APPLICATION PROGRAM INFORMATION

2/4/6CH Curtain Controller

M/W02.10.1, M/W04.10.1, M/W06.10.1

KNX/EIB-BUS

Document Version: 1.0, Date: _____

This document describes the M/W02.10.1, M/W04.10.1, M/W06.10.1-functions with the KNX-product- application:_____

Compiled by (english name):_____

HDL-Position:_____

Location:_____Date:_____ Signature:_____

Approved by (english name):_____

HDL-Position:_____

Location:_____Date:_____ Signature:_____

Document History			
Version	Date	Comments	Author (english name)
1.0	27.12.2014	First issue	

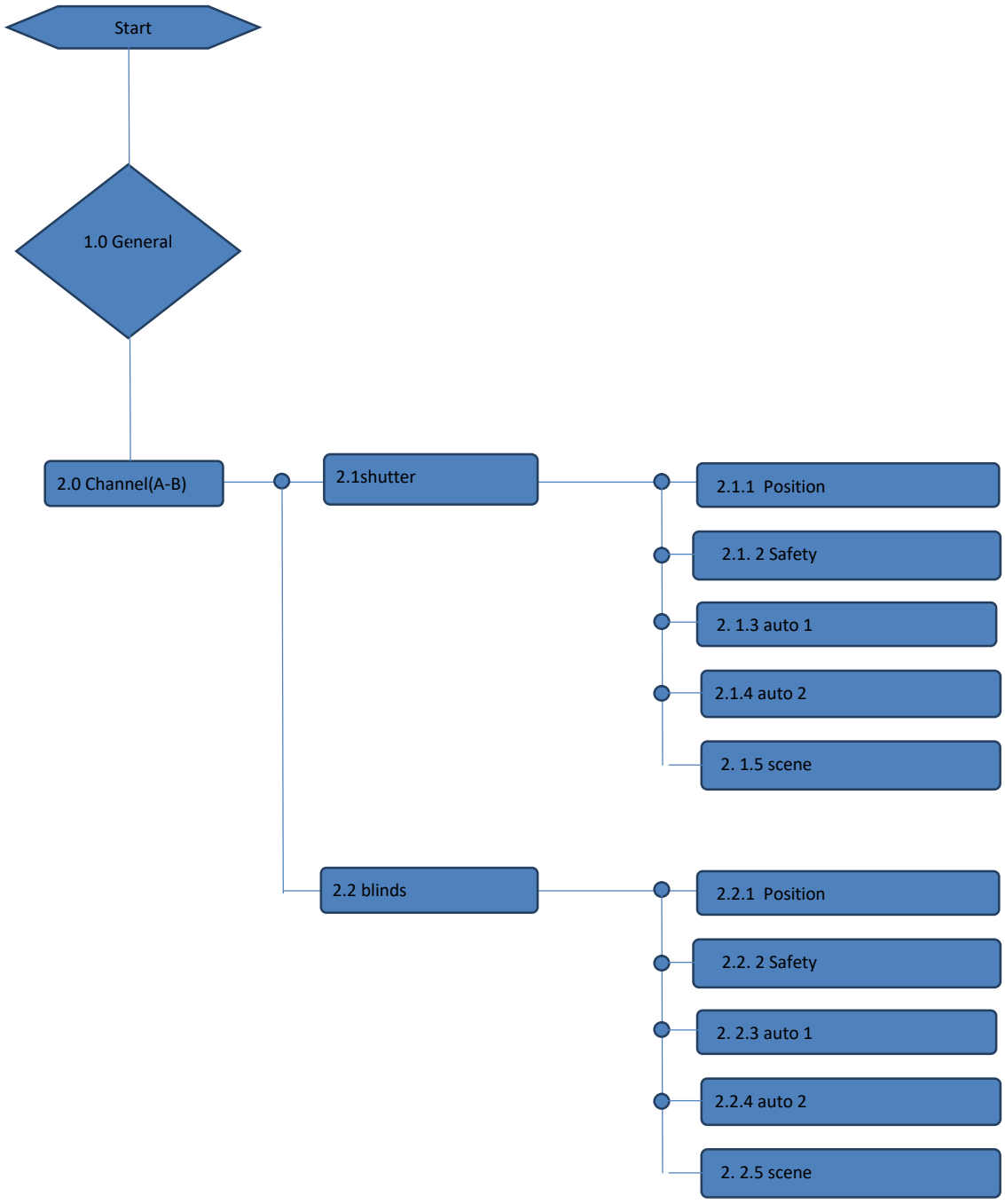
A. General description
B. Function overview flowchart
C. Function description
D. Communication objects

A.

The curtain controller is used to operate the shutter or blind. This manual contains the programming of this device.

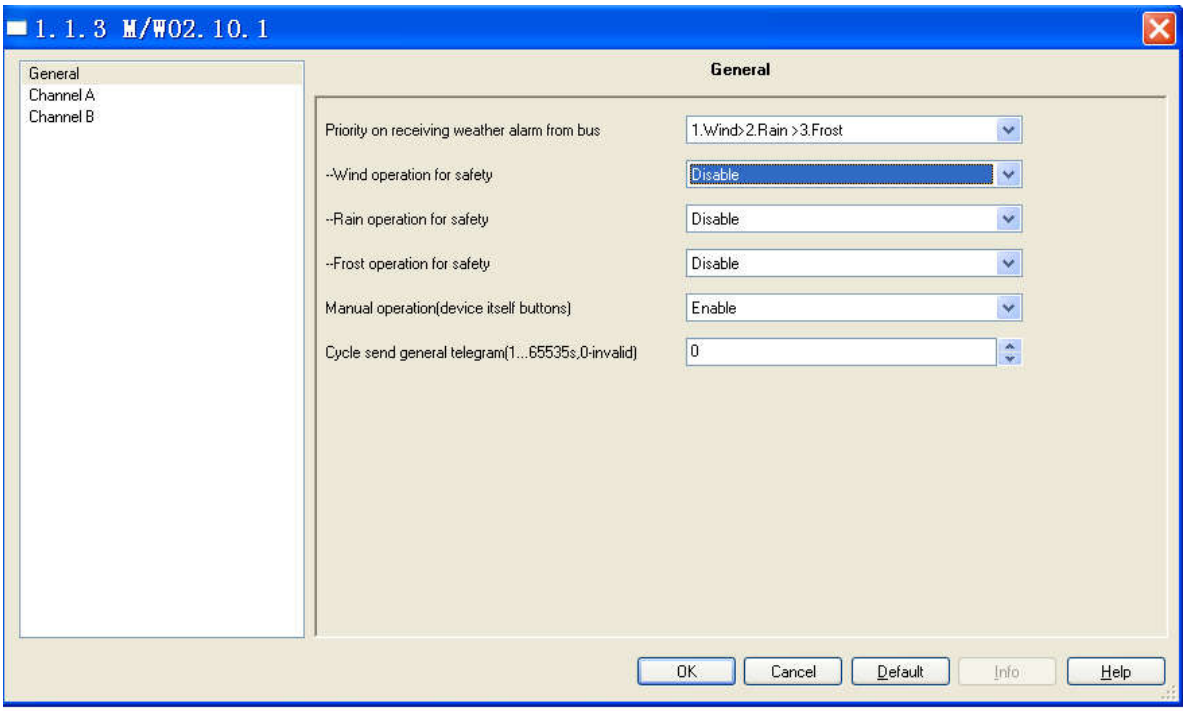
B.

2/4/6CH curtain controller's setting is same. Here, take 2CH curtain controller as an example.



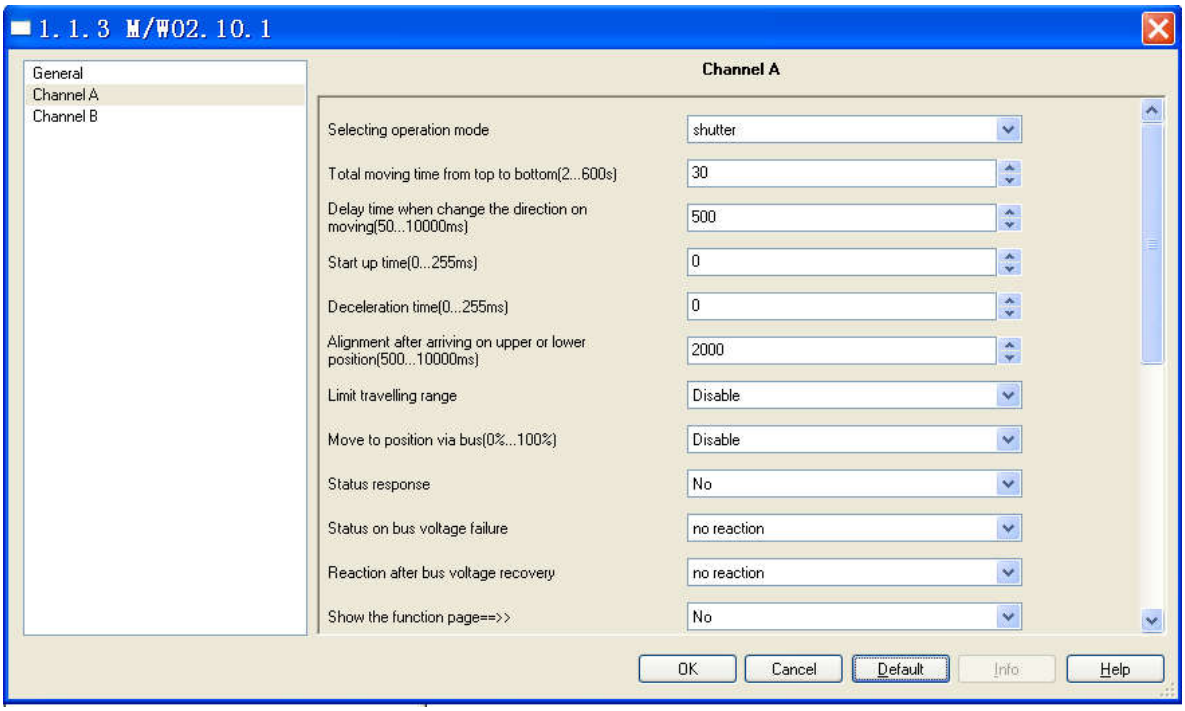
C.

1.0_General



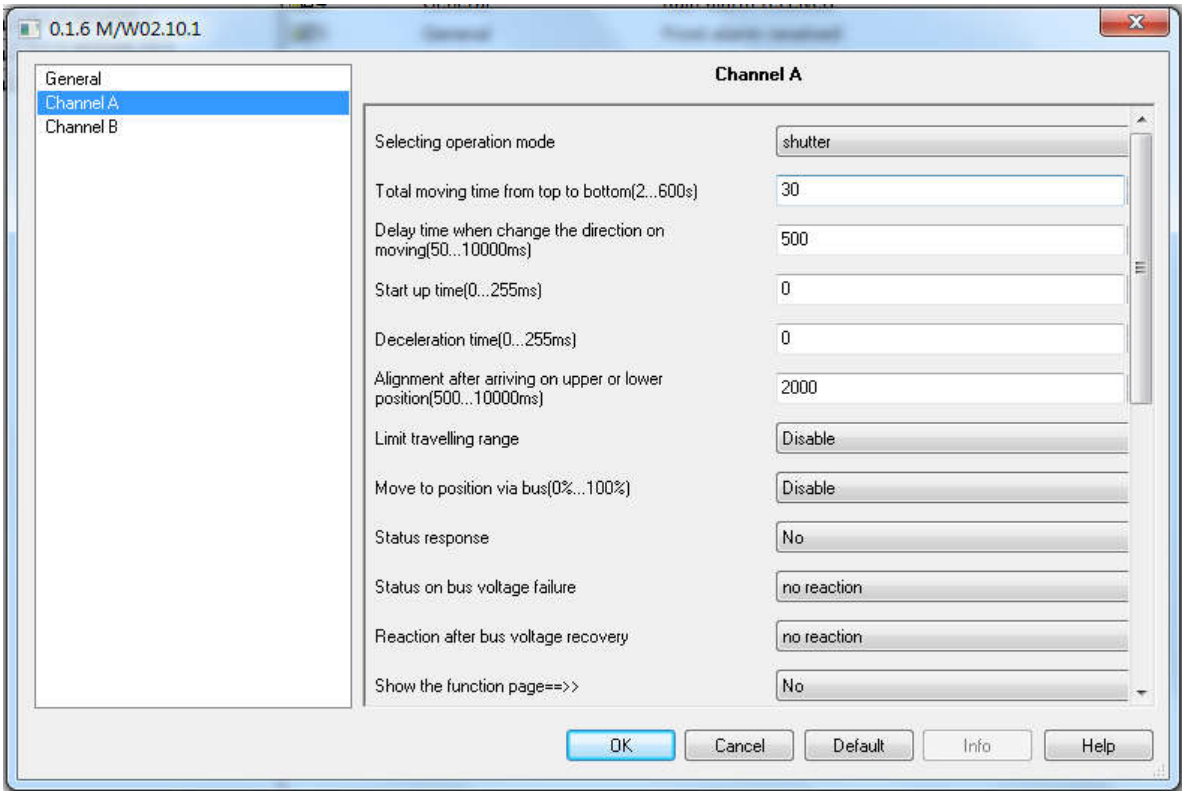
No.	ETS-Parameter	Range (default)	Description
1	Priority on receiving weather alarm from bus	-(1.Wind>2.Rain>3.Frost) -1.Wind>2.Frost>3.Rain -1.Rain>2.Wind>3.Frost -1.Rain>2.Frost>3.Wind -1.Frost>2.Wind>3.Rain -1.Frost>2.Rain>3.Wind	*Set the parameter about priority of the weather alarm. If receives more than 1 parameter at the same time, the highest priority weather signal is valid*
2	Wind operation for safety	-Enable -(Disable)	*Enable/Disable wind alarm received*
3	->Weak wind alarm received	-Enable -(Disable)	*Enable/Disable weak wind alarm received*
4	->Slight wind alarm received	-Enable -(Disable)	*Enable/Disable slight wind alarm received*
5	->Strong wind alarm received	-Enable -(Disable)	*Enable/Disable strong wind alarm received*
6	->Monitoring wind period(1...2000s,0-invalid)	(0)...1...2000s	*Set the monitoring wind period, 0 is invalid*
7	Rain operation for safety	-Enable -(Disable)	*Enable/Disable rain alarm received*
8	->Monitoring rain period(1...2000s,0-invalid)	(0)...1...2000s	*Set the monitoring rain period, 0 is invalid*
9	Frost operation for safety	-Enable -(Disable)	*Enable/Disable frost alarm received*
10	->Monitoring frost period(1...2000s,0-invalid)	(0)...1...2000s	*Set the monitoring frost period, 0 is invalid*
11	Manual operation(device itself buttons)	-(Enable) Disable	*Enable/Disable manual function*
12	Cycle send general telegram(1...65535s,0-invalid)	(0)...1...65535s	*Set the time to send the telegram data cyclically, if you set 0, will disable the function*

2.0_Channel A-B



No.	ETS-Parameter	Range (default)	Description
13	Selecting operation mode	-(shutter) -blinds	*Select the operation mode for the module*

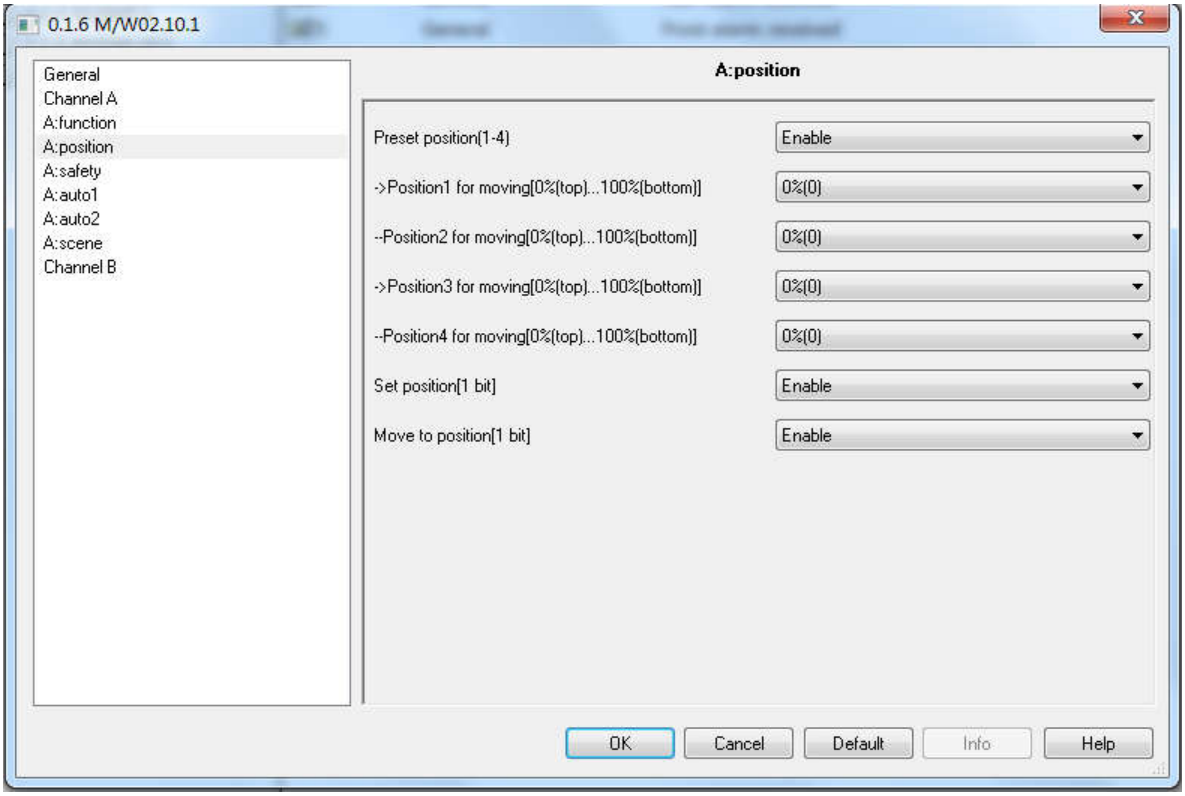
2.1_shutter



14	Total moving time from top to	2...(30)s...600s	*Set the moving time from top*

	button(2...600s)		*to button*
15	Delay moving time when change the direction on moving(50...10000ms)	50...(500)...10000ms	*Select the delay moving time*
16	Start up time	(0)...255ms	*Set the start up time of the drive*
17	Deceleration time(0...255ms)	(0)...255ms	*Set the deceleration time of the drive*
18	Alignment after arriving on upper or lower position(500...10000ms)	500...(2000)...10000ms	*Set the time when the shutter/blinds continue to move up or down after arriving upper or lower position*
19	Limit travelling range	-Enable -(Disable)	*Enable/Disable the range of shutter/blinds travel*
20	->Upper limit (0%...100%)	(0)...100%	*Set the value of upper limit*
21	->Lower limit (0%...100%)	0...(100)%(255)	*Set the value of lower limit*
22	Move the position via bus (0%...100%)	-Enable -(Disable)	*Enable/disable move the position*
23	Status response	-Enable -(Disable)	*Enable/disable status response*
24	->Send position (0%...100%)	-Enable -(Disable)	*Enable/disable shutter/blinds position communication object*
25	->Send limit position reached(1-reached)	-Enable -(Disable)	*Enable/disable limit position status communication*
26	->Send status of automatic control(1-activated)	-Enable -(Disable)	*Enable/disable automatic control status communication object*
27	->Send status of forced operation alarm(1-alarm)	-Enable -(Disable)	*Enable/ disable forced operation status communication object*
28	Status on bus voltage failure	-(no reaction) -up -down -stop	*Set the status when the bus voltage is failure* *up: The Shutter/Blinds will move to up after bus voltage failure.* *down: The Shutter/Blinds will move to down after bus voltage failure.* *stop: The Shutter/Blinds will stop after bus voltage failure.*
29	Reaction after bus voltage recovery	-(no reaction) -up -down -stop -set position	*Set the reaction when the bus voltage is recovery* *up: The Shutter/Blinds will move to up after bus voltage recovery.* *down: The Shutter/Blinds will move to down after bus voltage recovery.* *stop: The Shutter/Blinds will stop after bus voltage recovery.* *set position: set position or louver value is displayed.*

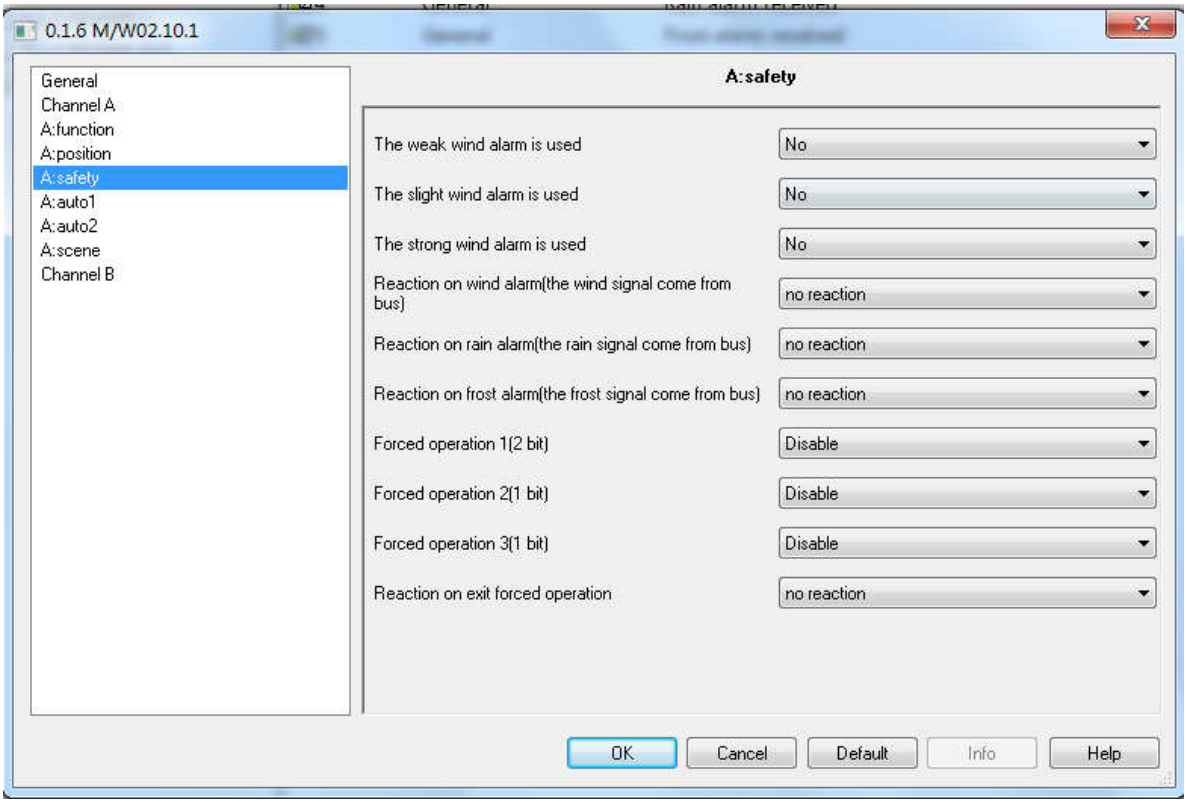
30	->Output position value	(0)...100%	*Set the range of the position value*
31	Show the function page==>>	-(No) -Yes	*Enable/disable the function page*
	Function:		
32	Position function control	-Enable -(Disable)	*Enable/disable the position function*
33	Safety function control	-Enable -(Disable)	*Enable/disable the safety function*
34	Auto 1 function for sun	-Enable -(Disable)	*Enable/disable the auto 1 function for sun*
35	-> Auto 2 function for heating/cooling	-Enable -(Disable)	*Enable/disable the auto 2 function for sun*
36	Scene function control	-Enable -(Disable)	*Enable/disable scene function for sun*
2.1.1_Position			



37	Preset position(1-4)	-Enable -(Disable)	*Enable/disable the preset function*
38	->Position 1 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 1 moving*
39	->Position 2 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 2 moving*
40	->Position 3 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 3 moving*
41	->Position 4 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 4 moving*

42	Set position(1 bit)	-Enable -(Disable)	*Enable/disable the position setting*
43	Move to position(1bit)	-Enable -(Disable)	*Enable/disable the position moving*

2.1.2_Safety

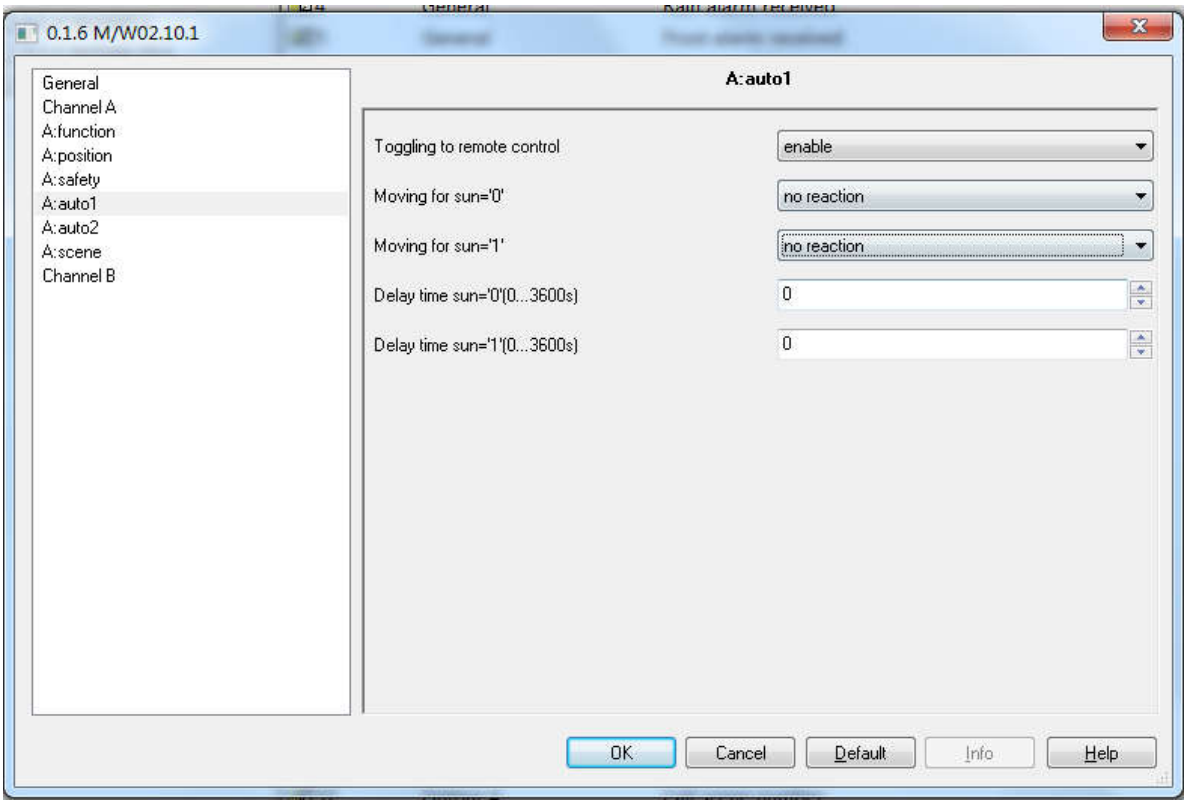


44	The weak wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
45	The slight wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
46	The strong wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
47	Reaction on wind alarm(the wind signal come from bus)	-(No reaction) -Up -Down -Stop	*Set the status for the wind alarm* *no reaction: the Shutter/Blinds is on reaction when receive wind(rain/frost) signal.* *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.*
48	Reaction on rain alarm(the rain signal come from bus)	-(No reaction) -Up -Down -Stop	*Set the status for the rain alarm* *no reaction: the Shutter/Blinds is on reaction*

			when receive wind(rain/frost) signal. *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.*
49	Reaction on frost alarm(the frost signal come from bus)	-(No reaction) -Up -Down -Stop	*Set the status for the frost alarm* *no reaction: the Shutter/Blinds is on reaction when receive wind(rain/frost) signal.* *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.*
50	Forced operation1(2 bit)	-Enable -(Disable)	*Enable/disable forced operation 1*
51	Forced operation2(1 bit)	-Enable -(Disable)	*Enable/disable forced operation 2*
52	-> Output position value	(0)…100%	*Set the value for output position*
53	Forced operation3(1 bit)	-Enable -(Disable)	*Enable/disable forced operation 3*
54	-> Output position value	(0)…100%	*Set the value for output position*

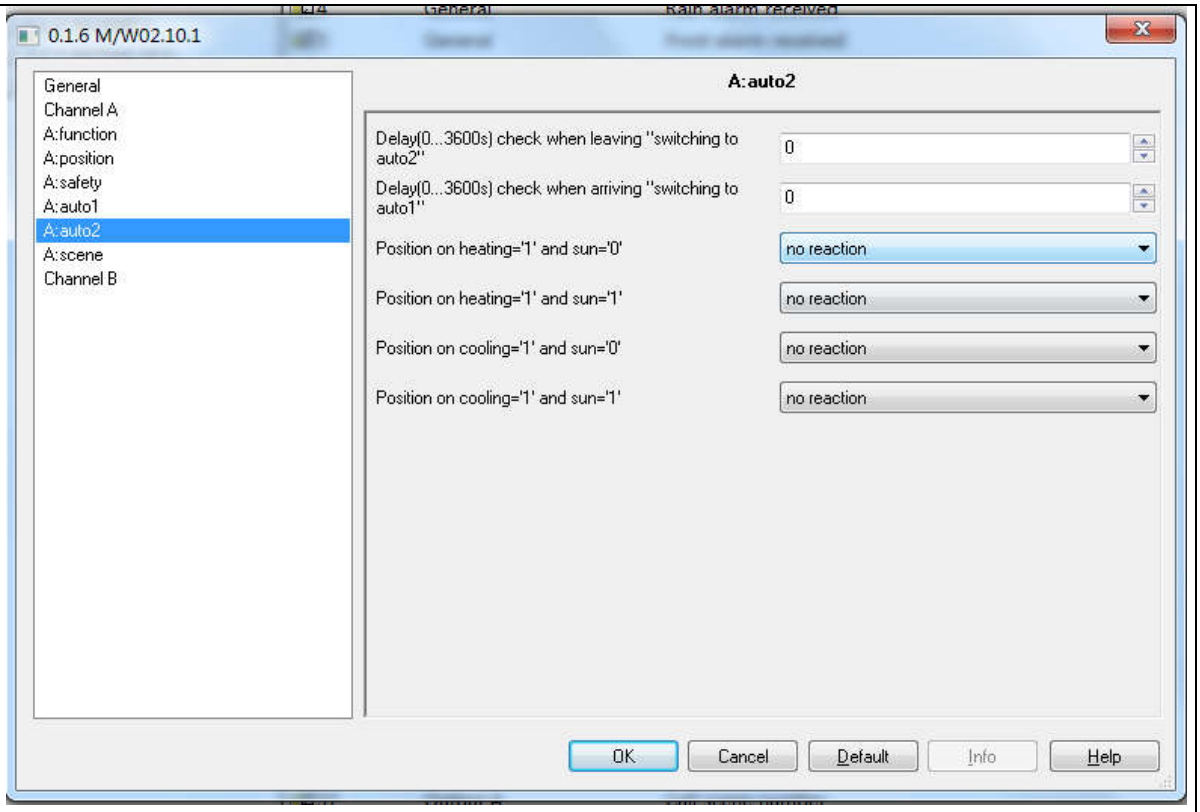
55	Reaction on exit forced operation	-(No reaction) -Up -Down -Stop -last position	*Set the status when exit forced operation* *no reaction: the Shutter/Blinds is no reaction when exit forced operation.* *up: the Shutter/Blinds move to up when exit forced operation.* *down: the Shutter/Blinds move to down when exit forced operation.* *stop: the Shutter/Blinds stop when exit forced operation.* *Last position: the Shutter/Blinds move to last position when exit forced operation.*

2.1.3_auto 1



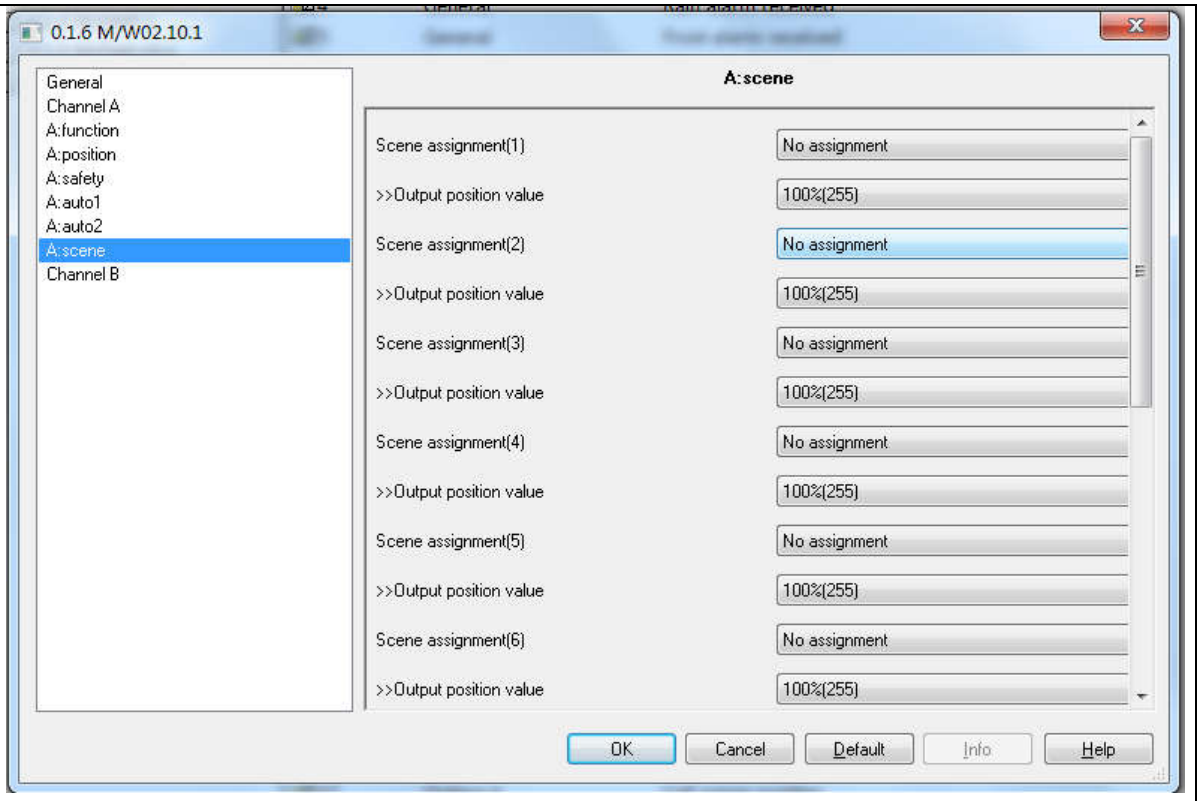
56	Toggling to remote control	-(Enable) -Communication object enable/disable	*Set the remote control* *Enable: Enable the remote control* *Communication object*

			enable/disable: Enable/ disable the communication object
57	Moving for sun= '0'	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4 -Receive percentage value(8bits)	*Set the status when send the telegram '0'(no sun)* *No reaction: when send the telegram '0', the module will no reaction* *Up: when send the telegram '0', the module will move up* *Down: when send the telegram '0', the module will move down* *Stop: when send the telegram '0', the module will stop* *Position1 to 4: when send the telegram '0', the module will move to preset position* *Receive percentage value(8bits): when send the telegram '0', the position will be according to the percentage value*
58	Moving for sun= '1'	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4 -Receive percentage value(8bits)	*Set the status when send the telegram '1'(sun)* *No reaction: when send the telegram '1', the module will no reaction* *Up: when send the telegram 1', the module will move up* *Down: when send the telegram '1', the module will move down* *Stop: when send the telegram '1', the module will stop* *Position1 to 4: when send the telegram '1', the module will move to preset position* *Receive percentage value(8bits): when send the telegram '1', the position will be according to the percentage value*
59	Delay time sun= '0'(0...3600s)	(0)...3600	*Set the delay time when receive the telegram=0*
60	Delay time sun= '1'(0...3600s)	(0)...3600	*Set the delay time when receive the telegram=1*
2.1.4_auto 2			



61	Delay(0...3600s) check when leaving “switching to auto 2”	(0)...3600	*Set the delay time for leaving*
62	Delay(0...3600s) check when arriving “switching to auto 1	(0)...3600	*Set the delay time for arriving*
63	Position on heating= “1” and sun=”0”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1” or “0”(no sun)* *No reaction: when it is heating and no sun, the module will no reaction* *Up: when it is heating and no sun, the module will move up* *Down: when it is heating and no sun, the module will move down* *Stop: when it is heating and no sun, the module will stop* *Position1 to 4: when it is heating and no sun, the module will move to preset position*
64	Position on heating= “1” and sun=”1”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1”* *No reaction: when it is heating and sunny, the module will no reaction* *Up: when it is heating and no sunny, the module will move up* *Down: when it is heating and sunny, the module will move*

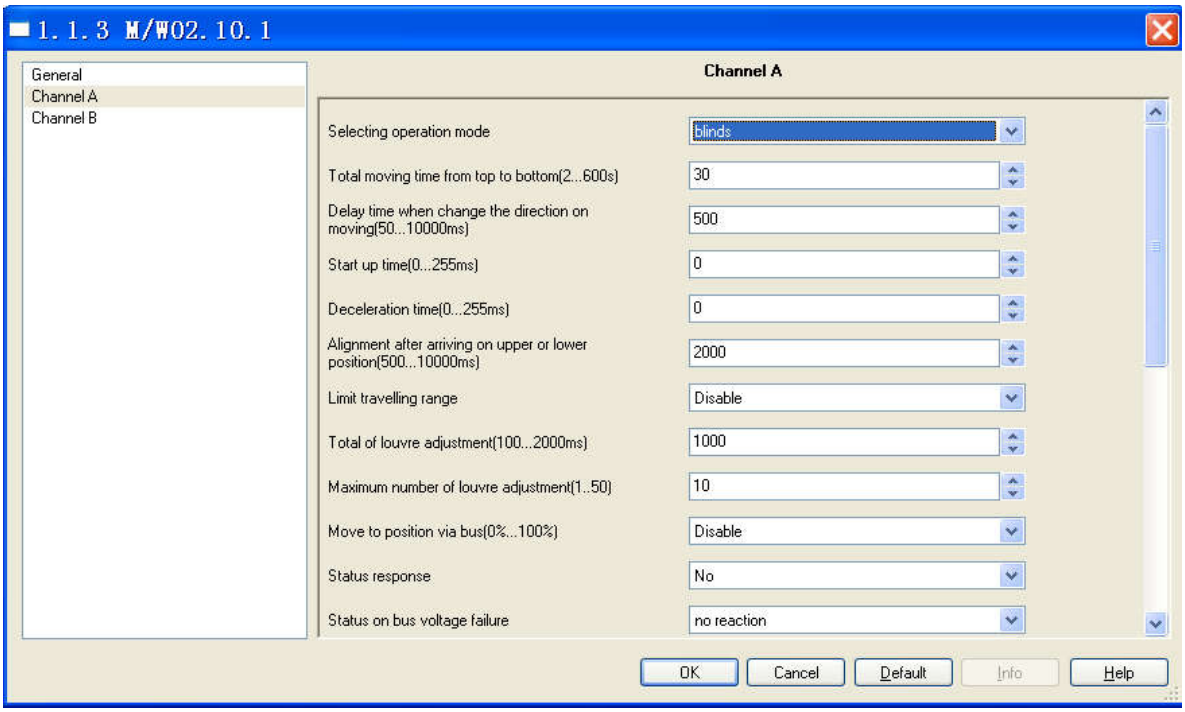
			down *Stop: when it is heating and sunny, the module will stop* *Position1 to 4: when it is heating and sunny, the module will move to preset position*
65	Position on cooling= “1” and sun=”0”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1” or “0”(no sun)* *No reaction: when it is cooling and no sun, the module will no reaction* *Up: when it is cooling and no sun, the module will move up* *Down: when it is cooling and no sun, the module will move down* *Stop: when it is cooling and no sun, the module will stop* *Position1 to 4: when it is cooling and no sun, the module will move to preset position*
66	Position on cooling= “1” and sun=”1”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1”* *No reaction: when it is cooling and sunny, the module will no reaction* *Up: when it is cooling and no sunny, the module will move up* *Down: when it is cooling and sunny, the module will move down* *Stop: when it is cool and sunny, the module will stop* *Position1 to 4: when it is cooling and sunny, the module will move to preset position*
2.1.5_scene			



67	Scene assignment(1)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
68	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
69	Scene assignment(2)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
70	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
71	Scene assignment(3)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
72	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
73	Scene assignment(4)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
74	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
75	Scene assignment(5)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
76	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
77	Scene assignment(6)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
78	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
79	Scene assignment(7)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
80	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
81	Scene assignment(8)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
82	->Output position value	*0%...(100%)(255)*	*Set the value for output*

			position
83	Scene assignment(9)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
84	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
85	Scene assignment(10)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
86	->Output position value	*0%...(100%)(255)*	*Set the value for output position*

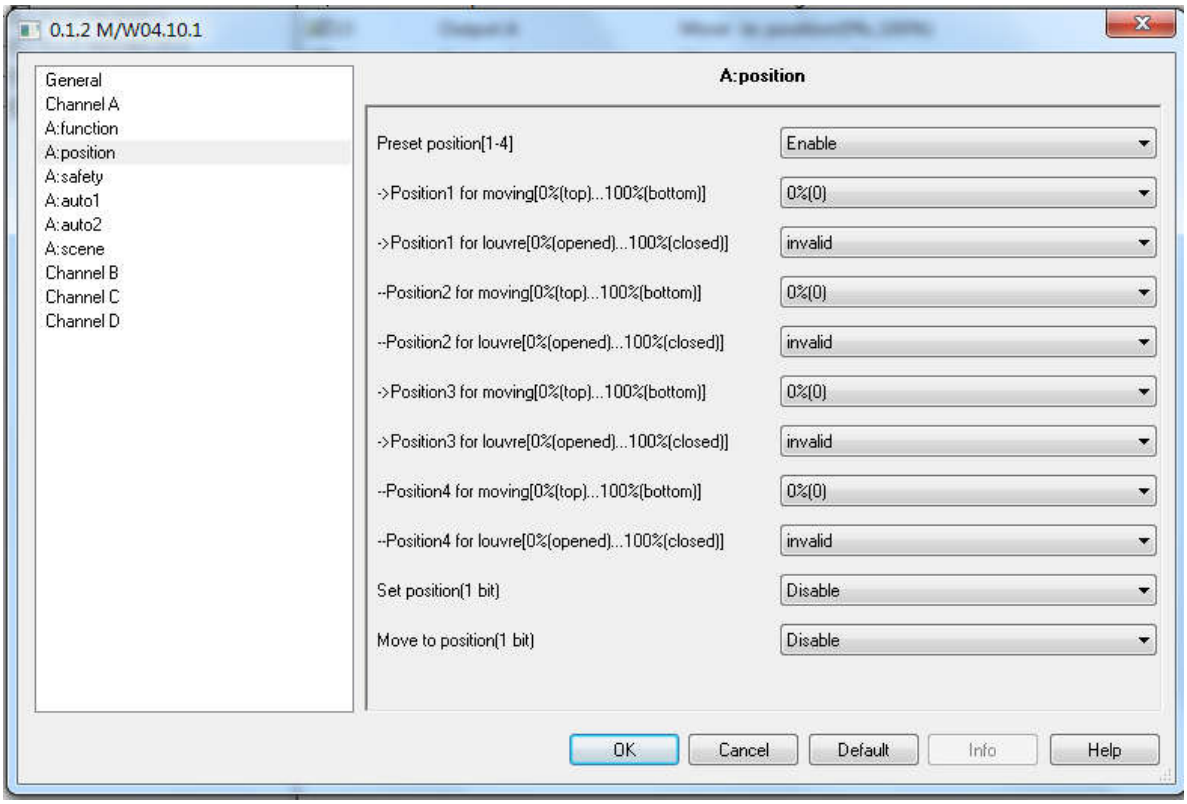
2.2_blinds



No.	ETS-Parameter	Range (default)	Description
87	Total moving time from top to button(2...600s)	2...(30)...600s	*Set the total moving time from top to button*
88	Delay time when change the direction on moving(50...10000ms)	50...(500)...10000ms	*Set the delay moving time*
89	Start up time(0...255ms)	(0)...255ms	*Set the start up time*
90	Deceleration time(0...255ms)	(0)...255ms	*Set the deceleration time*
91	Alignment after arriving on upper or lower position(500...10000ms)	500...(2000)...10000ms	*Set the time when the shutter/blinds continue to move up or down after arriving upper or lower position*
92	Limit travelling range	-Enable -(Disable)	*Enable/Disable the range of shutter/blinds travel*
93	->Upper limit (0%...100%)	(0)...100%	*Set the value of upper limit*
94	->Lower limit (0%...100%)	0...(100)%(255)	*Set the value of lower limit*
95	Total of louver adjustment(100...2000ms)	100....(1000)...2000ms	*Set the louver adjustment time*
96	Maximum number of louver adjustment(1...50)	1...(10)...50	*Set the parameter about the maximum number of louver*

			adjustment
97	Move the position via bus (0%...100%)	-Enable -(Disable)	*Enable/disable move the position*
98	Status response	-Enable -(Disable)	*Enable/disable status response*
99	->Send position (0%...100%)	-Enable -(Disable)	*Enable/disable shutter/blinds position communication object*
100	->Send limit position reached(1-reached)	-Enable -(Disable)	*Enable/disable limit position status communication*
101	->Send status of automatic control(1-activated)	-Enable -(Disable)	*Enable/disable automatic control status communication object*
102	->Send status of forced operation alarm(1-alarm)	-Enable -(Disable)	*Enable/ disable forced operation status communication object*
103	Status on bus voltage failure	-(no reaction) -up -down -stop	*Set the status when the bus voltage is failure* *up: The Shutter/Blinds will move to up after bus voltage failure.* *down: The Shutter/Blinds will move to down after bus voltage failure.* *stop: The Shutter/Blinds will stop after bus voltage failure.*
104	Reaction after bus voltage recovery	-(no reaction) -up -down -stop -set position	*Set the reaction when the bus voltage is recovery* *up: The Shutter/Blinds will move to up after bus voltage recovery.* *down: The Shutter/Blinds will move to down after bus voltage recovery.* *stop: The Shutter/Blinds will stop after bus voltage recovery.* *set position: set position or louver value is displayed.*
105	->Output position value	(0%)...100%	*Set the range of the position value*
106	->Output louver value	-(invalid) -0...100%	*Set the range of the louver value*
107	Show the function page==>>	-(No) -Yes	*Enable/disable the function page*
	Function:		
108	Position function control	-Enable -(Disable)	*Enable/disable the position function*
109	Safety function control	-Enable -(Disable)	*Enable/disable the safety function*
110	Auto 1 function for sun	-Enable -(Disable)	*Enable/disable the auto 1 function for sun*
111	-> Auto 2 function for heating/cooling	-Enable -(Disable)	*Enable/disable the auto 2 function for sun*
112	Scene function control	-Enable -(Disable)	*Enable/disable scene function for sun*

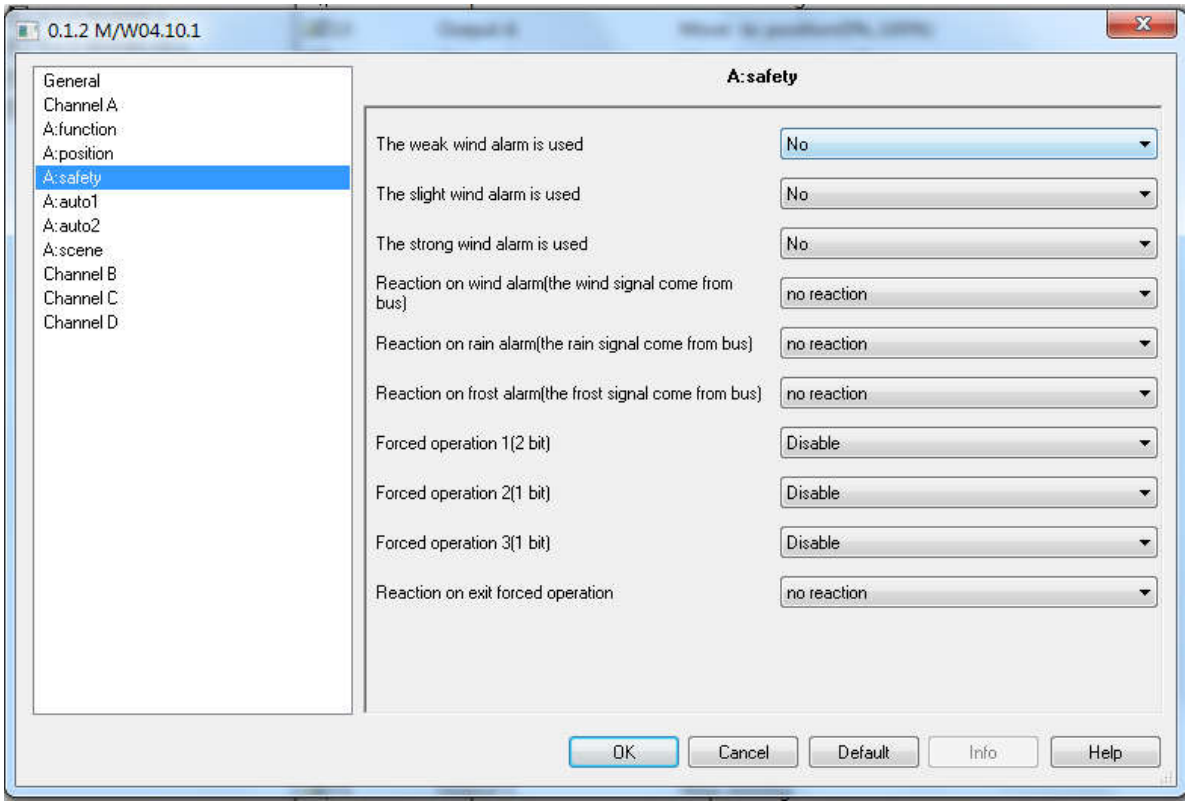
2.2.1_Position



113	Preset position(1-4)	-Enable -(Disable)	*Enable/disable the preset function setting*
114	->Position 1 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 1 moving*
115	-> Position 1 for louver[0%(opened)...100%(closed)]	-(invalid) -0...100	*Set the parameter for louver's position 1*
116	->Position 2 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 2 moving*
117	-> Position 2 for louver[0%(opened)...100%(closed)]	-(invalid) -0...100	*Set the parameter for louver's position 2*
118	->Position 3 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 3 moving*
119	-> Position 3 for louver[0%(opened)...100%(closed)]	-(invalid) -0...100	*Set the parameter for louver's position 3*
120	->Position 4 for moving[0%(top)...100%(button)]	(0)...100	*Set the parameter for position 4 moving*
121	-> Position 4 for louver[0%(opened)...100%(closed)]	-(invalid) -0...100	*Set the parameter for louver's position 4*
122	Set position(1 bit)	-Enable -(Disable)	*Enable/disable the position communication object*
123	Move to position(1bit)	-Enable	*Enable/disable move to*

		-(Disable)	*position communication object*

2.2.2_Safety

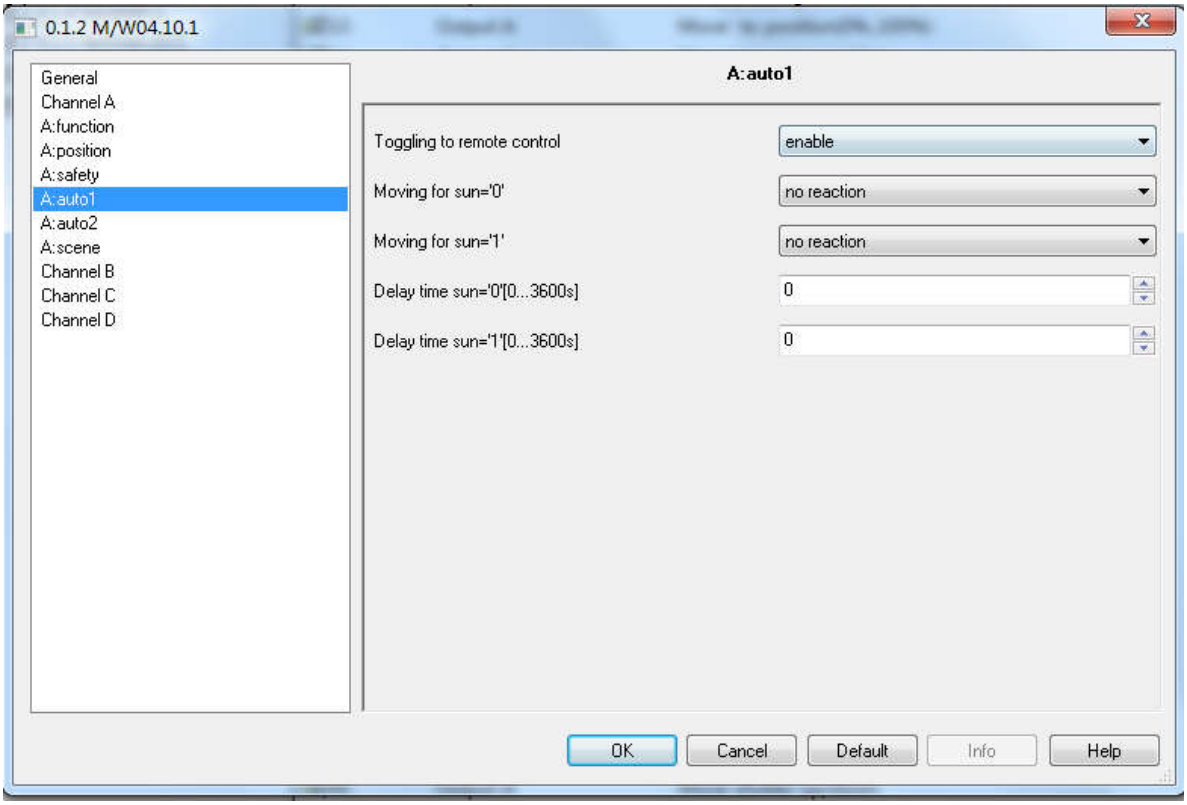


124	The weak wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
125	The slight wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
126	The strong wind alarm is used	-(No) -Yes	*If select "Yes", the communication object is valid*
127	Reaction on wind alarm(the wind signal come from bus)	-(No reaction) -Up -Down -Stop -Only set louver position	*Set the status for the wind alarm* *no reaction: the Shutter/Blinds is on reaction when receive wind(rain/frost) signal.* *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.* *only set louver position: can set the shutter/blinds adjustment louver position.*
128	->Output louver value	(0)...100%	*Set the range of louver value*
129	Reaction on rain alarm(the rain signal come from bus)	-(No reaction) -Up	*Set the status for the rain alarm*

		-Down -Stop -Only set louver position	*no reaction: the Shutter/Blinds is on reaction when receive wind(rain/frost) signal.* *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.* *only set louver position: can set the shutter/blinds adjustment louver position*.
130	->Output louver value	(0)...100%	*Set the range of louver value*
131	Reaction on frost alarm(the frost signal come from bus)	-(No reaction) -Up -Down -Stop -Only set louver position	*Set the status for the frost alarm* *no reaction: the Shutter/Blinds is on reaction when receive wind(rain/frost) signal.* *up: the Shutter/Blinds move to up when receive wind(rain/frost) signal.* *down: the shutter/blinds move to down when receive wind(rain/frost) signal.* *stop: the Shutter/Blinds stop when receive wind(rain/frost) signal.* *only set louver position: can set the shutter/blinds adjustment louver position*.
132	->Output louver value	(0)...100%	*Set the range of louver value*
133	Forced operation1(2 bit)	-Enable -(Disable)	*Enable/disable forced operation 1*
134	Forced operation2(1 bit)	-Enable -(Disable)	*Enable/disable forced operation 2*
135	->Output position value	(0)…100%	*Set the value for output position*
136	Forced operation3(1 bit)	-Enable -(Disable)	*Enable/disable forced operation 3*
137	->Output position value	(0)…100%	*Set the value for output position*
138	Reaction on exit forced operation	-(No reaction) -Up -Down -Stop -last position	*Set the status when exit forced operation* *no reaction: the Shutter/Blinds is no reaction when exit forced operation.* *up: the Shutter/Blinds move to up when exit forced operation.*

			down: the Shutter/Blinds move to down when exit forced operation. *stop: the Shutter/Blinds stop when exit forced operation.* *Last position: the Shutter/Blinds move to last position when exit forced operation.*

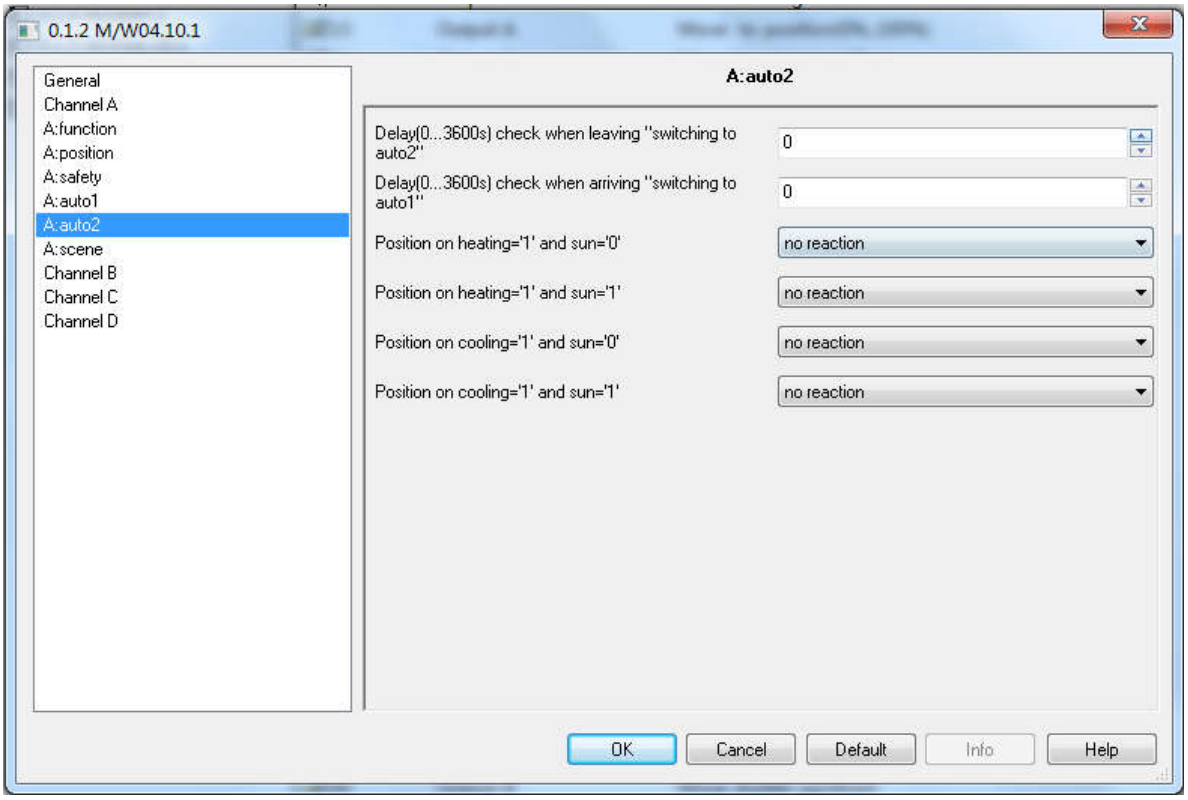
2.2.3_auto 1



139	Toggling to remote control	-(Enable) -Communication object enable/disable	*Set the remote control* *Enable: Enable the remote control* *Communication object enable/disable: Enable/ disable the communication object*
140	Moving for sun= '0'	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4 -Receive percentage value(8bits)	*Set the status when send the telegram '0'(no sun)* *No reaction: when send the telegram '0', the module will no reaction* *Up: when send the telegram '0', the module will move up* *Down: when send the telegram '0', the module will move down* *Stop: when send the telegram '0', the module will stop*

			Position1 to 4: when send the telegram '0', the module will move to preset position *Receive percentage value(8bits): when send the telegram '0', the position will be according to the percentage value*
141	Moving for sun= '1'	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4 -Receive percentage value(8bits)	*Set the status when send the telegram '1'(sun)* *No reaction: when send the telegram '1', the module will no reaction* *Up: when send the telegram 1', the module will move up* *Down: when send the telegram '1', the module will move down* *Stop: when send the telegram '1', the module will stop* *Position1 to 4: when send the telegram '1', the module will move to preset position* *Receive percentage value(8bits): when send the telegram '1', the position will be according to the percentage value*
142	Delay time sun= '0'(0...3600s)	(0)...3600	*Set the delay time when receive the telegram=0*
143	Delay time sun= '1'(0...3600s)	(0)...3600	*Set the delay time when receive the telegram=1*

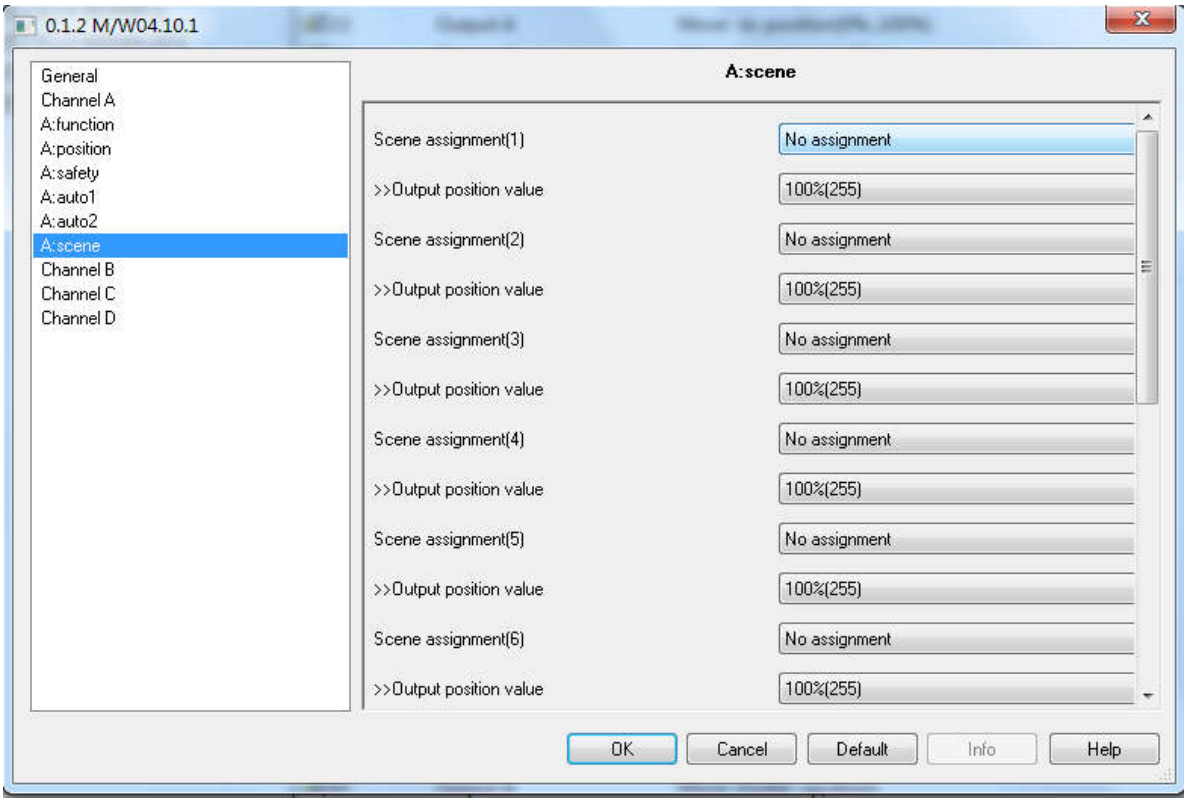
2.2.4_auto 2



144	Delay(0...3600s) check when leaving “switching to auto 2”	(0)...3600	*Set the delay time for leaving*
145	Delay(0...3600s) check when arriving “switching to auto 1	(0)...3600	*Set the delay time for arriving*
146	Position on heating= “1” and sun=”0”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1” or “0”(no sun)* *No reaction: when it is heating and no sun, the module will no reaction* *Up: when it is heating and no sun, the module will move up* *Down: when it is heating and no sun, the module will move down* *Stop: when it is heating and no sun, the module will stop* *Position1 to 4: when it is heating and no sun, the module will move to preset position*
147	Position on heating= “1” and sun=”1”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1”* *No reaction: when it is heating and sunny, the module will no reaction* *Up: when it is heating and no sunny, the module will move up*

			Down: when it is heating and sunny, the module will move down *Stop: when it is heating and sunny, the module will stop* *Position1 to 4: when it is heating and sunny, the module will move to preset position*
148	Position on cooling= “1” and sun=”0”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1” or “0”(no sun)* *No reaction: when it is cooling and no sun, the module will no reaction* *Up: when it is cooling and no sun, the module will move up* *Down: when it is cooling and no sun, the module will move down* *Stop: when it is cooling and no sun, the module will stop* *Position1 to 4: when it is cooling and no sun, the module will move to preset position*
149	Position on cooling= “1” and sun=”1”	-(No reaction) -Up -Down -Stop -Position 1 -Position 2 -Position 3 -Position 4	*Set the position when receive the telegram “1”* *No reaction: when it is cooling and sunny, the module will no reaction* *Up: when it is cooling and no sunny, the module will move up* *Down: when it is cooling and sunny, the module will move down* *Stop: when it is cool and sunny, the module will stop* *Position1 to 4: when it is cooling and sunny, the module will move to preset position*

2.2.5_scene



150	Scene assignment(1)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
151	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
152	Scene assignment(2)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
153	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
154	Scene assignment(3)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
155	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
156	Scene assignment(4)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
157	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
158	Scene assignment(5)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
159	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
160	Scene assignment(6)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
161	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
162	Scene assignment(7)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
163	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
164	Scene assignment(8)	*(No assignment)*	*Set the parameter for scene*

		Scene No.1...Scene No.2	*assignment*
165	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
166	Scene assignment(9)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
167	->Output position value	*0%...(100%)(255)*	*Set the value for output position*
168	Scene assignment(10)	*(No assignment)* *Scene No.1...Scene No.2*	*Set the parameter for scene assignment*
169	->Output position value	*0%...(100%)(255)*	*Set the value for output position*

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D.Communication Objects

D.0 General

Objects “General”

umber	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type
0	General	Send cycles			1 bit	C	R	-	T	-	1 bit DPT_Enable
1	General	Weak wind alarm received			1 bit	C	-	W	-	U	
2	General	Slight wind alarm received			1 bit	C	-	W	-	U	
3	General	Strong wind alarm received			1 bit	C	-	W	-	U	
4	General	Rain alarm received			1 bit	C	-	W	-	U	
5	General	Frost alarm received			1 bit	C	-	W	-	U	

NO.	Object name	Function	Flags	Data type
0	General	Send cycles	C R T	DPT 1.003 1bit
This communication object is always active and valid. Invert the value send telegram to bus in next frame. e.g. last telegram value is “1”, the next telegram value is “0”				
1	General	Weak wind alarm received	C W U	DPT 1.005 1bit
2	General	Slight wind alarm received	C W U	DPT 1.005 1bit
3	General	Strong wind alarm received	C W U	DPT 1.005 1bit
4	General	Rain alarm received	C W U	DPT 1.005 1bit
5	General	Frost alarm received	C W U	DPT 1.005 1bit
This communication objects are used to receive the telegram, if receives telegram “1”, will alarm, if receives telegram “0”, no action				

D.1 Shutter (All channels’ setting is same, here, take channel A as an example)

Objects “operation mode”

Number	Name	Object Function	Length	C	R	W	T	U	Data Type
0	General	Send cycles	1 bit	C	R	-	T	-	1 bit DPT_Enable
10	Output A	Move shutter up/down	1 bit	C	-	W	-	U	1 bit DPT_UpDown

NO.	Object name	Function	Flags	Data type
10	Output A	Move shutter	C W U	DPT 1.008

		up/down		1bit
This communication object is used to move shutter up/down, if receives "0", will move up, receives "1",will move down				

Objects "operation mode"

NO.	Object name	Function	Flags	Data type
11	Output A	Stop moving	C W U	DPT 1.007 1 bit
This communication object is used to stop moving				

Objects "limit travelling"

NO.	**Object name**	**Function**	**Flags**	**Data type**
12	Output A	Limit travelling	C W U	DPT 1.008 1 bit
This communication object is used to limit the range of shutter travel, if receives telegram "0",will move up, if receives "1", will move down				

Objects "move to position"

NO.	**Object name**	**Function**	**Flags**	**Data type**
13	Output A	Move to position (0%...100%)	C W U	DPT 5.001 1 byte
This communication object is used to move to the position according to the telegram				

Objects "Move louvre to position"

NO.	**Object name**	**Function**	**Flags**	**Data type**
14	Output A	Move louvre to position	C W U	DPT 5.001 1 byte
This communication object is used to move to louvre position according to the receiving value				

Objects “Status response”

NO.	Object name	Function	Flags	Data type
15	Output A	Object status of position	C R T	DPT 5.001 1 byte
17	Output A	Object status of upper pos	C R T	DPT 1.008 1 bit
18	Output A	Object status of lower pos	C R T	DPT1.008 1 bit
19	Output A	Object status of auto	C R T	DPT1.011 1bit
20	Output A	Object status of forced alarm	C R T	DPT1.005 1bit
These communication objects are used to set the shutter status when the position is changed				

Objects “Preset position”

NO.	Object name	Function	Flags	Data type
21	Output A	Set position1/2	C W U	DPT1.022 1 bit
22	Output A	Set position3/4		
23	Output A	Move to position 1/2		
24	Output A	Move to position 3/4		
These communication objects are used to set the preset position				

Objects “Activation of weather alarm”

NO.	Object name	Function	Flags	Data type
25	Output A	Activation of weather alarm	C W U	DPT1.011 1 bit
This communication object is used to activate the weather alarm				

Objects “Forced operation”

NO.	Object name	Function	Flags	Data type
26	Output A Safety	Forced operation1	C W U	DPT 2.008 2 bit

27	Output A Safety	Forced operation2	C W U	DPT 1.001 1 bit
28	Output A Safety	Forced operation3	C W U	DPT 1.001 1bit
These communication objects are used to force operation				

Objects “Activation of auto control”

NO.	Object name	Function	Flags	Data type
29	Output A	Activation of auto control	C T	DPT 1.011 1 bit
This communication object is used to activate weather alarm. If this communication object receives the value“1”, the auto control is activated. If this communication object receives a telegram with the value“0”, the weather alarm is deactivated.				

Objects “Auto 1”

NO.	Object name	Function	Flags	Data type
30	*Output A Auto1*	Sun= “0 or 1”	C W U	DPT1.002 1 bit
This communication object is used to receive the sun=0 or 1 signal				
31	*Output A Auto1*	Position percentage for sun	C W U	DPT5.001 1byte
This communication object is used to move to the position when auto is activated				
33	*Output A*	*Enable/Disable remote control*	C W U	DPT1.003 1 bit
This communication object is used to enable/disable remote control				

Objects “Presence”

NO.	Object name	Function	Flags	Data type
34	Output A	Presence check(arrive/leave)	C W U	DPT 1.002 1 bit
This communication object is used to receive presence (arrive) signal or no presence (leave) signal.				

Objects “Heating” and “Cooling”

NO.	Object name	Function	Flags	Data type
35	Output A Auto 2	Heating	C W U	DPT 1.002 1 bit
This communication is used to receive “Heating” signal, when send the telegram “1”, “Heating” is valid				
36	Output A Auto 2	Cooling	C W U	DPT 1.002 1 bit
This communication is used to receive “Cooling” signal, when send the telegram “1”, “Cooling” is valid				

Objects “Scene”

NO.	Object name	Function	Flags	Data type
37	Output A	Call scene number	C W U	DPT 18.001 1 byte
This communication is used to control the scene				

D 2 Blinds

Objects “Operation mode”

NO.	Object name	Function	Flags	Data type
10	Output A	Move blinds up/down	C W U	DPT 1.008 1 bit
This communication is used to move blinds up/down, if receives “0”, will move up, receives “1”,will move down				

Objects “operation mode”

NO.	Object name	Function	Flags	Data type
11	Output A	Adjust louver/Stop moving	C W U	DPT 1.007 1 bit
This communication is used to Adjust louver/Stop moving				

Objects “limit travelling”

NO.	Object name	Function	Flags	Data type
12	Output A	Limit travelling	C W U	DPT 1.008 1 bit

This communication is used to limit the range of blinds travel, if receives telegram “0”, will move up, if receives “1”, will move down

Objects “position”

NO.	Object name	Function	Flags	Data type
13	Output A	Move to position(0%...100%)	C W U	DPT 5.001 1 byte

This communication is used to move to any position when it receives value

Objects “position”

NO.	Object name	Function	Flags	Data type
14	Output A	Move louver to position	C W U	DPT5.001 1byte

This communication is used to move to any position when it receives value

Objects “status response”

NO.	Object name	Function	Flags	Data type
15	Output A	Object status of position	C R T	DPT 5.001 1 byte
16	Output A	Object status of louver pos	C R T	DPT5.001 1 byte
17	Output A	Object status of upper pos	C R T	DPT 1.008 1 bit
18	Output A	Object status of lower pos	C R T	DPT1.008 1 bit
19	Output A	Object status of auto	C R T	DPT1.011 1bit
20	Output A	Object status of forced alarm	C R T	DPT1.005 1bit

These communication objects are used to set the blinds status

Objects “Preset position”

NO.	Object name	Function	Flags	Data type
21	Output A	Set position 1/2	C W U	DPT 1.022 1bit
22	Output A	Set position 3/4	C W U	DPT 1.022 1bit
23	Output A	Move to position 1/2	C W U	DPT 1.022 1bit
24	Output A	Move to position 3/4	C W U	DPT 1.022 1bit

These communication objects are used to set the preset position

Objects “Activation of weather alarm”

NO.	Object name	Function	Flags	Data type
25	Output A	Activation of weather alarm	C W U	DPT 1.011 1 bit

This communication object is used to activate of weather alarm

Objects “Forced operation”

NO.	Object name	Function	Flags	Data type
26	Output A Safety	Forced operation 1	C W U	DPT2.008 2 bit
27	Output A Safety	Forced operation 2	C W U	DPT1.001 1bit
28	Output A Safety	Forced operation 3	C W U	DPT1.001 1bit

These communication objects are used to force operation

Objects “Activation of auto control”

NO.	Object name	Function	Flags	Data type
29	Output A	Activation of auto control	C W U	DPT1.011 1 bit
This communication object Is used to activate weather alarm, If this communication object receives the value“1”, the auto control is activated. If this communication object receives a telegram with the value“0”, the weather alarm is deactivated.				

Objects “Auto 1”

NO.	Object name	Function	Flags	Data type
30	Output A Auto1	Sun= “0 or 1”	C W U	DPT1.002 1 bit
This communication object is used to receive the sun=0 or 1 signal				
31	Output A Auto1	Position percentage for sun	C W U	DPT5.001 1byte
This communication object is used to move to the position when auto is activated				
32	Output A Auto 1	Louver percentage for sun	C W U	DPT5.001 1 byte
This communication object is used to move to position when auto is activated				
33	Output A	Enable/Disable remote control	C W U	DPT1.003 1 bit

Objects “Presence”

NO.	Object name	Function	Flags	Data type
34	Output A	Presence check(arrive/leave)	C W U	DPT 1.002 1 bit
This communication object is used to receive presence (arrive) signal or no presence (leave) signal.				

Objects “Heating” and “Cooling”

NO.	Object name	Function	Flags	Data type
35	Output A Auto 2	Heating	C W U	DPT 1.002 1 bit
This communication is used to receive “Heating” signal, when send the telegram “1”, “Heating” is valid				

36	Output A Auto 2	Cooling	C W U	DPT 1.002 1 bit
This communication is used to receive “Cooling” signal, when send the telegram “1”, “Cooling” is valid				

Objects “Scene”				
				
NO.	**Object name**	**Function**	**Flags**	**Data type**
37	Output A	Call scene number	C W U	DPT 18.001 1 byte
This communication is used to control the scene				

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