Messages
Version 1.0

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Dictionary

2.1 Parameter Table

Param	Description	Values
<shutterStep>	Step for moving up/Down advanced shutter	[1-99];100: • NULL or 100 → All opened • 1-99 → up of the value
<shutterLevel>	Level in advanced shutter	[0-100];255: • 0 → All closed • 1-99 → Current position (%) • 100 → All opened • 255 → Unknown position
<shutterStatus>	State of advances shutter	[10-14]: • 10 → Stop • 11 → Up • 12 → Down • 13 → Step-by-Step Up • 14 → Step-by-Step Down

<shutterInfo>	Device state/configuration for advanced shutter	0;[12-15]:
		• 0 → Normal
		• 12 → PUL + Disabled
		• 13 → Disabled
		• 14 → Command not executed
		• 15 → PUL
<shutterType>	Type of command to manage the priority in advanced shutter	[0-1]:
		• 0 → Clear priority
		• 1 → Set priority

<shutterPriority>	Priority level for advanced shutter	Priority: • $p_1 \rightarrow$ Safety priority • $p_2 \rightarrow$ High priority • $p_3 \rightarrow$ Medium priority • 0, $p_1=0$, $p_2=0$, $p_3=0 \rightarrow$ No effect on priority • 0, $p_1=0$, $p_2=0$, $p_3=1 \rightarrow$ Clear Medium priority • 0, $p_1=0$, $p_2=1$, $p_3=0 \rightarrow$ Clear High priority • 0, $p_1=0$, $p_2=1$, $p_3=1 \rightarrow$ Clear High priority and medium priority • 0, $p_1=1$, $p_2=0$, $p_3=0 \rightarrow$ Clear Safety priority • 0, $p_1=1$, $p_2=0$, $p_3=1 \rightarrow$ Clear Safety priority and Medium priority • 0, $p_1=1$, $p_2=1$, $p_3=0 \rightarrow$ Clear Safety priority and High priority • 0, $p_1=1$, $p_2=1$, $p_3=1 \rightarrow$ Clear Safety priority, High priority and Medium priority

- 1, p_1=0, p_2=0, p_3=0 $\rightarrow$ No effect on priority

- 1, p_1=0, p_2=0, p_3=1 $\rightarrow$ Set Medium priority

- 1, p_1=0, p_2=1, p_3=0 $\rightarrow$ Set High priority

- 1, p_1=0, p_2=1, p_3=1 $\rightarrow$ Set High priority and medium priority

- 1, p_1=1, p_2=0, p_3=0 $\rightarrow$ Set Safety priority

- 1, p_1=1, p_2=0, p_3=1 $\rightarrow$ Set Safety priority and Medium priority

- 1, p_1=1, p_2=1, p_3=0 $\rightarrow$ Set Safety priority and High priority

- 1, p_1=1, p_2=1, p_3=1 $\rightarrow$ Set Safety priority, High priority and Medium priority

2.2   Where Table

addressType		value
SCS	General	GEN=0
SCS	Ambient	A=[00, 1-9, 100]
SCS	Light Point	if

- A=00 → PL=[01-15]

- A=[1-9] → PL=[1-9]

- A=10 → PL=[01-15];

- A=[01-09] → PL=[10-15]

SCS	Group	GR=#[1-255]
SCS	Local bus	APL#4#interface

- Interface → [0-1][1-9]

2.3 Function Table

2.3.1 What table

Function Id	Value	Params	
		Set	**On**
Stop	0		
Up	1		
Down	2		
StopAdvanced	10	[<shutterPriority>]	<shutterPriority> <shutterType>
UpAdvanced	11	[<shutterStep>] [<shutterPriority>]	<shutterStep> <shutterPriority> <shutterType>
DownAdvanced	12	[<shutterStep>] [<shutterPriority>]	<shutterStep> <shutterPriority> <shutterType>

Chapter 3

Communication Flow

3.0.1 Command session - Base motor actuator

3.0.1.1 Stop - What = 0

Command	Open Frame
Client → Server	*2*0*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*0*<where>##	if <where>=GR → you will have one frame with <where>=GR and as many frames as automation objects

3.0.1.2 Up - What = 1

Command	Open Frame
Client → Server	*2*1*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#<what>##	only if <where>=APL
Server → Client	*2*1*<where>##	if <where>=GR → you will have one frame with <where>=GR and as many frames as automation objects
Server → Client	*2*0*<where>##	when the shutter reaches the maximum position if <where>=GEN,A,GR → you will have as many frames as automation objects

3.0.1.3 Down - What = 2

Command	Open Frame
Client → Server	*2*2*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#<what>##	only if <where>=APL
Server → Client	*2*2*<where>##	if <where>=GR → you will have one frame with <where>=GR and as many frames as automation objects
Server → Client	*2*0*<where>##	when the shutter reaches the minimum position if <where>=GEN,A,GR → you will have as many frames as automation objects

3.0.2 Command session - Advanced motor actuator

3.0.2.1 Stop - What = 0

Command	Open Frame
Client → Server	*2*0*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#<what>*<where>##	only if <where>=APL
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>* <shutterPriority>*<shutterInfo>##	if <where>=GEN,A,GR → you will have as many frames as automation objects
Server → Client	*2*0*<where>##	if <where>=GEN,A,GR → you will have as many frames as automation objects

3.0.2.2 Up - What = 1

Command	Open Frame
Client → Server	*2*1*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#<what>*<where>##	only if <where>=APL
Server → Client	*2*1*<where>##	only if <where>=GR
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>* <shutterPriority>*<shutterInfo>##	only if <where>=APL
Server → Client	*2*1*<where>##	if <where>=GEN,A,GR → you will have as many frames as automation objects
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>* <shutterPriority>*<shutterInfo>##	when the shutter reaches the maximum position if <where>=GEN,A,GR → you will have as many frames as automation objects
Server → Client	*2*0*<where>##	when the shutter reaches the maximum position if <where>=A,GEN,GR → you will have as many frames as automation objects

3.0.2.3 Down - What = 2

Command	Open Frame
Client →	*2*2*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#<what>*<where>##	only if <where>=PL
Server → Client	*2*2*<where>##	only if <where>=GR
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	only if <where>=PL
Server → Client	*2*2*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	when the shutter reaches the minimum position if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*2*0*<where>##	when the shutter reaches the minimum position if <where>=A,GEN,GR → you will have as many frames as automation objects

3.0.2.4 StopAdvanced - What = 10

Command	Open Frame
Client →	*2*10*#<shutterPriority>*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#10#<shutterPriority>#<shutterType>*<where>##	only if <where>=APL
Server → Client	*2*10#<shutterPriority>#<shutterType>*<where>##	only if <where>=A,GEN,GR
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	if <where>=A,GEN,GR as many frames as automation objects
Server → Client	*2*0*<where>##	if <where>=A,GEN,GR as many frames as automation objects

3.0.2.5 UpAdvanced - What = 11

Command	Open Frame
Client →	*2*11#<shutterStep>#<shutterPriority>*<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#11#\<shutterPriority>#\<shutterType>*\<where>##	only if \<where>=APL
Server → Client	*2*11#\<shutterStep>#\<shutterPriority>#\<shutterType>* \<where>##	only if \<where>=A,GEN,GR
Server → Client	*#2*\<where>*10*\<shutterStatus>*\<shutterLevel>* \<shutterPriority>*\<shutterInfo>##	only if \<where>=APL,GR if \<where>=GR → as many frames as automation objects
Server → Client	*2*1*\<where>##	only if \<where>=APL,GR if \<where>=GR → as many frames as automation objects
Server → Client	*#2*\<where>*10*\<shutterStatus>*\<shutterLevel>* \<shutterPriority>*\<shutterInfo>##	when the shutter reaches the maximum position if \<where>=A,GEN,GR → as many frames as automation objects
Server → Client	*2*0*\<where>##	when the shutter reaches the maximum position if \<where>=A,GEN,GR → as many frames as automation objects

3.0.2.6 DownAdvanced - What = 12

Command	Open Frame
Client →	*2*12#\<shutterStep>#\<shutterPriority>*\<where>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*2*1000#12#\<shutterPriority>#\<shutterType>*\<where>##	only if \<where>=APL
Server → Client	*2*12#\<shutterStep>#\<shutterPriority>#\<shutterType>* \<where>##	only if \<where>=A,GEN,GR
Server → Client	*#2*\<where>*10*\<shutterStatus>*\<shutterLevel>* \<shutterPriority>*\<shutterInfo>##	only if \<where>=APL,GR if \<where>=GR → as many frames as automation objects
Server → Client	*2*2*\<where>##	only if \<where>=APL, #G if \<where>=GR → as many frames as automation objects
Server → Client	*#2*\<where>*10*\<shutterStatus>*\<shutterLevel>* \<shutterPriority>*\<shutterInfo>##	when the shutter reaches the minimum position if \<where>=A,GEN,GR → as many frames as automation objects

Server → Client	*2*0*<where>##	when the shutter reaches the minimum position if <where>=A,GEN,GR → as many frames as automation objects

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3.0.3 Status request

3.0.4 Base motor actuator

Command	Open Frame	Note
Client → Server	*#2*<where>##	
Server → Client	*2*<what>*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	Ack	

Event Session	Open Frame	Note
Server → Client	*2*<what>*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects

3.0.5 Advanced motor actuator

Command	Open Frame	Note
Client → Server	*#2*<where>##	
Server → Client	*2*<what>*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	Ack	

Event Session	Open Frame	Note
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	if <where>=A,GEN,GR → you will have as many frames as light points
Server → Client	*2*<what>*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects

3.0.6 Dimension request

3.0.6.1 ShutterStatus - Dimension = 10

Command	Open Frame	Note
Client → Server	*#2*<where>*10##	
Server → Client	*#2*<where>*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	Ack	

Event Session	Open Frame	Note
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*2*0*<where>##	when the shutter reaches the minimum/maximum position if <where>=A,GEN,GR → you will have as many frames as automation objects

3.0.7   Dimension writing

3.0.7.1   GoToLevel - Dimension = 11

Command	Open Frame
Client → Server	*#2*<where>*#11#<shutterPriority>*<shutterLevel>##
Server → Client	Ack

Event Session	Open Frame	Note
Server → Client	*#2*<where>*#11#<shutterPriority>#<shutterLevel>*<shutterType>##	
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*2*<what>*<where>##	if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*#2*<where>*10*<shutterStatus>*<shutterLevel>*<shutterPriority>*<shutterInfo>##	when the level has been reached if <where>=A,GEN,GR → you will have as many frames as automation objects
Server → Client	*2*0*<where>##	when the level has been reached if <where>=A,GEN,GR → you will have as many frames as automation objects