 4 - Scene4; 5 - None

5-10-2. Enable use of bit-type Scene objects (for setting)

This parameter shows/hides the bit-type Setting_Execute Scene objects.

■ 51 Inner_Setting_Execute Scene 1	1 - Execute Scene 1
■ 52 Inner_Setting_Execute Scene 2	1 - Execute Scene 2
■ 53 Inner_Setting_Execute Scene 3	1 - Execute Scene 3
■ 54 Inner_Setting_Execute Scene 4	1 - Execute Scene 4

- If set to “No” the objects will not be shown.
- If set to “Yes” the bit-type Setting_Execute Scene objects for Scene 1, Scene 2, Scene 3 and Scene 4 will appear.
To execute a scene by using these objects, a “1” value has to be sent to the scene’s object we want to execute (i.e. to execute scene 4, a “1” has to be sent to the Setting_Execute Scene 4 object).

5-10-3. Scene “*” set

This parameter lets define a set for a scene (the following description is valid for all the scenes).

- If set to “No” the set for the scene “*” will be disabled.
- If set to “Yes” the set will be enabled. When a scene is executed the values configured in the preset will be applied.

Scene 1 set	<input type="radio"/> No <input checked="" type="radio"/> Yes
Enable use of Action time	<input checked="" type="radio"/> No <input type="radio"/> Yes
Value for Operation Mode	Cool
Value for Operation On/Off	On
Value for Set Temperature	28°C
Value for Airflow	Med
Value for Vertical Air Direction	Position 2
Value for Horizontal Air Direction	Position 4

- Enable use of Action time

This specifies whether to set the duration of execution time to the scene.

When the execution time is set, the operation state before the scene is started is restored after the execution time elapses. (Fig 7. 10. 3)

- When this is set to “No”, the execution time setting is not applied.
- When this is set to “Yes”, the execution time setting field will appear.
- In the case of Yes, the values of Operation Mode, Operation On/Off, and Air Direction are not included in the scene.

Enable use of Action time	<input type="radio"/> No <input checked="" type="radio"/> Yes
Action time for this scene (minutes)	1
Value for Set Temperature	28°C
Value for Airflow	Med

In the execution time setting field, the Scene execution time can be set between 1 minute and 180 minutes.

Air-conditioner
operation state

Scene 4

Scene 3

Scene 2

Scene 1

Current state

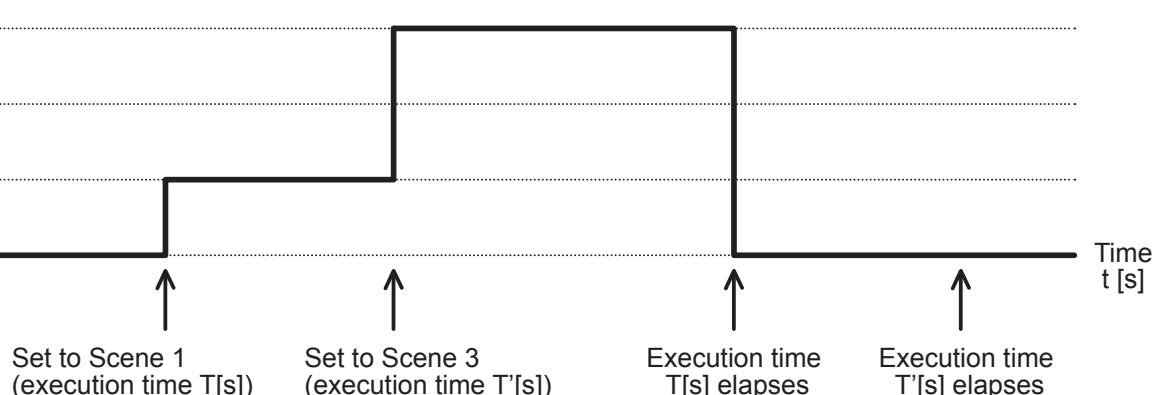


Figure 7-10-3. Operation during which execution times elapse

- Value for Operation Mode

This parameter sets Operation Mode to apply when the scene is executed.

The following options are available: “Auto”, “Heat”, “Cool”, “Fan”, “Dry” or “(unchanged)”.

- Value for Operation On/Off

This parameter sets Operation On/Off to apply when the scene is executed.

The following options are available: “Off”, “On” or “(unchanged)”.

- Value for Set Temperature

This parameter sets Set Temperature to apply when the scene is executed.

The following options are available: from “10°C” to “32°C” or “(unchanged)”.

- Value for Airflow

This parameter sets Airflow to apply when the scene is executed.

The following options are available: “Auto”, “Quiet”, “Low”, “Med-Low”, “Med”, “Med-High”, “High” or “(unchanged)”.

- Value for Vertical Air Direction

This parameter sets Vertical Air Direction to apply when the scene is executed.

The following options are available: “Position 1”, “Position 2”, “Position 3”, “Position 4”, “Swing” or “(unchanged)”.

- Value for Horizontal Air Direction

This parameter sets Horizontal Air Direction to apply when the scene is executed.

The following options are available: “Position 1”, “Position 2”, “Position 3”, “Position 4”, “Position 5”, “Swing” or “(unchanged)”.

Note

- If any set value is configured as “(unchanged)”, the execution of this scene will not change current status of this feature in the indoor unit.
- When a scene is executed, Monitoring_ Current Scene object shows the number of this scene.
Any change in previous items does Monitoring_ Current Scene show “None”.
Only changes on items marked as “(unchanged)” will not disable current scene.

5-11. Convertor Information dialog

15.15.255 KNX Convertor for Indoor > Convertor Information	
Mode	Enable use of Model Name object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Temperature	Enable use of Software Version object (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Air Flow	Enable use of Error Status objects (for Monitoring) <input checked="" type="radio"/> No <input type="radio"/> Yes
Vertical Air Direction	
Horizontal Air Direction	
Centrally Control	
Energy Saving Function	
Support Function	
Specific status monitoring	
Scene	

[Convertor Information](#)

5-11-1. Enable use of Model Name object (for Monitoring)

This parameter shows/hides the Monitoring_ Model Name object.

- If set to “No” the object will not be shown.
- If set to “Yes” the Monitoring_ Model Name object will appear.
The Monitoring_ Model Name object indicates the model name of the KNX converter.

111 Convertor_Monitoring_Model Name Information ASCII String

5-11-2. Enable use of Software Version object (for Monitoring)

This parameter shows/hides the Monitoring_ Software Version Information object.

- If set to “No” the object will not be shown.
- If set to “Yes” the Monitoring_ Software Version Information object will appear.
The Monitoring_ Software Version Information object indicates the version of the KNX converter software.

112 Convertor_Monitoring_Software Version Information ASCII String

5-11-3. Enable use of Error Status objects (for Monitoring)

This parameter shows/hides the Monitoring_ Error Status objects.

- If set to “No” the objects will not be shown.
- If set to “Yes” the Monitoring_ Error Status Error/No Error object and Monitoring_ Error Status Error Code object will appear.
The Monitoring_ Error Status Error/No Error object is “1” when the converter is faulty. The Monitoring_ Error Status Error/No Error object is “0” when the converter is running normally.
The Monitoring_ Error Status Error Code object indicates the code of the error that occurred in the converter.

113 Convertor_Monitoring_Error Status Error/No Error 0 - No Alarm; 1 - Alarm
114 Convertor_Monitoring_Error Status Error Code (Error code section)(Error code subsection)

6 COMMUNICATION OBJECTS TABLE

Classification	Function	Object Number	Name	Length	DataPoint Type		Flags				Value
					DPT_Name	DPT_ID	R	W	T	U	
Control Object	Operation mode setting	1	Inner_Setting_Operation Mode [HVAC]	1 byte	DPT_HVACContrMode	20.105		W			0 - Auto; 1 - Heat; 3 - Cool; 9 - Fan; 14 - Dry
		2	Inner_Setting_Operation Mode	1 byte	DPT_Scaling	5.001		W			0%-20% - Auto; 21%-40% - Heat; 41%-60% - Cool; 61%-80% - Fan; 81%-100% - Dry
			Inner_Setting_Operation Mode	1 byte	DPT_Enumeration_1 (Operation Mode)			W			1 - Auto; 2 - Heat; 3 - Cool; 4 - Fan; 5 - Dry
		3	Inner_Setting_Operation Mode Auto	1 bit	DPT_Bool	1.002		W			1 - Auto
		4	Inner_Setting_Operation Mode Heat	1 bit	DPT_Bool	1.002		W			1 - Heat
		5	Inner_Setting_Operation Mode Cool	1 bit	DPT_Bool	1.002		W			1 - Cool
		6	Inner_Setting_Operation Mode Fan	1 bit	DPT_Bool	1.002		W			1 - Fan
		7	Inner_Setting_Operation Mode Dry	1 bit	DPT_Bool	1.002		W			1 - Dry
		8	Inner_Setting_Operation Mode +/-	1 bit	DPT_Step	1.007		W			0 - Up; 1 - Down
	ON/OFF	9	Inner_Setting_Operation ON/OFF	1 bit	DPT_Switch	1.001		W			0 - Off; 1 - On
Set temperature setting	10	Inner_Setting_Set Temperature	2 byte	DPT_Value_Temp	9.001		W				(°C)
		11	Inner_Setting_Set Temperature +/-	1 bit	DPT_Up-Down	1.008		W			0 - Up; 1 - Down
Airflow setting	12	Inner_Setting_Airflow	1 byte	DPT_Scaling	5.001		W				0%-13% - Auto; 14%-27% - Quiet; 28%-41% - Low; 42%-55% - Med-Low; 56%-70% - Med; 71%-85% - Med-High; 86%-100% - High
		Inner_Setting_Airflow	1 byte	DPT_Enumeration_1 (Airflow)			W				1 - Auto; 2 - Quiet; 3 - Low; 4 - Med-Low; 5 - Med; 6 - Med-High; 7 - High
	13	Inner_Setting_Airflow Auto	1 bit	DPT_Bool	1.002		W				1 - Auto
	14	Inner_Setting_Airflow Quiet	1 bit	DPT_Bool	1.002		W				1 - Quiet
	15	Inner_Setting_Airflow Low	1 bit	DPT_Bool	1.002		W				1 - Low
	16	Inner_Setting_Airflow Med-Low	1 bit	DPT_Bool	1.002		W				1 - Med-Low
	17	Inner_Setting_Airflow Med	1 bit	DPT_Bool	1.002		W				1 - Med
	18	Inner_Setting_Airflow Med-High	1 bit	DPT_Bool	1.002		W				1 - Med-High
	19	Inner_Setting_Airflow High	1 bit	DPT_Bool	1.002		W				1 - High
	20	Inner_Setting_Airflow +/-	1 bit	DPT_Step	1.007		W				0 - Up; 1 - Down
Vertical air direction position setting	21	Inner_Setting_Vertical Air Direction	1 byte	DPT_Scaling	5.001		W				0%-20% - Position 1; 21%-40% - Position 2; 41%-60% - Position 3; 61%-80% - Position 4; 81%-100% - Swing
		Inner_Setting_Vertical Air Direction	1 byte	DPT_Enumeration_1 (Vertical Air Direction)			W				1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Swing
	22	Inner_Setting_Vertical Air Direction Pos1	1 bit	DPT_Bool	1.002		W				1 - Position 1
	23	Inner_Setting_Vertical Air Direction Pos2	1 bit	DPT_Bool	1.002		W				1 - Position 2
	24	Inner_Setting_Vertical Air Direction Pos3	1 bit	DPT_Bool	1.002		W				1 - Position 3
	25	Inner_Setting_Vertical Air Direction Pos4	1 bit	DPT_Bool	1.002		W				1 - Position 4
	26	Inner_Setting_Vertical Air Direction Swing	1 bit	DPT_Bool	1.002		W				1 - Swing
	27	Inner_Setting_Vertical Air Direction +/-	1 bit	DPT_Step	1.007		W				0 - Up; 1 - Down

Classification	FUNCTION	OBJECT NUMBER	NAME	LENGTH	DATAPPOINT TYPE		FLAGS				Value
					DPT_NAME	DPT_ID	R	W	T	U	
Control Object	Horizontal air direction position setting	28	Inner_Setting_Horizontal Air Direction	1 byte	DPT_Scaling	5.001		W			0%-16% - Position 1; 17%-32% - Position 2; 33%-49% - Position 3; 50%-66% - Position 4; 67%-83% - Position 5; 84%-100% - Swing
			Inner_Setting_Horizontal Air Direction	1 byte	DPT_Enumeration_1 (Horizontal Air Direction)			W			1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Position 5; 6 - Swing
		29	Inner_Setting_Horizontal Air Direction Pos1	1 bit	DPT_Bool	1.002		W			1 - Position 1
		30	Inner_Setting_Horizontal Air Direction Pos2	1 bit	DPT_Bool	1.002		W			1 - Position 2
		31	Inner_Setting_Horizontal Air Direction Pos3	1 bit	DPT_Bool	1.002		W			1 - Position 3
		32	Inner_Setting_Horizontal Air Direction Pos4	1 bit	DPT_Bool	1.002		W			1 - Position 4
		33	Inner_Setting_Horizontal Air Direction Pos5	1 bit	DPT_Bool	1.002		W			1 - Position 5
		34	Inner_Setting_Horizontal Air Direction Swing	1 bit	DPT_Bool	1.002		W			1 - Swing
		35	Inner_Setting_Horizontal Air Direction +/-	1 bit	DPT_Step	1.007		W			0 - Up; 1 - Down
		Remote controller operation prohibition setting	36	Inner_Setting_Centrally Control (All Mode)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			37	Inner_Setting_Centrally Control (Timer Mode)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			38	Inner_Setting_Centrally Control (Set Temp)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			39	Inner_Setting_Centrally Control (Operation Mode)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			40	Inner_Setting_Centrally Control (ON/OFF Mode)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			41	Inner_Setting_Centrally Control (ON Mode)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
			42	Inner_Setting_Centrally Control (Filter Reset)	1 bit	DPT_Bool	1.002		W		0 - Not inhibit; 1 - Inhibit
Filter sign reset	43	Inner_Setting_Filter Sign Reset	1 bit	DPT_Bool	1.002		W				0 - No change; 1 - Reset
Economy mode	44	Inner_Setting_Economy Mode Operation	1 bit	DPT_Enable	1.003		W				0 - Normal operation; 1 - Save operation
Thermo-off	45	Inner_Setting_Thermostat Off	1 bit	DPT_Bool	1.002		W				0 - Release; 1 - Thermo-off
Human detection	46	Inner_Setting_Human Detection Auto Save	1 bit	DPT_Bool	1.002		W				0 - No operation; 1 - Operation
	47	Inner_Setting_Human Detection Auto Save Set Time	2 byte	DPT_Time-PeriodMin	7.006		W				(min)
	48	Inner_Setting_Human Detection Auto Off	1 bit	DPT_Bool	1.002		W				0 - No operation; 1 - Operation
	49	Inner_Setting_Human Detection Auto Off Time	2 byte	DPT_Time-PeriodMin	7.006		W				(min)
Scene	50	Inner_Setting_Execute Scene	1 byte	DPT_Scene-Number	17.001		W				1 - Scene 1; 2 - Scene 2; 3 - Scene 3; 4 - Scene 4; 5 - None
	51	Inner_Setting_Execute Scene 1	1 bit	DPT_Bool	1.002		W				1 - Execute Scene 1
	52	Inner_Setting_Execute Scene 2	1 bit	DPT_Bool	1.002		W				1 - Execute Scene 2
	53	Inner_Setting_Execute Scene 3	1 bit	DPT_Bool	1.002		W				1 - Execute Scene 3
	54	Inner_Setting_Execute Scene 4	1 bit	DPT_Bool	1.002		W				1 - Execute Scene 4

Classification	FUNCTION	OBJECT NUMBER	NAME	LENGTH	DATAPPOINT TYPE		FLAGS				Value
					DPT_NAME	DPT_ID	R	W	T	U	
Status Object	Operation mode	55	Inner_Monitoring_Operation Mode [HVAC]	1 byte	DPT_HVAC-ContrMode	20.105	R		T		0 - Auto; 1 - Heat; 3 - Cool; 9 - Fan; 14 - Dry
		56	Inner_Monitoring_Operation Mode	1 byte	DPT_Scaling	5.001	R		T		20% - Auto; 40% - Heat; 60% - Cool; 80% - Fan; 100% - Dry
			Inner_Monitoring_Operation Mode	1 byte	DPT_Enumeration_1 (Operation Mode)		R		T		1 - Auto; 2 - Heat; 3 - Cool; 4 - Fan; 5 - Dry
		57	Inner_Monitoring_Operation Mode Auto	1 bit	DPT_Bool	1.002	R		T		1 - Auto
		58	Inner_Monitoring_Operation Mode Heat	1 bit	DPT_Bool	1.002	R		T		1 - Heat
		59	Inner_Monitoring_Operation Mode Cool	1 bit	DPT_Bool	1.002	R		T		1 - Cool
		60	Inner_Monitoring_Operation Mode Fan	1 bit	DPT_Bool	1.002	R		T		1 - Fan
		61	Inner_Monitoring_Operation Mode Dry	1 bit	DPT_Bool	1.002	R		T		1 - Dry
	ON/OFF	62	Inner_Monitoring_Operation Mode Text	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
		63	Inner_Monitoring_Operation ON/OFF	1 bit	DPT_Switch	1.001	R		T		0 - Off; 1-On
	Set temperature	64	Inner_Monitoring_Set Temperature	2 byte	DPT_Value_Temp	9.001	R		T		(°C)
	Airflow status	65	Inner_Monitoring_Airflow	1 byte	DPT_Scaling	5.001	R		T		13% - Auto; 27% - Quiet; 41% - Low; 55% - Med-Low; 70% - Med; 85% - Med-High; 100% - High
			Inner_Monitoring_Airflow	1 byte	DPT_Enumeration_1 (Airflow)		R		T		1 - Auto; 2 - Quiet; 3 - Low; 4 - Med-Low; 5 - Med; 6 - Med-High; 7 - High
		66	Inner_Monitoring_Airflow Auto	1 bit	DPT_Bool	1.002	R		T		1 - Auto
		67	Inner_Monitoring_Airflow Quiet	1 bit	DPT_Bool	1.002	R		T		1 - Quiet
		68	Inner_Monitoring_Airflow Low	1 bit	DPT_Bool	1.002	R		T		1 - Low
		69	Inner_Monitoring_Airflow Med-Low	1 bit	DPT_Bool	1.002	R		T		1 - Med-Low
		70	Inner_Monitoring_Airflow Med	1 bit	DPT_Bool	1.002	R		T		1 - Med
		71	Inner_Monitoring_Airflow Med-High	1 bit	DPT_Bool	1.002	R		T		1 - Med-High
		72	Inner_Monitoring_Airflow High	1 bit	DPT_Bool	1.002	R		T		1 - High
		73	Inner_Monitoring_Airflow Text	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
	Indoor temperature	74	Inner_Monitoring_Room Temperature	2 byte	DPT_Value_Temp	9.001	R		T		(°C)
Error monitoring	75	Inner_Monitoring_Error Status Error/No error	1 bit	DPT_Alarm	1.005	R		T			0 - No error; 1 - Error
		76	Inner_Monitoring_Error Status Error Code	2 byte	DPT_Enumeration_2 (Error Code)		R		T		(Error code section)(Error code subsection)

Classification	Function	Object Number	Name	Length	DataPoint Type		Flags				Value
					DPT_Name	DPT_ID	R	W	T	U	
Status Object	Vertical air direction position status	77	Inner_Monitoring_Verical Air Direction	1 byte	DPT_Scaling	5.001	R		T		20% - Position 1; 40% - Position 2; 60% - Position 3; 80% - Position 4; 100% - Swing
			Inner_Monitoring_Verical Air Direction	1 byte	DPT_Enumeration_1 (Vertical Air Direction)		R		T		1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Swing
		78	Inner_Monitoring_Verical Air Direction Pos1	1 bit	DPT_Bool	1.002	R		T		1 - Position 1
		79	Inner_Monitoring_Verical Air Direction Pos2	1 bit	DPT_Bool	1.002	R		T		1 - Position 2
		80	Inner_Monitoring_Verical Air Direction Pos3	1 bit	DPT_Bool	1.002	R		T		1 - Position 3
		81	Inner_Monitoring_Verical Air Direction Pos4	1 bit	DPT_Bool	1.002	R		T		1 - Position 4
		82	Inner_Monitoring_Verical Air Direction Swing	1 bit	DPT_Bool	1.002	R		T		1 - Swing
		83	Inner_Monitoring_Verical Air Direction Text	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
	Horizontal air direction position status	84	Inner_Monitoring_Horizontal Air Direction	1 byte	DPT_Scaling	5.001	R		T		16% - Position 1; 32% - Position 2; 49% - Position 3; 66% - Position 4; 83% - Position 5; 100% - Swing
			Inner_Monitoring_Horizontal Air Direction	1 byte	DPT_Enumeration_1 (Horizontal Air Direction)		R		T		1 - Position 1; 2 - Position 2; 3 - Position 3; 4 - Position 4; 5 - Position 5; 6 - Swing
		85	Inner_Monitoring_Horizontal Air Direction Pos1	1 bit	DPT_Bool	1.002	R		T		1 - Position 1
		86	Inner_Monitoring_Horizontal Air Direction Pos2	1 bit	DPT_Bool	1.002	R		T		1 - Position 2
		87	Inner_Monitoring_Horizontal Air Direction Pos3	1 bit	DPT_Bool	1.002	R		T		1 - Position 3
		88	Inner_Monitoring_Horizontal Air Direction Pos4	1 bit	DPT_Bool	1.002	R		T		1 - Position 4
		89	Inner_Monitoring_Horizontal Air Direction Pos5	1 bit	DPT_Bool	1.002	R		T		1 - Position 5
		90	Inner_Monitoring_Horizontal Air Direction Swing	1 bit	DPT_Bool	1.002	R		T		1 - Swing
		91	Inner_Monitoring_Horizontal Air Direction Text	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
Remote controller operation prohibition setting status	92	Inner_Monitoring_Centrally Control (All Mode)	1 bit	DPT_Bool	1.002	R		T			0 - Not inhibit; 1 - Inhibit
		93	Inner_Monitoring_Centrally Control (Timer Mode)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
		94	Inner_Monitoring_Centrally Control (Set Temperature)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
		95	Inner_Monitoring_Centrally Control (Operation Mode)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
		96	Inner_Monitoring_Centrally Control (ON/OFF Mode)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
		97	Inner_Monitoring_Centrally Control (ON Mode)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
		98	Inner_Monitoring_Centrally Control (Filter Reset)	1 bit	DPT_Bool	1.002	R		T		0 - Not inhibit; 1 - Inhibit
	Filter sign status	99	Inner_Monitoring_Filter Sign	1 bit	DPT_Bool	1.002	R		T		0 - No sign; 1 - Filter sign
Economy mode	100	Inner_Monitoring_Economy Mode Operation	1 bit	DPT_Enable	1.003	R		T			0 - Normal operation; 1 - Save operation

Classification	FUNCTION	OBJECT NUMBER	NAME	LENGTH	DATAPPOINT TYPE		FLAGS				Value
					DPT_NAME	DPT_ID	R	W	T	U	
Status Object	Special status monitoring	101	Inner_Monitoring_Specific Status Defrosting	1 bit	DPT_Bool	1.002	R		T		0 - No defrosting status; 1 - Defrosting status
		102	Inner_Monitoring_Specific Status Oil Recovery	1 bit	DPT_Bool	1.002	R		T		0 - No oil recovery status; 1 - Oil recovery status
		103	Inner_Monitoring_Specific Status Pump Down	1 bit	DPT_Bool	1.002	R		T		0 - No pump down status; 1 - Pump down status
	Thermo-off	104	Inner_Monitoring_Thermostat Off	1 bit	DPT_Bool	1.002	R		T		0 - Release; 1 - Thermo-off
	Demand	105	Inner_Monitoring_Demand Control	1 byte	DPT_Value_1_Ucount	5.010	R		T		0 - No operation; 1 - DRM 1; 2 - DRM 2; 3 - DRM 3
	Human detection	106	Inner_Monitoring_Human Detection Auto Save	1 bit	DPT_Bool	1.002	R		T		0 - No operation; 1 - Operation
		107	Inner_Monitoring_Human Detection Auto Save Set Time	2 byte	DPT_Time_PeriodMin	7.006	R		T		(min)
		108	Inner_Monitoring_Human Detection Auto Off	1 bit	DPT_Bool	1.002	R		T		0 - No operation; 1 - Operation
		109	Inner_Monitoring_Human Detection Auto Off Set Time	2 byte	DPT_Time_PeriodMin	7.006	R		T		(min)
	Scene	110	Inner_Monitoring_Current Scene	1 byte	DPT_Scene Number	17.001	R		T		1 - Scene 1; 2 - Scene 2; 3 - Scene 3; 4 - Scene4; 5 - None;
	Convertor Information	111	Convertor_Monitoring_Model Name Information	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
		112	Convertor_Monitoring_Software Version Information	14 byte	DPT_String_8859_1	16.001	R		T		ASCII String
	Error monitoring	113	Convertor_Monitoring_Error Status Error/No Error	1 bit	DPT_Alarm	1.005	R		T		0 - No Alarm; 1 - Alarm
		114	Convertor_Monitoring_Error Status Error Code	2 byte	DPT_Enumeration_2 (Error Code)		R		T		(Error code section)(Error code subsection)