



KNX Blinds Motor User Manual

(Applicable model: M/AG40B.1)

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Update History

The form below contains the information of every update. The latest version contains all the updates of all former versions.

No.	Version	Update Information	Date
1	V1.0.0	Initial release	Jan.13, 2020



1 Introduction

This user manual offers the information on the configuration of KNX Blinds Motor (Model: M/AG40B.1, hereinafter referred to as motor). The following tools might be included:

- KNX Blinds Motor (Model: M/AG40B.1)
- A computer with ETS5 software
- KNX USB interface (Model: M/USB.1)
- > KNX power supply and auxiliary power supply
- KNX project files
- Dedicated KNX cable(s)

Note:

- ① Please refer to the datasheet attached to the product for the information of installation, wiring, specifications, etc.
- ② The pictures in this user manual are for reference only and the actual product should prevail.



1.1 Import Data

1.1.1 Import Database to ETS (.knxprod)

1. Import Catalogs: click "Catalogs" → "Import…" in the main page of ETS5 software and select local database files with the suffix of .knxprod, as shown in Figure 1-1.

I ETS5™								×
ETS								?
Overview Bus	Catalogs	کې Settings					KNX	8
🛃 Import ፋ Export 🛛 🗠	Download	III → HD	L > Product	s		Search		ρ
📌 Favorites 🔹	See Manufacturer	Name	Order Med	liu Application	Version	Catalan	A	
🜆 My Products 🛛 🔳		YEE Panel 3R	M/P3 TP	YEE Panel 3Rocker Con.	1.0	Catalog	Application	
둸 Recent Products		YEE Panel 2R		YEE Panel 2Rocker Con.				
Manufacturers •] HDL	Energy 3fold	M/EA TP	Energy 3fold Actuator(. 1.0			
A 🗐 HDL								
Products								
C						>		
				ETS Version ET	S 5.6.4 (Build 8	B42) 🛈 License	Demo Apps 0 activ	vei

Figure 1-1 Import catalog



2. Create Projects: as shown in Figure 1-2, in "Your Projects" tab from ETS5 software's "Overview" page, click "+" to create projects. After editing project name, please keep other default setting items.

⊞ ETS5™					
ETS					0
Overview	Bus	Catalogs	Settings		KNX
Your Projects	Project Arc	hive		KNX News	New KNX Products
+ 🎢 📩 Create New Pr	oject	Search	Q	Modern, Massive, Moscow – The 15th KNX National Group Conference kicked off with many surprises 2019/10/7	True Presence® Multisensor KNX Steinel GmbH (Germany)
Name HDL Backbone IP Topology ✓ Create Line 1.1	Name HDL Backbone IP Topology			2019/10/7 This year, the 15th KNX National Group Conference welcomed delegates from 20 countries. Hosting city was Moscow – Not known by many, but appreciated by all. The first day's agenda had various surprises for the delegates regarding the future of	
TP Group Address Style Free Two Level Three Level Create Proj				KNX Association, Tools, and upcoming events. The day after followed with additional presentations and discussion on Social Media activites, best practices and other open subject were discussed between KNX and its National Groups Although both days required the full attention of the delegates, all delegates are anticipating the next day with high excitement.	7 senses for KNX. Welcome to the new era in building sensor technology! True Presence® provides absolutely reliable information on human presence and absence. The revolutionary technology is based on ultra-sensitive high-
				NETx Multi Protocol Server	Certified KNX Products See a list of all certified KNX products here.
				ETS Version ETS 5.6.4 (Build a	842) 🛈 License Demo Apps 0 active

Figure 1-2 Create projects



3. Add Devices to Projects:

① After creating a project, the project page will show up by default. Click "Buildings" and select "Topology", as shown in Figure 1-3.

ETS5™ - HDL (3) ETS Edit Workplace Com	missioning Diagr	nostics Extras V	Vindow		
🗙 Close Project 🛛 🏑 Undo		Reports	Workplace 🔻 📳 Catalogs	Diagnostic	
Buildings 🔻				∧ □ ×	Properties
Buildings	🖢 Download 🔻	🚺 Info 🔹 灯 Re	set 🔻 Search	Q	
😨 Orgup Addresses	Room	Description	Application Program	Adr	Settings Com Infor
Topology					
📰 Project Root					
Devices					
🚔 Reports					
🔠 Catalog					
Diagnostics					Select an element to see details here
					➢ Find and Replace
					Workspaces
					🕗 Todo Items
					Pending Operations
Devices	Parameter	Building Parts			🖍 Undo History
<no 1.1="" interface="" li<="" new="" sel="" td="" ="" 🔺=""><td>ne</td><td>Buildings</td><td></td><td></td><td>Last used workspace</td></no>	ne	Buildings			Last used workspace

Figure 1-3 Add devices to projects (1)



② Figure 1-4 shows "Topology" page, click the arrow beside "Add Areas" and select "Devices", and the catalog page will show up below.

ETS5™ - HDL (1)								
ETS Edit Workplace Con	nmissioning Dia	agnostics Extras	Window					
Close Project 🖍 Undo		-	Workplace • 🚺 Catalogs	Diagnost	ice			
-	· · ·	E Reports	Workplace and catalog.				∧ □	×
Topology *							^ L	
🕇 Add Areas 🔻 🗙 Delete 🛨	[Download 🛛 🔻 🌔	🚺 Info 🔻 灯 Re	eset 🎸 Unload 🔻 🗎 Print			Search		
Topology 👫 Areas			Description			Domain Address		
Dynamic Lines					TP -			\bigcirc
I New A Devices								
Area Catalog ▼ Limport Li Export C	as Lines /		Parameter		2	iearch	^ 🗆	×
Catalog	Downlos Security	ad 🔃 🕨 Ma Manufacturer *	inufacturers Name	Order Number	Medium Type	Application	Version	×
Catalog ▼ La Import La Export C Favorites ▼ La My Products	C Downlos Security	ad 🔃 > Ma Manufacturer * HDL	nufacturers Name YEE Panel 3Rocker Controller(V1.0)	M/P3R 1801 P016	Medium Type	Application YEE Panel 3Rocker C.	Version	× ₽
Catalog ▼ La Import 1 Export C ★ Favorites ▼ My Products T Recent Products	C Downlos Security	ad 🔃 > Ma Manufacturer * HDL	inufacturers Name	M/P3R 1801 P016	Medium Type	Application	Version	× ₽
Catalog ▼ Import 1 Export Favorites ▼ Import 1 Export Favorites ▼ Import 1 Export I	C Downlos Security	ad 🔃 > Ma Manufacturer * HDL	nufacturers Name YEE Panel 3Rocker Controller(V1.0)	M/P3R 1801 P016	Medium Type	Application YEE Panel 3Rocker C.	Version	×
Catalog ▼ La Import 1 Export C ★ Favorites ▼ My Products T Recent Products	C Downlos Security	ad 🔃 > Ma Manufacturer * HDL	nufacturers Name YEE Panel 3Rocker Controller(V1.0)	M/P3R 1801 P016	Medium Type	Application YEE Panel 3Rocker C.	Version	× •
Catalog ▼ Import 1 Export Favorites ▼ Import 1 Export Favorites ▼ Import 1 Export I	Downloa	ad 🔃 > Ma Manufacturer * HDL	Name YEE Panel 3Rocker Controller(V1.0) YEE Panel 2Rocker Controller(V1.0)	M/P3R 1801 P016 M/P2R 1801 P015	Medium Type	Application YEE Panel 3Rocker C.	Version	×

Figure 1-4 Add devices to projects (2)



③ As shown in Figure 1-5, click "HDL" in "Manufactures" column and select devices to be added to the project on the right. Drag devices to the above area (Method 1) or click "Add" button to add devices after clicking the location needed to add projects below (Method 2).

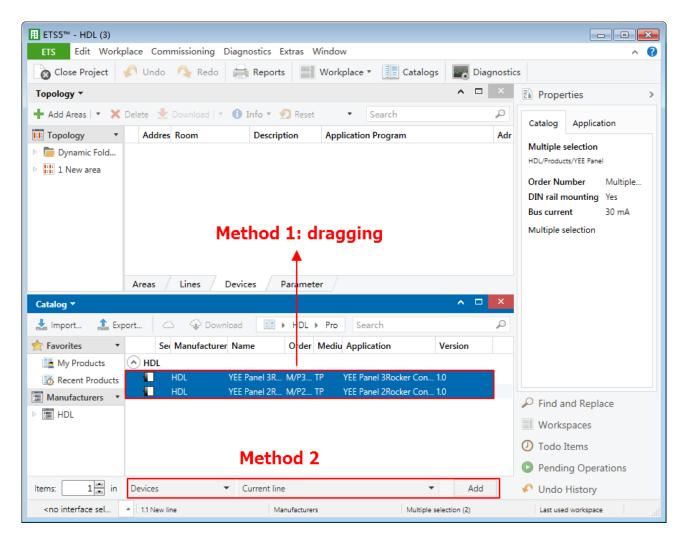


Figure 1-5 Add devices to projects (3)



1.1.2 Import Projects (.knxproj)

As shown in Figure 1-6. Open ETS5 and click "Import project" button of "Your Project" tab of "Overview" page and import obtained KNX project files with the suffix of .knxproj. After importing projects, added/created projects will be listed below. Double click to edit.

ETS						0
Overview	Bus	Catalogs	Settings			KNX
Your Projects	Project Arch	nive		KNX Nev	VS	New KNX Products
+ 🎢 🛃 ᆂ		Search	£	15th KNX N	assive, Moscow – The ational Group kicked off with many	True Presence® Multisensor KNX Steinel GmbH (Germany)
Name Last Modifie	d ▼ Status :22 Unknown			surprises 2019/10/7	,	
				Group Cont delegates fi Hosting city known by m by all. The first da various sun delegates n KNX Associ upcoming followed wi presentatio Social Medi practices an were discus its National Although b full attentic delegates a	he 15th KNX National ference welcomed rom 20 countries. y was Moscow – Not nany, but appreciated y's agenda had prises for the egarding the future of ation, Tools, and events. The day after ith additional nos and discussion on ia activites, best nd other open subject used between KNX and I Groups oth days required the on of the delegates, all tre anticipating the th high excitement.	7 senses for KNX. Welcome to the new era in building sensor technology! True Presence® provides absolutely reliable information on human presence and absence. The revolutionary technology is based on ultra-sensitive high-
				NETx Multi 2019/9/13	Protocol Server	Certified KNX Products See a list of all certified KNX products here.
					ETS Version ETS 5.6.4 (Build	842) 🛈 License Demo Apps 0 active

Figure 1-6 Import projects



1.2 Open Configuration Window

Double click the project to be configured. Click "Workspace" \rightarrow "Open New Panel" \rightarrow "Topology" to open the window, as shown in Figure 1-7.

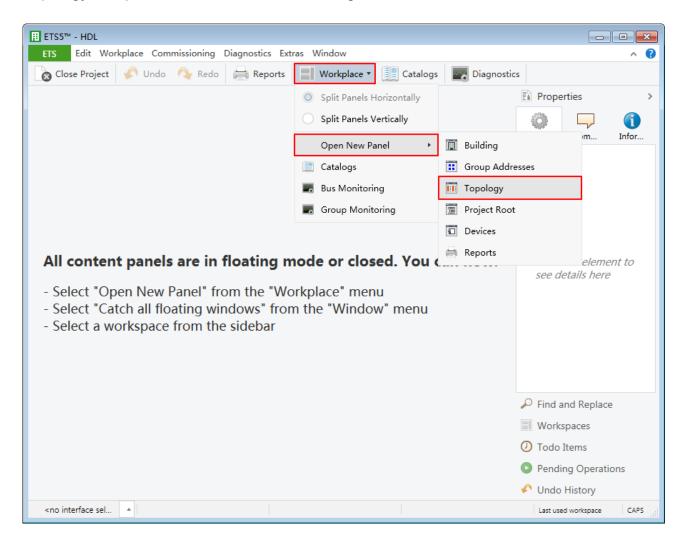


Figure 1-7 Open configuration window



2 General Setting

In topology skeleton on the left side of topology page, click the devices to be set and select "General" in "Parameter" option, as shown in Figure 2-1.

	ETS5 ^m - KNX Blinds Motor									
E	ETS Edit Workplace Commissioning Diagnostics Extras Window 🔨 🕜									
	💫 Close Project 🎸 Undo 🔷 Redo 🚔 Reports 📰 Workplace 🔻 🎚 Catalogs 📰 Diagnostics									
Το	opology 🔻				∧ □ ×	<				
+	Add Channels 🔻	🗙 Delete ± Dow	nload 🔻 🕜 Help 🌛 Highlight Changes 🛛	Default Parameters						
>	1.1.1 M/AG40	B.1 > General								
目 1.1 新建支线	General		Operation delay after recovered(1255s)	1	▲ ▼					
碱建支	Function pag	je	Heartbeat telegram	Send value "1/0" alternately and periodic	ally 🔻					
浙			Period of heartbeat transmission (165535s)	1	* *					
			Set/Reset limitation point via bus	Disable Enable						
			Moving automatically after short drag	O Disable C Enable						
			Enable/Disable short drag function via bus	O Disable O Enable						
			Running direction	Forward Backward						
			Report up/down state after reached up/ down	'0'-up,'1'-down	•					
			Report stop state after stopped	Report '0'	-					
			Report percentage state after percentage changed	O Disable C Enable						
	Devices Pa	arameter								
H	HDL USB Interface	▲ 1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1	Last used workspace					

Figure 2-1 General setting

The setting items are explained below:

- 1. Operation delay after recovered: system time-delay function, namely a delay time between powering on the device and activating the system, which ranges from 1 to 255s. The default value is 1s.
- 2. Heartbeat telegram
 - Disable
 - Send value "0" periodically



- Send value "1" periodically
- > Send value "1/0" alternately and periodically
- 3. Period of heartbeat transmission: except "Disable", any option is selected in "Heartbeat telegram", the time interval of sending heartbeat telegram can be set, which ranges from 1 to 65535s. The default value is 1s.
- 4. Set/Reset limitation point via bus: to enable setting/resetting the limiting position function of the curtain via the bus.
- 5. Moving automatically after short drag: to enable starting up the curtain via short dragging.
- 6. Enable/Disable short drag function via bus: to enable/disable the function of starting up the curtain via short dragging by the bus.
- 7. Running direction: to set curtain running direction to "Forward" or "Backward".
- 8. Report up/down state after reached up/down: to select the feedback type of curtain switch status.
 - > Disable: there is no feedback after the curtain is opened/closed.
 - '1'-up, '0'-down: "1" will be sent after the curtain is rolled up, while "0" will be sent after the curtain is rolled down.
 - '0'-up, '1'-down: "0" will be sent after the curtain is rolled up, while "1" will be sent after the curtain is rolled down.
- 9. Report stop state after stopped: to select the feedback type after the curtain stops.
 - > Disable: there is no feedback after the curtain stops.
 - > Report '0': "0" will be sent after the curtain stops.
 - > Report '1': "1" will be sent after the curtain stops.
- 10. Report percentage state after finished change percentage: current curtain position percentage will be sent when curtain position percentage is changed.

3 Function Selection

Click "Function page" label in the parameter list, and enable motor functions, as shown in Figure 3-1.

Ħ	ETS5™ - KNX Blinds Motor									
	ETS Edit Workplace Commissioning Diagnostics Extras Window 🔨 🖓									
	🔉 Close Project 🎸 Undo 🛝 Redo 🚔 Reports 📰 Workplace 🔻 🎚 Catalogs 📰 Diagnostics									
Т	Topology 🔻 🔿 🖓 🔀 🤇									
+	• Add Channels 🔹 🗙 Delete 🛨 D	ownload 🔹 🕜 Help 🥒 Highlight Cha	anges Default Parameters							
> 	1.1.1 M/AG40B.1 > Function pa	age								
11	General	Preset position	O Disable C Enable	Ö						
新建支线	Function page	Safety control	🔘 Disable 🔵 Enable							
維		Auto1 for sun	O Disable C Enable							
		Auto2 for cooling and heating	O Disable C Enable							
		Scene control	O Disable 🔵 Enable							
		Forced control	O Disable 🔵 Enable							
	Devices Parameter									
	HDL USB Interface 🔺 1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1	Last used workspace						

Figure 3-1 Select function

The motor supports:

- 1. Preset position
- 2. Safety control
- 3. Auto 1 for sun
- 4. Auto 2 for cooling and heating
- 5. Scene control
- 6. Forced control

4 Preset Position Function

After preset position function is enabled in function selection page, click "Preset position" label on the left, as shown in Figure 4-1.

III F	ETS5™ - KNX Blinds Motor								
E	ETS Edit Workplace Commissioning Diagnostics Extras Window 🔨 🗘								
	🔞 Close Project 🍫 Undo 🔌 Redo 🚔 Reports 📰 Workplace 🔻 🎚 Catalogs 📰 Diagnostics								
То	opology 🔻			∧ □ × <					
+	Add Channels 🛛 🛪 🗙 Delete 🛨 Dov	vnload 🔹 🕜 Help 🥒 Highlight Changes 🛛	Default Parameters						
> Ⅲ	1.1.1 M/AG40B.1 > Preset positio	on							
	General	Preset position 1	0%(0)	•					
1.1 新建支线	Function page	Preset position 2	25%	▼					
猯	Preset position	Preset position 3	50%	Ŧ					
	Treset position	Preset position 4	100%(255)	•					
		Set preset position(1 bit)	O Disable O Enable						
		Move to preset position(1 bit)	Oisable OEnable						
		Preset report	Report '0' after operation	•					
	Devices Parameter								
ł	Devices Parameter HDL USB Interface A 1.1 新建支线	1.1 新建支线	1.1.1 M/AG408.1	Last used workspace					

Figure 4-1 Preset position function

The setting items are explained below:

- 1. Preset position 1/2/3/4: 4 preset positions can be set.
- 2. Set preset position (1 bit): to enable resetting curtain preset position via 1-bit object.
- 3. Move to preset position (1 bit): to enable running the curtain to preset position via 1-bit object.
- 4. Preset report: to select the feedback type after preset position command is executed.
 - > Disable: there is no feedback after preset position command is executed.
 - Report '1' after operation: "1" will be sent after preset position command is executed.
 - > Report '0' after operation: "0" will be sent after preset position command is executed.

5 Safety Control Function

After safety control function is enabled in function selection page, click "Safety control" label, as shown in Figure 5-1.

ETS5™ - KNX Blinds Motor										
	ETS Edit Workplace Commissioning Diagnostics Extras Window									
💽 Close Project 🎸 Undo 🐴 Redo 🚔 Reports 📰 Workplace 🛪 📳 Catalogs 📰 Diagnostics										
Т	opology 🔻			∧ □ × <						
+	• Add Channels 🔹 🗙 Delete 🛨 Do	wnload 🔹 🕜 Help 🤳 Highlight Changes	Default Parameters							
> 	1.1.1 M/AG40B.1 > Safety contr	ol								
1.1 新建支线	General	Enable/Disable safety mode via bus	O Disable C Enable	0						
建支	Function page	//======		-						
8 16	Safety control	Enable wind alarm	Disable Enable							
	Surely control	//								
		Enable rain alarm	Disable Enable							
		//								
		Enable frost alarm	Disable Enable							
		//								
		Priority for alarms	Frost>Rain>Wind	-						
		Safety mode after voltage recover	Invalid Recover							
	Devices Parameter									
	HDL USB Interface 🔺 1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1	Last used workspace						

Figure 5-1 Safety control function

The setting items are explained below:

- 1. Enable/Disable safety mode via bus: to enable opening/closing safety control function via the bus.
 - Report after safety mode enabled/disabled: after "Enable" is selected in "Enable/ Disable safety mode via bus", choose whether to send the switch status of safety control function or not.
- 2. Enable wind alarm: after "Enable" is selected, the following items can be set:
 - > Alarm of weak wind: to select the receiving signal type of weak wind alarm.
 - 1) '0'-No alarm, '1'-Alarm: there is no weak wind when "0" is received, while there is



weak wind when "1" is received.

- 2) '1'-No alarm, '0'-Alarm: there is no weak wind when "1" is received, while there is weak wind when "0" is received.
- > Reaction on weak wind alarm: to set curtain status after weak wind alarm is received.
 - 1) No reaction: the curtain will have no response after weak wind alarm is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after weak wind alarm is received.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after weak wind alarm is received.
 - 4) Set position: the curtain will run to new set position after weak wind alarm is received.

Position for weak wind alarm: after "Set position" is selected in "Reaction on weak wind alarm", curtain position percentage can be set after weak wind alarm is received.

- > Alarm of slight wind: to select the receiving signal type of slight wind alarm.
 - 1) '0'-No alarm, '1'-Alarm: there is no slight wind when "0" is received, while there is slight wind when "1" is received.
 - 2) '1'-No alarm, '0'-Alarm: there is no slight wind when "1" is received, while there is slight wind when "0" is received.
- Reaction on slight wind alarm: to set the curtain status after slight wind alarm is received.
 - 1) No reaction: the curtain will have no response after slight wind alarm is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after slight wind alarm is received.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after slight wind alarm is received.
 - 4) Set position: the curtain will run to new set position after slight wind alarm is received.

Position for slight wind alarm: after "Set position" is selected in "Reaction on slight wind alarm", curtain position percentage can be set after slight wind alarm is received.

- > Alarm of strong wind: to select the receiving signal type of strong wind alarm.
 - 1) '0'-No alarm, '1'-Alarm: there is no strong wind when "0" is received, while there is strong wind when "1" is received.
 - 2) '1'-No alarm, '0'-Alarm: there is no strong wind when "1" is received, while there



is strong wind when "0" is received.

- Reaction on strong wind alarm: to set the curtain status after strong wind alarm is received.
 - 1) No reaction: the curtain will have no response after strong wind alarm is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after strong wind alarm is received.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after strong wind alarm is received.
 - 4) Set position: the curtain will run to new set position after strong wind alarm is received.

Position for strong wind alarm: after "Set position" is selected in "Reaction on strong wind alarm", curtain position percentage can be set after strong wind alarm is received.

- > Reaction on reset wind alarm: to set the curtain status after wind alarm is reset.
 - 1) No reaction: the curtain will have no response after wind alarm is reset.
 - 2) Up/ Down/Stop: the curtain will be rolled up/down or stopped after wind alarm is reset.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after wind alarm is reset.
 - 4) Set position: the curtain will run to new set position after wind alarm is reset.

Position for reset wind alarm: after "Set position" is selected in "Reaction on reset wind alarm", curtain position percentage can be set after wind alarm is reset.

- Report after wind alarm reaction: to select the feedback type after wind alarm command is executed.
 - 1) Disable: there is no feedback after wind alarm command is executed.
 - 2) Report '1' after operation: "1" will be sent after wind alarm command is executed.
 - 3) Report '0' after operation: "0" will be sent after wind alarm command is executed.
- 3. Enable rain alarm: after "Enable" is selected, the following items can be set:
 - Rain alarm: to select the receiving signal type of rain alarm.
 - 1) '0'-No alarm, '1'-Alarm: there is no rain when "0" is received, while there is rain when "1" is received.
 - 2) '1'-No alarm, '0'-Alarm: there is no rain when "1" is received, while there is rain



when "0" is received.

- > Reaction on rain alarm: to set the curtain status after rain alarm is received.
 - 1) No reaction: the curtain will have no response after rain alarm is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after rain alarm is received.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after rain alarm is received.
 - 4) Set position: the curtain will run to new set position after rain alarm is received.

Position for rain alarm: after "Set position" is selected in "Reaction on rain alarm", curtain position percentage can be set after rain alarm is received.

- > Reaction on reset rain alarm: to set curtain status after rain alarm is reset.
 - 1) No reaction: the curtain will have no response after rain alarm is reset.
 - Up/ Down/Stop: the curtain will be rolled up/down or stopped after rain alarm is reset.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after rain alarm is reset.
 - 4) Set position: the curtain will run to new set position after rain alarm is reset.

Position for reset rain alarm: after "Set position" is selected in "Reaction on reset rain alarm", curtain position percentage can be set after rain alarm is reset.

- Report after rain alarm reaction: to select the feedback type after rain alarm command is executed.
 - 1) Disable: there is no feedback after rain alarm command is executed.
 - 2) Report '1' after operation: "1" will be sent after rain alarm command is executed.
 - 3) Report '0' after operation: "0" will be sent after rain alarm command is executed.
- 4. Enable frost alarm: after "Enable" is selected, the following items can be set:
 - > Frost alarm: to select the receiving signal type of frost alarm.
 - 1) '0'-No alarm, '1'-Alarm: there is no frost when "0" is received, while there is frost when "1" is received.
 - 2) '1'-No alarm, '0'-Alarm: there is no frost when "1" is received, while there is frost when "0" is received.
 - Reaction on frost alarm: to set curtain status after frost alarm is received.



- 1) No reaction: the curtain will have no response after frost alarm is received.
- Up/ Down/Stop: the curtain will be rolled up/down or stopped after frost alarm is received.
- 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after frost alarm is received.
- 4) Set position: the curtain will run to new set position after frost alarm is received.

Position for frost alarm: after "Set position" is selected in "Reaction on frost alarm", curtain position percentage can be set after frost alarm is received.

- > Reaction on reset frost alarm: to set curtain status after frost alarm is reset.
 - 1) No reaction: the curtain will have no response after frost alarm is reset.
 - 2) Up/ Down/Stop: the curtain will be rolled up/down or stopped after frost alarm is reset.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after frost alarm is reset.
 - 4) Set position: the curtain will run to new set position after frost alarm is reset.

Position for reset frost alarm: after "Set position" is selected in "Reaction on reset frost alarm", curtain position percentage can be set after frost alarm is reset.

- Report after frost alarm reaction: to select the feedback type after frost alarm command is executed.
 - 1) Disable: there is no feedback after frost alarm command is executed.
 - 2) Report '1' after operation: "1" will be sent after frost alarm command is executed.
 - 3) Report '0' after operation: "0" will be sent after frost alarm command is executed.
- 5. Priority for alarms: to set the curtain response order when wind alarm, frost alarm and rain alarm are received at the same time.
- 6. Safety mode after voltage recover: to set safety mode status after the voltage is recovered.
 - > Invalid: the safety mode is invalid after the voltage is recovered.
 - > Recover: the safety mode recorded before power down will be recovered.
- 7. Read alarm status after voltage recover: after "Recover" is selected in "Safety mode after voltage recover", "Read alarm status after voltage recover" can be enabled/disabled.
- 8. Delay for reading alarm status: after "Recover" is selected in "Safety mode after voltage recover" and "Enable" is selected in "Read alarm status after voltage recover", the delay



time of reading alarm status can be set, which ranges from 2 to 255s. The default value is 2s.

9. If status have no update then repeatedly read (1 time/s): after "Recover" is selected in "Safety mode after voltage recover" and "Enable" is selected in "Read alarm status after voltage recover", user can set the frequency of reading alarm status when alarm status is not updated, including "1 time", "2 times" and "3 times". The period of reading alarm status is 1 time/s.

6 Auto Mode

6.1 Auto 1 for Sun

After auto 1 for sun is enabled in function selection page, click "Auto 1 for sun" label on the left, as shown in Figure 6-1.

ETS		sioning Diagnostics Extras Window			^
0	Close Project 🦨 Undo 🔍	Redo 🚔 Reports Workplace 🔻	Catalogs Diagnostics		
боро	ology 🔻			▲ □ ×	
A	dd Channels 🔹 🗙 Delete 🛨 [Download 🛛 🔻 🕜 Help 🥒 Highlight Changes	Default Parameters		
	1.1.1 M/AG40B.1 > Auto1 for	sun			
	General	Enable/Disable auto1 via bus	Oisable O Enable		
	Function page	Report after auto1 enabled/disabled	Oisable O Enable		*
	Auto1 for sun	Delay for sun='0' (03600s)	0	*	
		Delay for sun='1' (03600s)	0	* *	
		Reaction on sun='0'	No reaction	-	
		Reaction on sun='1'	No reaction	•	
		Auto1 mode after voltage recover	Invalid O Recover		
		Read auto1 status after voltage recover	Oisable O Enable		
		Delay for reading auto1 status(2255s)	2	*	
		If status have no update then repeatedly read(1 time/s)	2 times	•	
	Devices Parameter				

Figure 6-1 Auto 1 for sun

The setting items are explained below:

- 1. Enable/Disable auto 1 via bus: to enable opening/closing "auto 1 for sun" via the bus.
- 2. Report after auto 1 enabled: after "auto 1 for sun" is enabled, choose whether to send "auto 1 for sun" status.



- 3. Delay for sun='0': to set the delay time of running the curtain after sun data "0" is received, which ranges from 0 to 3600s.
- 4. Delay for sun='1': to set the delay time of running the curtain after sun data "1" is received, which ranges from 0 to 3600s.
- 5. Reaction on sun='0': to set curtain status after sun data "0" is received.
 - 1) No reaction: the curtain will have no response after sun data "0" is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after sun data "0" is received.
 - 3) Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after sun data "0" is received.
 - 4) Set position: the curtain will run to new set position after sun data "0" is received.

Position for sun='0': after "Set position" is selected in "Reaction on sun='0", curtain position percentage can be set after sun data "0" is received.

- 6. Reaction on sun='1': to set curtain status after sun data "1" is received.
 - 1) No reaction: the curtain will have no response after sun data "1" is received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after sun data "1" is received.
 - Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after sun data "1" is received.
 - 4) Set position: the curtain will run to new set position after sun data "1" is received.

Position for sun='1': after "Set position" is selected in "Reaction on sun='1", curtain position percentage can be set after sun data "1" is received.

- 7. Auto 1 mode after voltage recover: to set "auto 1 for sun" status after the voltage is recovered.
 - > Invalid: "auto 1 for sun" is invalid after the voltage is recovered.
 - Recover: the "auto 1 for sun" status recorded before power down will be recovered.
- 8. Read auto 1 status after voltage recover: after "Recover" is selected in "Auto 1 mode after voltage recover", "Read auto 1 status after voltage recover" can be enabled/disabled.
- 9. Delay for reading auto 1 status: after "Recover" is selected in "Auto 1 mode after voltage recover" and "Enable" is selected in "Read auto 1 status after voltage recover", the delay time of reading auto 1 status can be set, which ranges from 2 to 255s. The default value is 2s.



10. If status have no update then repeatedly read (1 time/s): after "Recover" is selected in "Auto 1 mode after voltage recover" and "Enable" is selected in "Read auto 1 status after voltage recover", user can set the frequency of reading auto 1 status when auto 1 status is not updated, including "1 time", "2 times" and "3 times". The period of reading auto 1 status is 1 time/s.

6.2 Auto 2 for Cooling and Heating

After "Auto 2 for cooling and heating" is enabled in function selection page, click "Auto 2 for cooling and heating" label in the parameter list, as shown in Figure 6-2.

Ħ	ETS5™ - KNX Blinds	Motor				×
	ETS Edit Workp	lace Commission	ing Diagnostics Extras Window			^ 🕜
	Close Project	🖍 Undo 🛛 🔷 R	Reports Workplace 🔻	Catalogs Diagnostics		
Т	opology 🔻				∧ □ ×	<
+	Add Channels 🔹	🗙 Delete 🛨 Dow	nload 🔹 🕜 Help 🤌 Highlight Changes	Default Parameters		
> 	1.1.1 M/AG40B.1	> Auto2 for coc	oling and heating			
11	General		Enable/Disable auto2 via bus	O Disable O Enable		O
新建支线	Function page		Report after auto2 enabled/disabled	🔵 Disable 🔘 Enable		
蹝	Auto2 for cool	ing and heating	Auto switch for presence check('1'- presence,'0'-absence)	0'-auto1,'1'-auto2 0'1'-auto1,'0'-au	uto2	
			Delay for switch to auto1(03600s)	0	*	
			Delay for switch to auto2(03600s)	0	*	
			Reaction when heating='1' and sun='0'	Set position	-	
			Position when heating='1' and sun='0'	100%(255)	•	
			Reaction when heating='1' and sun='1'	No reaction	•	
			Reaction when cooling='1' and sun='0'	No reaction	-	
			Reaction when cooling='1' and sun='1'	No reaction	•	
	Devices Para	meter				
	HDL USB Interface	▲ 1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1 Last u	used workspace	

Figure 6-2 Auto 2 for cooling and heating

The setting items are explained below:

1. Enable/Disable auto 2 via bus: to enable opening/closing "auto 2 for cooling and heating"



function via the bus.

- 2. Report after auto 2 enabled: after "auto 2 for cooling and heating" is enabled, choose whether to send "auto 2 for cooling and heating" status.
- 3. Auto switch for presence check: to switch between "auto 1 for sun" and "auto 2 for cooling and heating" when presence check data is received.
 - '0'-auto 1, '1'-auto 2: "auto 1 for sun" will be activated when presence check data "0" is received, while "auto 2 for cooling and heating" will be activated when presence check data "1" is received.
 - '1'-auto 1, '0'-auto 2: "auto 1 for sun" will be activated when presence check data "1" is received, while "auto 2 for cooling and heating" will be activated when presence check data "0" is received.
- 4. Delay for switch to auto 1: to set the delay time of switching to "auto 1 for sun", which ranges from 0 to 3600s.
- 5. Delay for switch to auto 2: to set the delay time of switching to "auto 2 for cooling and heating", which ranges from 0 to 3600s.
- 6. Reaction when heating='1' and sun='0': to set curtain status after heating data "1" and sun data "0" are received.
 - 1) No reaction: the curtain will have no response after heating data "1" and sun data "0" are received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after heating data "1" and sun data "0" are received.
 - Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after heating data "1" and sun data "0" are received.
 - 4) Set position: the curtain will run to new set position after heating data "1" and sun data "0" are received.

Position when heating='1' and sun='0': after "Set position" is selected in "Reaction when heating='1' and sun='0", curtain position percentage can be set after heating data "1" and sun data "0" are received.

- 7. Reaction when heating='1' and sun='1': to set curtain status after heating data "1" and sun data "1" are received.
 - 1) No reaction: the curtain will have no response after heating data "1" and sun data "1" are received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after heating data "1" and sun data "1" are received.



- Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after heating data "1" and sun data "1" are received.
- 4) Set position: the curtain will run to new set position after heating data "1" and sun data "1" are received.

Position when heating='1' and sun='1': after "Set position" is selected in "Reaction when heating='1' and sun='1", curtain position percentage can be set after heating data "1" and sun data "1" are received.

- 8. Reaction when cooling='1' and sun='0': to set curtain status after cooling data "1" and sun data "0" are received.
 - 1) No reaction: the curtain will have no response after cooling data "1" and sun data "0" are received.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after cooling data "1" and sun data "0" are received.
 - Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after cooling data "1" and sun data "0" are received.
 - 4) Set position: the curtain will run to new set position after cooling data "1" and sun data "0" are received.

Position when cooling ='1' and sun='0": after "Set position" is selected in "Reaction when cooling ='1' and sun='0", curtain position percentage can be set after cooling data "1" and sun data "0" are received.

- 9. Reaction when cooling='1' and sun='1': to set curtain status after cooling data "1" and sun data "1" are received.
 - 1) No reaction: the curtain will have no response after cooling data "1" and sun data "1" are received.
 - Up/Down/Stop: the curtain will be rolled up/down or stopped after cooling data "1" and sun data "1" are received.
 - Preset position 1/2/3/4: the curtain will run to preset position 1/2/3/4 after cooling data "1" and sun data "1" are received.
 - 4) Set position: the curtain will run to new set position after cooling data "1" and sun data "1" are received.

Position when cooling ='1' and sun='1': after "Set position" is selected in "Reaction when cooling ='1' and sun='1", curtain position percentage can be set after cooling data "1" and sun data "1" are received.

7 Scene Control Function

After scene control function is enabled in function selection page, click "Scene control" label, as shown in Figure 7-1.

	ETS5™ - KNX Blinds Motor			
E	ETS Edit Workplace Commission	ing Diagnostics Extras Window		^ ()
	g Close Project 🧳 Undo 🛝 F	Redo 🚔 Reports 🔛 Workplace 🔻	Catalogs Diagnostics	
То	opology 🔻			∧ □ × <
+	Add Channels 🛛 🛪 🗙 Delete 🛨 Dov	vnload 🔻 🕜 Help 🥒 Highlight Changes	Default Parameters	
> 	1.1.1 M/AG40B.1 > Scene contro	I		
11	General	Output is assigned to(scene 164)	Invalid	- ^ O
新建支线	Function page	Output position	100%(255)	- ·
÷٤	Scene control	Output delay	O Disable O Enable	
	Scene control	Output is assigned to(scene 164)	Invalid	.
		Output position	100%(255)	-
		Output delay	O Disable C Enable	
		Output is assigned to(scene 164)	Invalid	-
		Output position	100%(255)	-
		Output delay	O Disable C Enable	
		Output is assigned to(scene 164)	Invalid	•
		Output position	100%(255)	•
		Output delay	O Disable C Enable	
		Output is assigned to(scene 164)	Invalid	-
		Output position	100%(255)	•
	Devices Parameter		<u> </u>	~
	HDL USB Interface 1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1	Last used workspace

Figure 7-1 Scene control

The page contains 10 scene settings, whose setting items are explained below:

- 1. Output assigned to (scene 1..64): choose to output corresponding scene number (Up to 64 scene numbers available).
- 2. Output position: to set the curtain position of scene output.
- 3. Output delay: to enable scene output delay function.
 - Delay: after "Enable" is selected in "Output delay", the delay time of outputting scene can be set, which ranges from 0 to 255 minutes 59 s.



- 4. Scene report: to select the feedback type after scene control command is executed.
 - > Disable: there is no feedback after scene control command is executed.
 - > Report '1' after operation: "1" will be sent after scene control command is executed.
 - > Report '0' after operation: "0" will be sent after scene control command is executed.

8 Forced Control Function

After forced control function is enabled in function selection page, click "Forced control" label, as shown in Figure 8-1.

	ETS5™ - KNX Blinds Motor			
E	TS Edit Workplace Commission	ing Diagnostics Extras Window		^ ()
	🔉 Close Project 🛛 🎸 Undo 🛛 🐴 R	Reports Workplace •	Catalogs Diagnostics	
Тс	pology 🔻			∧ □ × <
+	Add Channels 🛛 🔹 🗙 Delete 🛨 Dow	rnload 🔹 🕜 Help 🌛 Highlight Changes 🛛	Default Parameters	
> 	1.1.1 M/AG40B.1 > Forced contro	bl		
H	General	Forced operation 1(2 bit)	🔵 Disable 🔘 Enable	0
新建支线	Function page	Forced operation 2(1 bit)	O Disable O Enable	· · · · · · · · · · · · · · · · · · ·
नार	Forced control	Output position	0%(0)	•
		Forced operation 3(1 bit)	🔵 Disable 🔘 Enable	
		Output position	0%(0)	-
		Reaction after exit from forced operation	Last position	-
		Forced operation after voltage recover	🗌 Invalid 🔘 Recover	
		Read forced operation status after voltage recover	🔵 Disable 🔘 Enable	
		Delay for reading forced operation status (2255s)	2	* *
		If status have no update then repeatedly read(1 time/s)	2 times	-
		Forced operation report	Report '0' after operation	-
	Devices Parameter			
	HDL USB Interface1.1 新建支线	1.1 新建支线	1.1.1 M/AG40B.1	Last used workspace

Figure 8-1 Forced control

The setting items are explained below:

- 1. Forced operation 1 (2 bits): to enable controlling forced operation 1 via 2-bit object.
- 2. Forced operation 2 (1 bit): to enable controlling forced operation 2 via 1-bit object.
 - Output position: after "Enable" is selected in "Forced operation 2 (1 bit)", user may set curtain position percentage after forced operation 2 command is executed.
- 3. Forced operation 3 (1 bit): to enable controlling forced operation 3 via 1-bit object.
 - > Output position: after "Enable" is selected in "Forced operation 3 (1 bit)", user may



set curtain position percentage after forced operation 3 command is executed.

- 4. Reaction after exit from forced operation: to set curtain status after forced operation mode is exited.
 - 1) No reaction: the curtain will have no response after forced operation mode is exited.
 - 2) Up/Down/Stop: the curtain will be rolled up/down or stopped after forced operation mode is exited.
 - 3) Last position: after forced operation mode is exited, the curtain will run to the position before entering forced operation mode.
- 5. Forced operation after voltage recover: to set forced operation mode status after the voltage is recovered.
 - > Invalid: forced operation mode is invalid after the voltage is recovered.
 - > Recover: the forced operation mode recorded before power down will be recovered.
- 6. Read forced operation status after voltage recover: after "Recover" is selected in "Forced operation after voltage recover", "Read forced operation status after voltage recover" can be enabled/disabled.
- 7. Delay for reading forced operation status: after "Recover" is selected in "Forced operation after voltage recover" and "Enable" is selected in "Read forced operation status after voltage recover", the delay time of reading forced operation status can be set, which ranges from 2 to 255s. The default value is 2s.
- 8. If status have no update then repeatedly read (1 time/s): after "Recover" is selected in "Forced operation after voltage recover" and "Enable" is selected in "Read forced operation status after voltage recover", user can set the frequency of reading forced operation status when forced operation status is not updated, including "1 time", "2 times" and "3 times". The period of reading forced operation status is 1 time/s.
- 9. Forced operation report: to select the feedback type after forced operation command is executed.
 - > Disable: there is no feedback after forced operation command is executed.
 - Report '1' after operation: "1" will be sent after forced operation command is executed.
 - > Report '0' after operation: "0" will be sent after forced operation command is executed.





9 Download Data

9.1 Interface Setting

If users need to download data to the panel, KNX interface is necessary.

After connecting KNX interface to a computer via USB, click "Bus" tab in ETS' main page, "HDL USB Interface" will show up in "Discovered Interface". Double click to add and the interface will show up in "Current Interface", as shown in Figure 9-1.

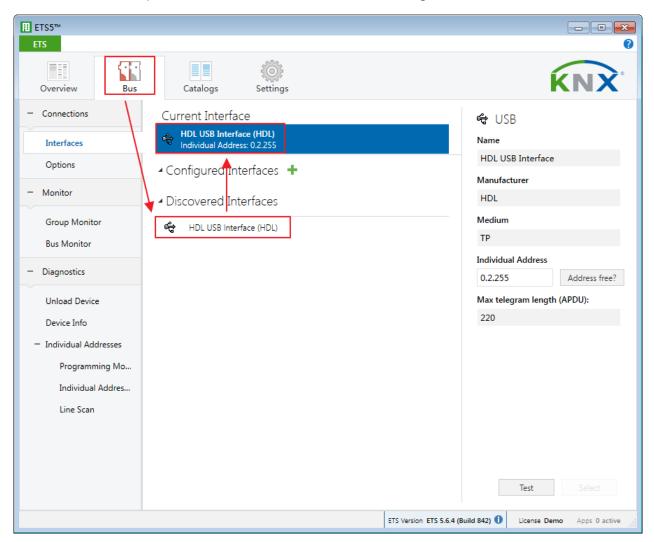


Figure 9-1 Interface setting



9.2 Download Data

Press the programming button of the motor, and the red indicator keeps on. Right click the database to be downloaded to the motor and select "Download". The information indicates the end of the process on the right side of ETS, as shown in Figure 9-2.

6	Close Proje	ct 🥜 Undo 🥖	💊 Redo 🛛 🚔 Reports 🛛 📰	Workplace *		Catalogs 🛛 🖉	Diagnosti	ics			
To	pology 👻					^	d ×	Fi F	Properties		
ł	Add Channels	🔹 🗙 Delete 👲	Download 🔹 🕕 Info 🔹	• Sea	arch		Q	₽ F	ind and Repl	ace	
	Number	Name	Object Function	Length C R	Ψт	U Data Type	Priority	V	Norkspaces		
	∎‡ 11	External temperature	Remote temperature for outdoor	2 bytes C -	WT	U	Low		odo Items		
	■ ‡ 12	General	PM2.5	2 bytes C -	WΤ	-	Low	01	odo Items		
	■之 13	General	CO2	2 bytes C -	WT	81	Low	O F	ending Oper	ations	
	∎‡ 14	General	TVOC	2 bytes C -	ΨT	2 -	Low	1	Active	History	
								0	Clear History		

Figure 9-2 Download data



10 Object Instruction

KNX communication objects are used for receiving and sending data. The length of these objects is from 1 to 14 bits according to different function settings. Each object has a flag with communication property.

- 1. "C"-Communication, representing that communication objects are connected normally via the bus.
- 2. "R"-Read, representing that communication object value can be read via the bus.
- 3. "W"-Write, representing that communication object value can be rewritten via the bus.
- 4. "T"-Transmit, representing that communication objects have transmit function. When this object value is modified, the message will be sent.
- 5. "U"-Update, representing that communication object value can be updated via the bus response message.

10.1	Objects	"System	function"
------	---------	---------	-----------

Objects	s "System function"							
1	System function	'0'-up,'1'-down	1 bit C -	W - U up/down 低				
2	System function	'0'-step up,'1'-step down	1 bit C -	W - U step 低				
3	System function	Stop ('0'/'1'-stop)	1 bit C -	W - U trigger 低				
4	System function	Percentage set	1 byte C -	W - U percentag 低				
编号	名称	功能	标识	数据类型				
1	System function	ʻ0'-up, ʻ1'-down	CWU	DPT1.008 1 bit				
This ob	ject is used for rolling	up/down the curtain.						
0	Ourstans function	(O) star up (d) star dour	0.0011	DPT1.007				
2	System function	'0'-step up, '1'-step down	CWU	1 bit				
This ob	ject is used for steppi	ng up/down the curtain.						
0			0.14/11	DPT1.017				
3	System function	Stop ('0'/'1'-stop)	CWU	1 bit				
This ob	ject is used for stoppi	ng the curtain.						
4	System function	Doroontago oot	CWU	DPT5.001				
4	System function	Percentage set		1 byte				
This ob	pject is used for setting	curtain position percentage.						



10.2 Object "Heartbeat telegram"

5	Heartbeat telegram	Send "0" periodically	1 bit C	T - enable 低
5	Heartbeat telegram	Send "1" periodically	T - enable 低	
5	Heartbeat telegram	Send "1/0" alternately	1 bit C	T - enable 低
No.	Name	Function	Flag	Data Type
5	Heartbeat telegram	Send "0" periodically Send "1" periodically Send "1/0" alternately	СТ	DPT1.003 1 bit
	•	by selecting "Send value "0" per priodically" in the parameter "Hea		

10.3 Objects "Limitation point"

Objects	"Limitation point"										
7	Limitation point set	'0'-up,'1'-d	own	1 bit	С	-	W	-	U up/down	低	
8	Limitation coarse control	'0'-up,'1'-d	own	1 bit	С	-	W	-	U step	低	
9	Limitation fine adjustment	'0'-up,'1'-d	own	1 bit	С	-	W	-	U step	低	
10	Reset limitation point	'1'-reset lin	itation	1 bit	С	-	W - U state 化低				
编号	名称		功能	标识			数据类型				
7	Limitation point	t set	ʻ0'-up, ʻ1'-down	CWU			DPT1.008 1 bit				
This ob	ject is used for settin	g curtain	switch limiting position.								
8	Limitation approx	oontrol	(0' up (1' down				DPT1.007				
o	Limitation coarse control		'0'-up, '1'-down	CWU			1 bit				
This ob	ject is used for adjus	ting the c	urtain coarsely.								
0			(0) (4) (5)	0.14/11					DPT1.00)7	
9	Limitation fine adju	istment	'0'-up, '1'-down	CWU					1 bit		
This ob	ject is used for adjus	ting the c	urtain finely.								
10	Deast limitation	naint	(d) react limitation	0.14/11					DPT1.01	1	
10	Reset limitation	point	'1'-reset limitation	CWU			1 bit				
This ob	ject is used for reset	ting curta	in switch limiting position								

10.4 Object "Short drag function"

Object "Short drag function"



11	Short drag function '1	l'-Enable,'0'-Disable	1 bit C -	W - U enable 低
No.	Name	Function	Flag	Data Type
11	Short drag function	'1'-Enable, '0'-Disable	CWU	DPT1.003 1 bit
This obj	ect is used for enabling	disabling starting up the curtai	n by short dragging	

10.5 Objects "state report"

Objects	s"state report"										
12	up/down state report	'1'-up,'0'	-down	1 bit	С	R	-	Т	-	up/down	低
13	Stop state report	'1'-stop		1 bit	С	R	-	Т	-	trigger	低
14	Percentage state report	Percenta	ge	1 byte	С	R	-	Т	-	percentag	. 低
12	up/down state report	'0'-up,'1'	-down	1 bit	С	R	-	Т	-	up/down	低
13	Stop state report	'0'-stop		1 bit	С	R	-	Т	-	trigger	低
编号	名称		功能	标识						数据类型	Ą
12	Up/down state report		'1'-up, '0'-down	CRT						DPT1.00	8
12			'0'-up, '1'-down				1 bit				
This ob	ject is used for the fe	edback	of curtain rolling up/down	status.							
13	Stop state repo	ort	'0'-stop				DPT1.017				
15	Stop State Tep	JIL	'1'-stop	CRT						1 bit	
This ob	ject is used for the fe	edback	of curtain stopping status								
14	Percentage state	roport	Percentage				DPT5.001				
14	Fercentage state	epon	Fercentage	CRI	CRT			1 byte			
This ob	ject is used for the fe	edback	of curtain position percen	tage status.							

10.6 Objects "preset position"

Objects	"preset position"										
15	Set preset position	'0'-pres	et 1,'1'-preset 2	1 bit	С	-	W	-	U	scene	低
16	Set preset position	'0'-pres	et 3,'1'-preset 4	1 bit	С	-	W	-	U	scene	低
17	Move to preset position	'0'-pres	et 1,'1'-preset 2	1 bit	С	-	W	-	U	scene	低
18	Move to preset position	'0'-pres	et 3,'1'-preset 4	1 bit	С	-	W	-	U	scene	低
19	Preset report	report Report '1' after operation				R	-	Т	-	state	低
19	Preset report	eset report Report '0' after operation				R	-	Т	-	state	低
编号	名称		功能	标识	标识			数据类型			型
15 16	Cot propot popiti	an	'0'-preset 1, '1'-preset 2	0.14/11			DPT1.022				
15, 16	Set preset positi	ION	'0'-preset 3, '1'-preset 4	CWU		1 bit					
These of	bjects are used for p	oresettir	ng 4 curtain positions.								
17, 18	Move to preset pe	aition	'0'-preset 1, '1'-preset 2	сул	0.0011		DPT1.022				
17, 10	Move to preset position		'0'-preset 3, '1'-preset 4				1 bit				



These objects are used for running the curtain to the preset position.								
19	Dreast report	Report '1' after operation	CRT	DPT1.011				
19	Preset report	Report '0' after operation	CRI	1 bit				
This obj	ect is used for the status fe	edback after preset position co	mmand is exec	uted.				

10.7 Objects "safety mode"

Objects	s "safety mode"											
20	Enable/Disable safety mode	'1'-Enable,'0'-D	isable		1 bit	С	-	W	т	U	enable	低
21	Report of safety mode	'1'-Enabled,'0'-	Disabled		1 bit	С	R	-	т	-	enable	低
22	Alarm of weak wind	'0'-No alarm,'1'	'-Alarm		1 bit	С	-	W	Т	U	alarm	低
23	Alarm of slight wind	'0'-No alarm,'1'	'-Alarm		1 bit	C	-	W	Т	U	alarm	低
24	Alarm of strong wind	'0'-No alarm,'1'	'-Alarm		1 bit	С	-	W	Т	U	alarm	低
25	Report after wind alarm react	ti Report '1' after	operation		1 bit	С	R	-	Т	-	state	低
26	Rain alarm	'1'-No alarm,'0'	'-Alarm		1 bit	C	-	W	Т	U	alarm	低
27	Report after rain alarm reacti	ion Report '1' after	operation		1 bit	C				-		低
28	Frost alarm	'0'-No alarm,'1'			1 bit						alarm	低
29	Report after frost alarm react	tionReport '1' after	operation		1 bit	С	R	-	Т	-	state	低
22	Alarm of weak wind	'1'-No alarm,'0'	-Alarm		1 bit	С	-	W	т	U	alarm	低
23	Alarm of slight wind	'1'-No alarm,'0'	-Alarm		1 bit	С	-	W	Т	U	alarm	低
24	Alarm of strong wind	'1'-No alarm,'0'			1 bit	С		W	Г	U	alarm	低
25	Report after wind alarm react				1 bit	С	R	- '	Т	-	state	低
26	Rain alarm	'0'-No alarm,'1'			1 bit			W			alarm	低
27	Report after rain alarm reaction				1 bit	C		-			state	低
28	Frost alarm	'1'-No alarm,'0'			1 bit			W			alarm	低
29	Report after frost alarm react	ionkeport v alter	operation		1 bit	<u> </u>	n	-		-	state	低
_												
编号	名称	•	功能		标识					×	数据类	型
	名称 Enable/Disable s	-	-	able	标识 CWT	U					数据类 PT1.0 1 bit	
编号 20		afety mode	功能 '1'-Enable, '0'-Disa	able		U					PT1.0	
编号 20 This ob	Enable/Disable s	afety mode	功能 '1'-Enable, '0'-Disa afety mode.		CWT					D	PT1.0	03
编号 20	Enable/Disable s	afety mode	功能 '1'-Enable, '0'-Disa							D	PT1.0 1 bit PT1.0	03
编号 20 This ob 21	Enable/Disable solution	afety mode ing/closing s ty mode	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa	able	CWT					D	PT1.0 1 bit	03
编号 20 This ob 21	Enable/Disable s	afety mode ing/closing s ty mode eedback of sa	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa	able	CWT					D	PT1.0 1 bit PT1.0	03
编号 20 This ob 21 This ob	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea	afety mode ing/closing s ity mode eedback of sa ak wind	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa	able	CWT					D	PT1.0 1 bit PT1.0	03
编号 20 This ob 21 This ob 22, 23	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea , Alarm of sligh	afety mode ing/closing s ty mode eedback of sa ak wind ht wind	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa	able	CWT					D	PT1.0 1 bit PT1.0	03
编号 20 This ot 21 This ot 22, 23 24, 26	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea Alarm of sligh Alarm of stror	afety mode ing/closing s ty mode eedback of s ak wind ht wind ng wind	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al	able tatus.	CWT					D	PT1.0 1 bit PT1.0 1 bit	03
编号 20 This ob 21 This ob 22, 23	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea , Alarm of sligh	afety mode ing/closing s ty mode eedback of s ak wind ht wind ng wind	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st	able tatus.	CWT					D	PT1.0 1 bit PT1.0 1 bit	03
编号 20 This ot 21 This ot 22, 23 24, 26	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea Alarm of sligh Alarm of stror	afety mode ing/closing s ity mode eedback of sa ak wind ht wind ng wind rm	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al	able tatus.	CWT					D	PT1.0 1 bit PT1.0 1 bit	03
编号 20 This ot 21 This ot 22, 23 24, 26 28	Enable/Disable so oject is used for open Report of safe oject is used for the fe Alarm of wea Alarm of sligh Alarm of stror Rain alar	afety mode ing/closing s ity mode eedback of s ak wind ht wind ng wind rm	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al '1'-No alarm, '0'-Al	able tatus. larm larm	CWT	U		rm	ar	D	PT1.0 1 bit PT1.0 1 bit PT1.0 1 bit	03 03 05
编号 20 This ot 21 This ot 22, 23 24, 26 28	Enable/Disable si oject is used for openi Report of safe oject is used for the fe Alarm of wea , Alarm of sligh , Alarm of stror Rain alar Frost ala	afety mode ing/closing s ity mode eedback of s ak wind ht wind ng wind rm	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al '1'-No alarm, '0'-Al	able tatus. larm larm	CWT	U		rm	ar	D	PT1.0 1 bit PT1.0 1 bit PT1.0 1 bit	03 03 05
编号 20 This ob 21 This ob 22, 23 24, 26 28 These	Enable/Disable so oject is used for openion Report of safe oject is used for the fe Alarm of wea Alarm of sligh Alarm of stror Rain alar Frost ala	afety mode ing/closing s ity mode eedback of sa eedback of sa k wind ht wind ng wind rm rm rm controlling w	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al '1'-No alarm, '0'-Al eak wind alarm, stro Report '0' after th	able tatus. larm larm	CWT	U		rm	ar	D	PT1.0 1 bit PT1.0 1 bit PT1.0 1 bit frost a	03 03 05 Iarm.
编号 20 This ot 21 This ot 22, 23 24, 26 28	Enable/Disable so oject is used for openion Report of safe oject is used for the fe Alarm of wea Alarm of sligh Alarm of stror Rain alar Frost ala	afety mode ing/closing s ity mode eedback of sa ak wind ht wind ng wind rm rm controlling w d/rain/frost	功能 '1'-Enable, '0'-Disa afety mode. '1'-Enable, '0'-Disa afety mode switch st '0'-No alarm, '1'-Al '1'-No alarm, '0'-Al eak wind alarm, stro	able tatus. larm larm mg winc he	CWT	U		rm	ar	D	PT1.0 1 bit PT1.0 1 bit PT1.0 1 bit	03 03 05 Iarm.



These objects are used for the status feedback after wind alarm, rain alarm and frost alarm commands are executed.

10.8 Objects "Auto"

30	Enable/Dis	able auto1 '1'-Enab	le,'0'-Disable	1 bit C -	W T U enable 低			
31	Report of auto1		led,'0'-Disabled	1 bit C R	- T - enable 低			
32	Auto1	Sun-"0'	/*1*	1 bit C -	W T U switch 低			
33	Enable/Dis	able auto2 '1'-Enab	le,'0'-Disable	1 bit C -	W - U enable 低			
34 Report of auto2		auto2 '1'-Enab	led,'0'-Disabled	1 bit C R	- T - enable 低			
35	Auto2 pre		ence,'0'-absence	1 bit C -	W T U boolean 低			
36	Auto2	Heating			W T U boolean 低			
37	Auto2	Cooling	-"1"	1 bit C -	W T U boolean 低			
	No.	Name	Function	Flag	Data Type			
		Enable/Disable		CWTU	DPT1.003			
	30, 33	auto1/2	auto1/2 '1'-Enable, '0'-Disable		1 bit			
Thes	se objects a	are used for enablin	g opening/closing auto mode 1/2	via the bus.				
					DPT1.003			
	31, 34	Report of auto1/2	'1'-Enable, '0'-Disable	CRT	1 bit			
Thes	se objects a	are used for the feed	back of auto mode 1/2 switch sta	atus.				
			0		DPT1.001			
		36, 37 Auto1/2	Sun-"0"/"1"		1 bit			
32	, 36, 37		Heating "0"/"1"	CWTU	DPT1.002			
			Cooling "0"/"1"					
					1 bit			
Thes	se objects a	are used for enablin	g/disabling auto mode 1/2.		1			
35 Auto2 pr		Auto2 presence	(1) processo (0) observes		DPT1.002			
		abaali	'1'-presence, '0'-absence	CWTU	1 bit			

10.9 Objects "Scene"

Obje	Objects "Scene"										
38	Scene control Call/Save scene number				С	-	W	-	U	scene cont.	低
39	Scene repo	rt Report '1' a	after operation	1 bit	С	R	-	Т	-	state	低
39	Scene repo	rt Report '0'	Report '0' after operation		С	R	-	т	-	state	低
	No. Name Function								[Data Typ	e
38		Coope control						DPT18.001			1
		Scene control	Call/Save scene number	CWU			1 byte				

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This object is used for calling/saving scene.									
20	Soono roport	Report '0' after operation	СРТ	DPT1.011					
39	Scene report	Report '1' after operation	CRT	1 bit					
This object is us	This object is used for the status feedback after scene command is executed.								

10.10 Objects "Forced control"

Obje	cts "Forced	d control"								
40	Forced control Fo		Forced ope	eration 1(2 bit)	2 bit	с -	W	τu	direction	ic低
41	Forced con	trol	Forced ope	eration 2(1 bit)	1 bit	с -	W	τυ	switch	低
42			Forced ope	eration 3(1 bit)	1 bit	с -	W	τu	switch	低
43	Forced operation report		Report '1' a	after operation	1 bit	C R	-	т -	state	低
43	Forced ope	eration report	Report '0'	after operation	1 bit	C R	-	T -	state	低
	No.	Nan	ne	Function	Fla	g			Data Ty	ре
40-42		Forced	control	Forced operation 1 (2 bits) Forced operation 2 (1 bit) Forced operation 3 (1 bit)	c w ⁻	ΓU	J DPT2.0 2 bits DPT1.0 1 bit		01	
Thes	e objects a	are used for	controlling	forced operation 1/2/3.						
10		Forced operation		Report '0' after operation	CRT		DPT1.011			
	43	report		Report '1' after operation		I	1 bit			
This	object is us	sed for the s	tatus feed	back after forced operation com	mand i	s exe	cute	ed.		