Application Descriptions

7

Shutters and Blinds

50

Actuators

2

Summary:

This document specifies the basic Functional Block for a Sunblind Actuator.

Version 01.03.02 is a KNX Approved Standard.

This document is part of the KNX Specifications v2.1.

Document updates

Version	Date	Modifications
1.0	2005.03.10	Publication of the TFI Approved version.
1.1	2006.01.09	Preparation of the Draft for Voting.
1.2	2007.03.30	Publication of the Approved Standard.
1.2	2008.07.29	Editorial update
1.2	2009.06.26	Update in view of publication in the KNX Specifications v2.0.
01.03.01	2013.09.06	• **AN150 "FB Profiles for existing FBs"** integrated.
01.03.02	2013.10.29	Editorial updates for the publication of KNX Specifications 2.1.

References

[01] Chapter 6/30/1 "Runtime Profiles"

Filename: 07_50_02 Shutters and Blinds Actuators v01.03.02 AS.docx
Version: 01.03.02
Status: Approved Standard
Savedate: 2013.10.29
Number of pages: 51

Contents

Abbreviations

Datapoints

APSP	Set AbsolutePosition Slats Percentage
CAPBL	Current Absolute Position Blinds Length
CAPBP	Current Absolute Position Blinds Percentage
CAPSD	Current Absolute Position Slats Degrees
CAPSP	Current Absolute Position Slats Percentage
FA	Frost Alarm
FO	Forced
IMUD	Info Move Up Down
MUD	Move UpDown
PP	Preset Position
RA	Rain Alarm
SAPBL	Set Absolute Position Blinds Length
SAPBP	Set Absolute Position Blinds Percentage
SAPSD	Set Absolute Position Slats Degrees
SC	Scene Control
SN	Scene Number
SSUD	StopStep UpDown
STOP	Dedicated Stop
VCAP	Valid Current Absolute Position
WA	Wind Alarm

Parameters

BPSN	Blinds Position for Scene Number
EBM	Enable Blinds mode
HFA	Heartbeat Frost Alarm
HRA	Heartbeat Rain Alarm
HWA	Heartbeat Wind Alarm
MSMT	Maximum Slat Move time
MUDT	Move Up/Down Time
PPL	Preset Position Length
PPP	Preset Position Percentage
PPT	Preset Position Time
PSA	Preset Slats Angle
PSP	Preset Slats Percentage
RFA	Reaction on Frost Alarm
RPT	Reversion Pause Time
RRA	Reaction on Rain Alarm
RWA	Reaction on Wind Alarm
SFSN	Storage function for scene
SLME	Scene Learn Mode Enable
SPSN	Slat Position for Scene Number
SST	Slat Step Time

Other

cs	Company Specific
SAB	Sunblind Actuator Basic

1 Introduction

1.1 S-Mode [1)] compliance of a Functional Block

Such implementations have to ensure the following to claim compliance to this Functional Block.

- The *inputs and outputs* shall be implemented and encoded according the Functional Block specification. This concerns both the format and the implementation flavour (Group Object, Property).
- The *parameters* that are implemented shall follow the Functional Block specification if implemented as Interface Object Property.
  If implemented as S-mode *memory mapped Datapoint*, a parameter encoding may differ from its specification in the FB definition, under the condition that at least the same functionality can be achieved.

EXAMPLE If a time period is in a FB specification specified as DPT_TimePeriod_Min with a range of 0 min to 15 min, an implementation of this same functionality through one or more memory mapped parameters shall allow setting the same values.

1.2 Ctrl-Mode and PB-Mode compliance of a Functional Block

Ctrl-Mode and PB-Mode implementations shall ensure the following to claim compliance to this Functional Block.

- The *inputs and outputs* shall be implemented and encoded according the Functional Block specification. This concerns both the format and the implementation flavour (Group Object, Property).
- The *parameters* that are implemented shall follow the channel code specifications as laid down in the relevant KNX Handbook Supplement.

1.3 Combined Profiles and parameter access

It shall in all cases be possible to read out the current values of standardised parameters, regardless of any combination of Configuration Mode in the device.

If the implementation of the parameters differs according to the used Configuration Modes, the implementation shall take care of consistency of the parameter data between all flavours, i.e. if one implementation requires a parameter to be set via property access and the channel specification of that same Functional Block uses a different parameter format, then modification of the parameter value via Easy Configuration access shall cause the property value to be updated appropriately (and vice versa).

1) Also applies to LTE Standard Mode interface.

2 FB Sunblind Actuator Basic

2.1 Aims and objectives

The following Functional Block describes the application of a basic sunblind actuator.

The Functional Block „Sunblind Actuator Basic“ receives sunblind control commands from a sunblind push button, a preset position push button or a wind sensor. It moves the sunblind accordingly up, down or to a predefined position as well as stops the sunblind movement and steps the slats up/down.

NOTE In the case of implementation of this Functional Block in an actuator for vertical movement (e.g. venetian blinds or ‘Fensterladen’), the wording up/down shall be interpreted as ‘open/close’. The same goes for awnings.

2.2 Functional specification

2.2.1 Overview

The Functional Block “Sunblind Actuator Basic” contains the mandatory input Datapoints:

- Move UpDown: (MUD) sets the sunblind in motion and changes the direction of the movement
- StopStep UpDown: (SSUD) stops the movement and performs a gradual movement

The Functional Block also contains optional parameters. Please refer to clause 2.5.2 “Detailed specification of Datapoints” below, for the functional specification of these parameters.

Furthermore the movement shall be stopped by an access to the optional input Datapoint “Dedicated Stop” (STOP). If the movement is not stopped via these Inputs, it shall stop when the sunblind has reached its final upper or lower position. Normally this will happen when a timer loaded with the value from parameter “Move Up/Down Time” (MUDT) expires. The parameter “Slat Step Time” (SST) shall specify the time for performing the gradual movement initiated by an access to SSUD.

The rules how the actuator works depending on these Input - and parameter values are mandatory. The behaviour of the Functional Block “Sunblind Actuator Basic” is mainly characterized by the following states:

- STOPPED: the actuator is stopped
- MOVING: the actuator is moving up or down
- STEPPING: the actuator performs a step up or down

Additionally “Sunblind Actuator Basic” contains optional input Datapoints for positioning the blinds and the slats. In the case where the actuator supports positioning of blinds, positioning via percentage via the input Datapoint “Set Absolute Position Blinds Percentage” (SAPBP) is mandatory. The same goes for the absolute positioning of the slats via the input Datapoint “Set Absolute Position Slats Percentage” (SAPSP). Additionally, positioning of the blinds respectively slats can be realised via the input Datapoints “Set Absolute Position Blinds Length (SAPBL) respectively “Set Absolute Position Slats Degrees” (SAPSD).

The 1 bit input Datapoint “Preset Position” (PP) shall work with a parameter that defines two preset positions in case of receiving the values “1” or “0”.

The input “Scene Number” (SN) shall be used to move the sunblinds to a scene position. The Input “Scene Control” (SC) shall be used to move the sunblind to a scene position as well as to save the current position as a scene number. The Datapoints “Scene Number” (SN) and “Scene Control” (SC) shall refer to the same scene number.

The optional input Datapoints “Forced” (FO), “Wind Alarm” (WA), “Frost Alarm” (FA) and “Rain Alarm” (RA) shall be used to indicate that continued normal control may damage the sunblind and shall allow bringing the sunblind in a secure position (defined by a parameter), which shall not be overridden by an access to input Datapoints with a lower priority (see Table 3).

The parameter “Reversion Pause Time” (RPT) shall define the time during which the physical output of the actuator shall be de-activated before it changes the direction. This time shall be respected, regardless of the Input that has triggered the change of direction.

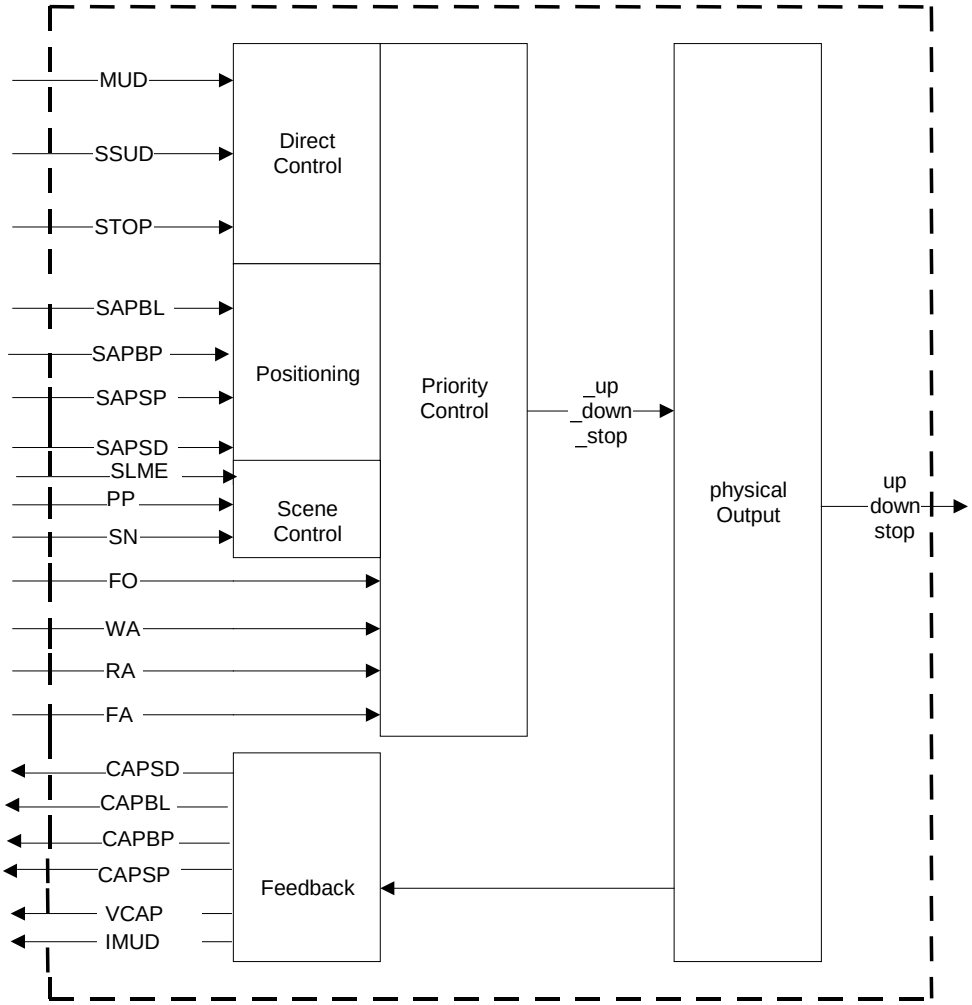

Figure 1 – Input and output Datapoints of the Functional Block Sunblind Actuator Basic

The optional output Datapoint “Info Move Up Down” (IMUD) shall indicate the direction of the current movement; its value shall be transmitted immediately when the movement starts or the direction is changed. It is mainly used for realising the toggle mode in a control panel. The optional output Datapoints “Current Absolute Position Blinds” (CAPBL for length and CAPBP for percentage) and “Current Absolute Position Slats (CAPSP for percentage and CAPSD for degrees) shall reflect the current position of the blinds respectively slats. The optional Output “Valid Current Absolute Position” (VCAP) shall inform on whether the absolute position is known or not: only when valid, the CAPBP/CAPBL and CAPSP/CAPSD shall be taken into account by the receiver.

2.2.2 Behaviour concerning Direct Control

Figure 2 below shows the FB with Inputs and parameters separated in two modules: the “Physical Output” processes the intermediate input data generated from the module “Direct Control”. With the definition of these modules the behaviour of the FB in its smallest meaningful granularity is specified.

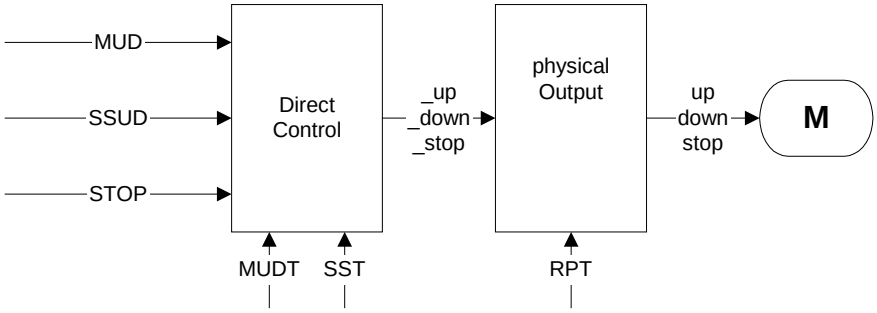

Figure 2 – Direct Control

The functionality of the reversion pause time shall be guaranteed, even if the optional parameter to control (see 2.5.2.21) it is not implemented.

2.2.3 State machine of Direct Control

For further information, see Figure 2.

State	Description
• Stopped:	The (internal) output is set to Stop.
• Moving:	The (internal) output is set to Up/Down; the timer loaded with Maximum Move-Time runs.
• Stepping:	The (internal) output is set to Up/Down; the Timer loaded with Step-Time runs.

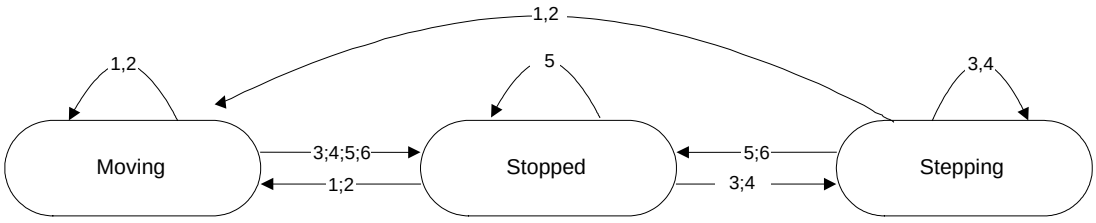

Figure 3 – State transition diagram

Table 1 – Overview of events

Event	Interpretation	number in state transition diagram
MUD = 1	move down	1
MUD = 0	move up	2
SSUD = 1	stop when moving or step down	3
SSUD = 0	stop when moving or step up	4
STOP = X	stop	5
Timeout	stop	6

Table 2 - State Transition Table

State	Event	Action	Next state
Stopped	MUD = 1	moving down, timeout = MUDT	Moving
Stopped	MUD = 0	moving up, timeout = MUDT	Moving
Stopped	SSUD = 1	step down, timeout = SST	Stepping
Stopped	SSUD = 0	step up, timeout = SST	Stepping
Stopped	STOP = X	none	Stopped
Stopped	Timeout	none	Stopped
Moving	MUD = 1	moving down, timeout = MUDT	Moving
Moving	MUD = 0	moving up, timeout = MUDT	Moving
Moving	SSUD = 1	stop moving	Stopped
Moving	SSUD = 0	stop moving	Stopped
Moving	STOP = X	stop moving	Stopped
Moving	Timeout	stop moving	Stopped
Stepping	MUD = 1	moving down, timeout = MUDT	Moving
Stepping	MUD = 0	moving up, timeout = MUDT	Moving
Stepping	SSUD = 1	step down, timeout = SST	Stepping
Stepping	SSUD = 0	step up, timeout = SST	Stepping
Stepping	STOP = X	stop stepping	Stopped
Stepping	Timeout	stop stepping	Stopped

2.2.4 Physical output

As mentioned in 2.2.1 the physical output of the actuator shall remain deactivated for “Reversion Pause Time” before changing the direction. But the (internal) state of the actuator shall directly follow according the state transition table. As a consequence an access to an input Datapoint during the Reversion Pause Time shall be processed according the state transition table.

EXAMPLE An access to SSUD during the Reversion Pause Time, which is caused by an access to MUD, shall lead to the State stopped and not to the state stepping up/down as sketched in Figure 4.

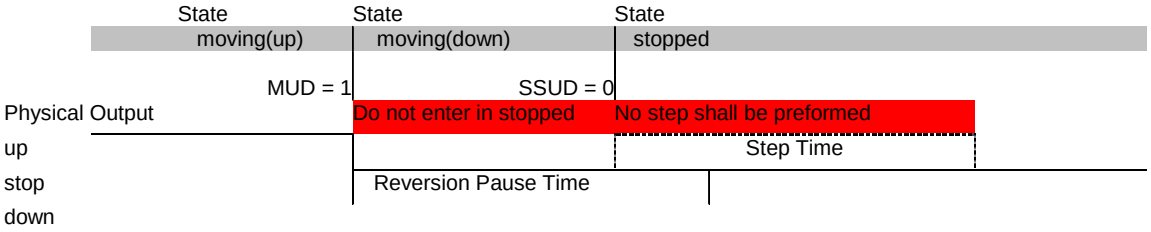

Figure 4 – The internal state follows directly

It is strongly recommended that the timers (or counters) for MUDT and SST are started when the physical output is set in motion after the Reversion Pause Time has elapsed.

2.2.5 Positioning

2.2.5.1 Positioning of the drive

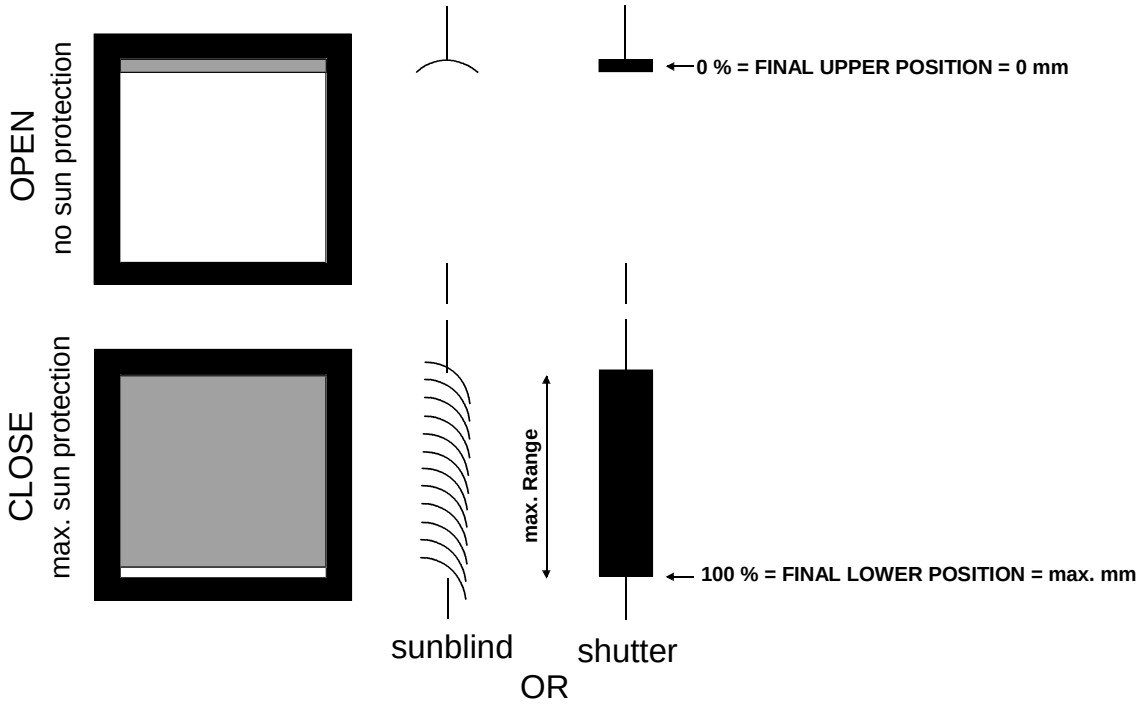

Figure 5 – Definition of the drive positions

2.2.5.1.1 Absolute position in percent

The optional input Datapoint SAPBP shall allow to directly move the drive into a given position expressed in percent.

- 0 % Position of the shutter/blind is defined as that position up from which the shutter/blind starts moving downwards (the shutter is in the final upper position; the shutter is completely „open“, see Figure 5 above).
- 100 % Position of the shutter/blind is defined as that position up from which the shutter/blind starts moving upwards (the shutter is in the final lower position; the shutter is completely „closed“, see Figure 5 above).

NOTE The positioning of the slats *between* the 0 % and 100 % position is company specific.

2.2.5.1.2 Absolute Position in Length

The optional input Datapoint SAPBL shall allow to directly move the drive into a given position expressed as a length.

„Zero millimeter“ = 0 mm is defined as the starting position of the shutter/blind (no sun protection, see Figure 5 above). Both top down and bottom up movement of shutters/blinds are possible. No negative absolute position values are allowed.

2.2.5.2 Positioning the slats

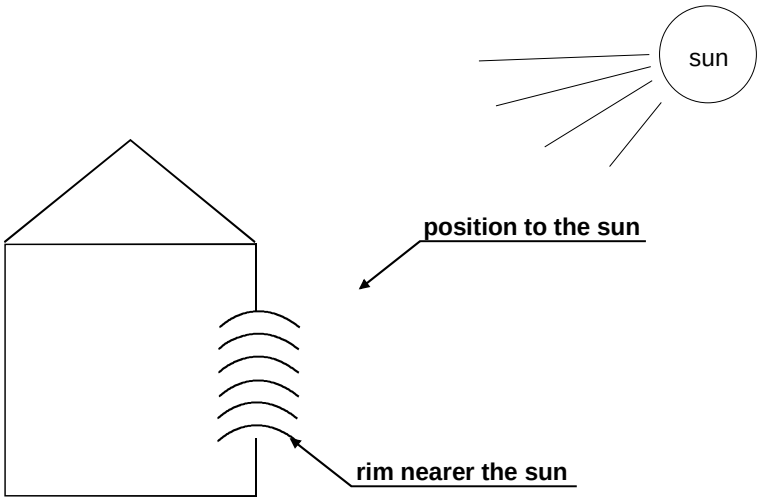

Figure 6 – Definition of the slat positions

2.2.5.2.1 Set Absolute Position Slat Percentage (SAPSP)

This optional input Datapoint shall allow to directly position the slats to a value expressed in percent.

- The 0 % position of the slats is defined as the fixed limit position up from which the rim that is nearer to the sun can only start moving downwards (see Figure 7).
  The rim that is nearer to the sun shall be in the final upper position.
- The 100 % position of the slats is defined as the fixed limit position up from which the rim that is nearer to the sun can only start moving upwards (see Figure 7).
  The rim that is nearer to the sun shall be in the final lower position.

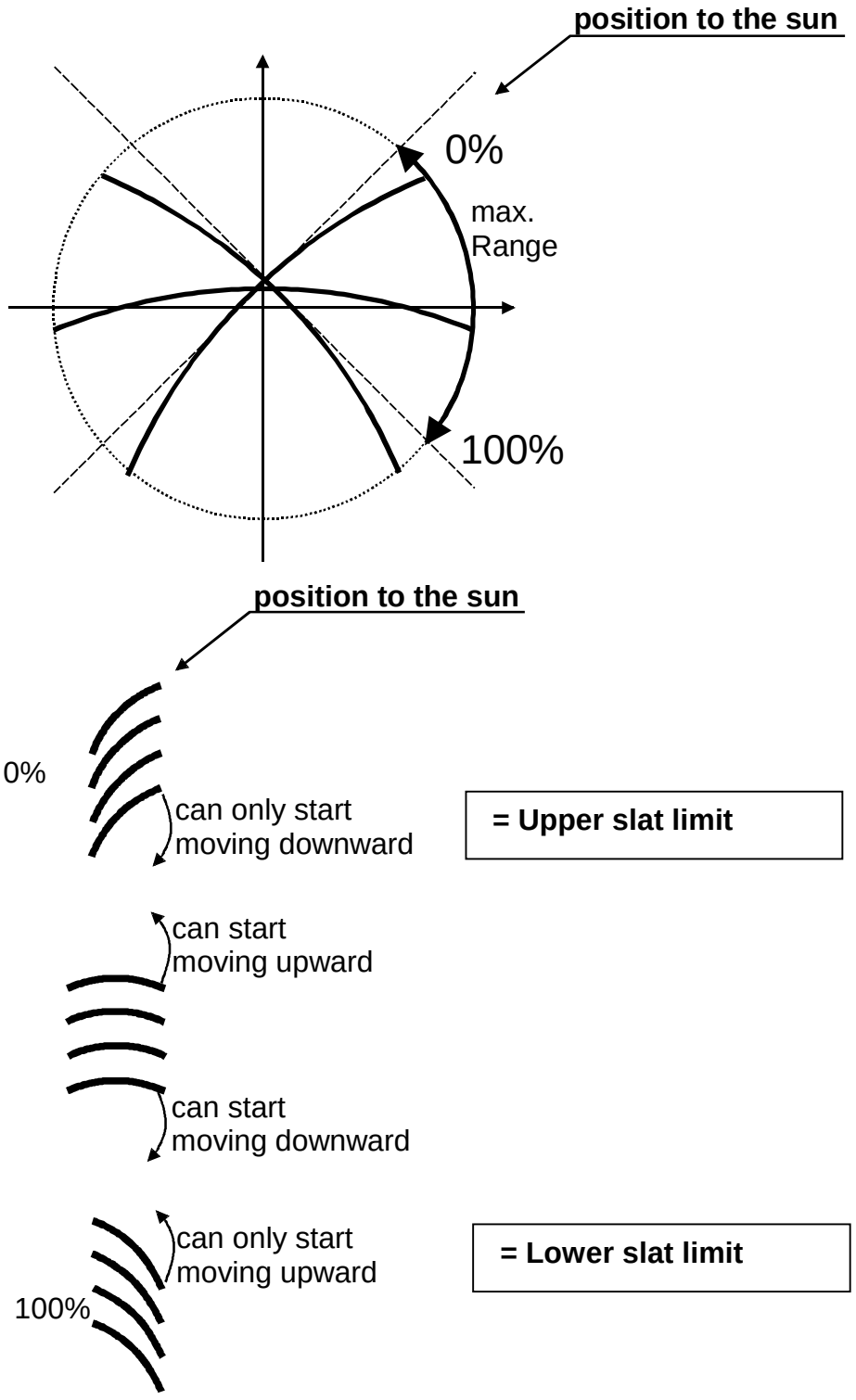

Figure 7 – Slat position in percent

2.2.5.2.2 Set Absolute Position Slats Degrees (SAPSD)

This optional input Datapoint shall allow to directly position the slats to a value expressed in degrees.

- „Zero degree“ = 0° is defined as the „starting“ horizontal position of the slats.
- A positive slat angle is defined as moving „upward“ that rim of the slat that is nearer to the sun (see Figure 8).
- A negative slat angle is defined as moving „downward“ that rim of the slat that is nearer to the sun (see Figure 8).

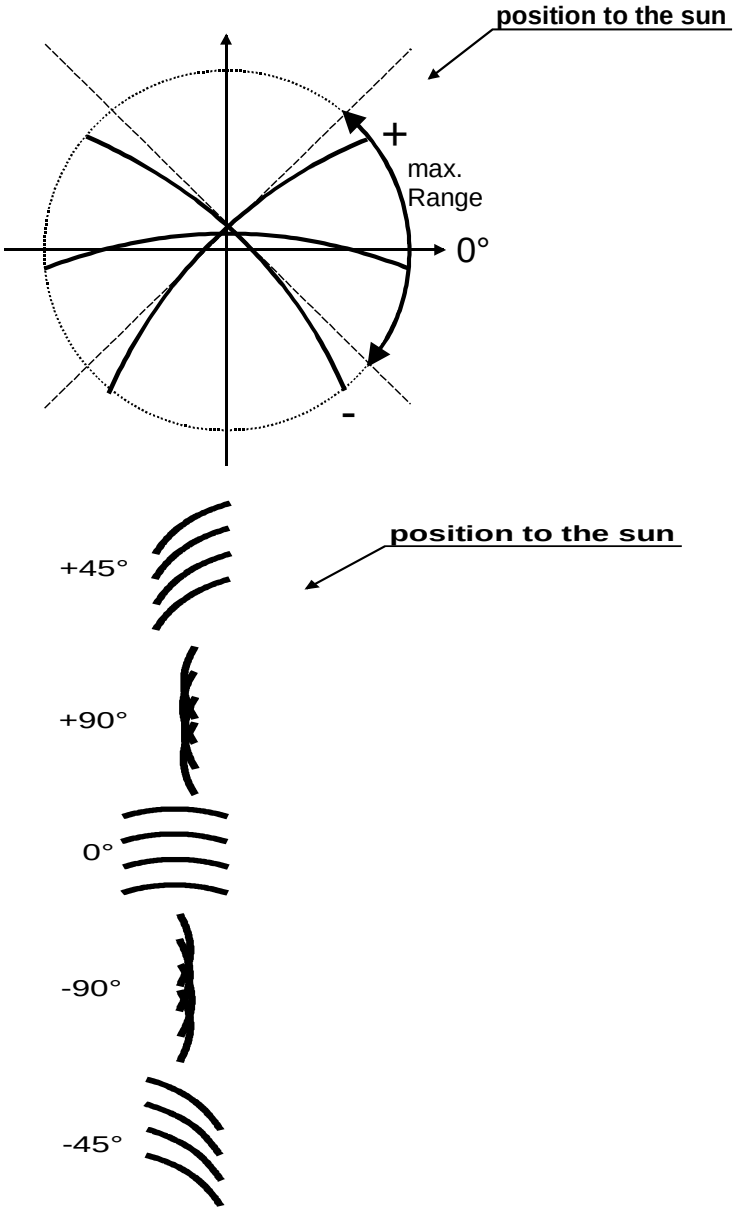

Figure 8 - Set Absolute Slat Position in Degrees (SASPD)

2.2.5.2.3 Valid Current Absolute Position

This optional output Datapoint shall indicate whether or not the absolute blinds position (CAPBP/CAPBL) and/or the absolute slat position (CAPSP/CAPSD) are valid.

In the case where the value is 0, the values of CAPBP/CAPBL and CAPSP/CAPSD are invalid and shall not be taken into account by the receiver. In the case where the value is 1, the before-said output Datapoints contain valid data.

2.2.5.3 Preset Positions

The optional input Datapoint PP shall be used to move the drive or shutter and the slats into one of two possible positions that are predefined by

1. the optional parameters for moving the blinds, these are PPT, PPP and PPL, and
2. the optional parameters for moving the slats, these are PSP and PSA.

2.2.6 Scene Control

With the optional input Datapoint “Scene Number” (SN) it shall be possible to call a maximum number of 64 different values for positions of blinds and slats in the device. The maximum number of scenes that can be called can optionally be lower than 64.

With the optional input Datapoint “Scene Control” (SC) it shall be possible to call and store a maximum number of 64 different values for positions of blinds and slats in the device. The maximum number of scenes that can be stored and called may optionally be lower than 64.

The Datapoints “Scene Number” and “Scene Control” shall refer to the same scene numbers. Scene n called through “Scene Number” shall be the same as scene n called through “Scene Control”.

The maximum number of scenes that can be called and the maximum number of scenes that can be stored may differ.

If implemented, the Datapoints “Scene Number” and “Scene Control” shall for each scene be controlled via the parameter “Blind Position for Scene Number” (BPSN) and via the parameter “Slat Position for Scene Number” (SPSN). It is allowed to implement only one of the parameter BPSN and SPSN.

The parameters BPSN and SPSN are defined as array of maximum 64 elements of DPT_Scaling, where the parameter SFSN is an array of maximum 64 elements of DPT_Enable. The field *SceneNumber* in the value of the input Datapoints SN and SC shall address the element of the arrays. After receiving a scene number on the Datapoint “Scene Number” (SN) or “Scene Control” (SC) with the field ‘c’ (learn field) cleared, the actual value of the actuator shall change to the parameterised position.

The scene learning mode can be activated

- *globally for all scene numbers* via the additional input Datapoint “Scene Learning Mode Enable” (SLME), or
- *separately for each individual scene number* via the parameter “Storage Function for Scene Number (SFSN)”

If scene learning is enabled for a given scene number, the addressed actuator shall store its current value in the relevant field-element of the parameter BPSN and SPSN at runtime if a scene number is learned.

If both SLME and SFSN are implemented, the following counts:

if SLME has the value “Disabled”, then *all* scene learning shall be disabled, regardless of the values of SFSN;

if SLME has the value “Enabled”, then only those scenes shall be set for which the corresponding entry in SFSN has the value “Enabled”.

2.2.7 Forced, Wind Alarm, Rain Alarm and Frost Alarm

The input Datapoints are grouped in priorities (low, medium and high). This allows specifying the drive's reaction in case of conflicting requests.

Table 3 – Groups of input Datapoints with priority

Datapoint		Priority
Move UpDown	(MUD)	Low
StopStep UpDown	(SSUD)	Low
Dedicated Stop	(STOP)	Low
Preset Position	(PP)	Low
Set Absolute Position Blinds Percentage	(SAPBP)	Low
Set Absolute Position Slats Percentage	(SAPSP)	Low
Set Absolute Position Blinds Length	(SAPBL)	Low
Set Absolute Position Slat Degrees	(SAPSD)	Low
Scene Number	(SN)	Low
Scene Control	(SC)	Low
Wind Alarm	(WA)	Medium
Frost Alarm	(FA)	Medium
Rain Alarm	(RA)	Medium
Forced	(FO)	High

The Datapoint “Forced” allows overriding the values set by any of the other input Datapoints. Additionally, the drive shall be forced to move to the position indicated by the value of the Datapoint “Forced”.

Value FO	Behaviour
0X	lower priority input Datapoints active. In the case the high priority state becomes inactive, the behaviour of the actuator is manufacturer-specific.
11b	high priority State: moving to lower position
10b	high priority State: moving to upper position

Figure 9 - Behaviour after access to FO

The Datapoints “Rain Alarm”, “Frost Alarm” and “Wind Alarm” shall have priority over the low priority Datapoints. Additionally, the drive shall be forced to move to the position indicated by the respective additional parameter values (“Reaction on Wind Alarm” (RWA), “Reaction on Rain Alarm” (RRA) and ”Reaction on Frost Alarm”(RFA). The priority hierarchy of the medium priority Datapoints can be determined by the manufacturer and shall be documented.

On heartbeat time-out of any of the Datapoints “Rain Alarm”, “Frost Alarm” or “Wind Alarm”, the Functional Block shall react as if the respective alarm is active.

2.2.8 Feedback

The Datapoint “Info Move Up Down” (IMUD) provides information on whether the drive is set into motion in upper or lower direction. Its value shall only be sent if the drive is set into motion; it shall not be transmitted when the motion has completed.

The Datapoints “Current Absolute Position Blinds Percentage” (CAPBP) respectively “Current Absolute Position Blinds Length” (CAPBL) and “Current Absolute Position Slats Percentage” (CAPSP) and “Current Absolute Position Slats degrees” (CAPSD) shall provide information on the position of the blinds respectively slats, unless the VCAP has the value 0 (where the data shall be interpreted as invalid).

The values of the Datapoints CAPBP and CAPBL shall be transmitted when the drive has completed its motion. They may additionally be sent *during* a motion, however with a minimal repetition period of 1 minute.

The values of the Datapoints CAPSP and CAPSD shall only be sent when the slats have completed their motion; they shall not be transmitted *during* a motion of the slats.

2.2.9 Power up / down behaviour

The power up and power down reaction of a device implementing this Functional Block is manufacturer dependent.

2.3 Constraints

There are no constraints for this Functional Block specification.

2.4 Functional Block Diagram

Sunblind Actuator Basic (SAB)			
Inputs		**Outputs**	
Move UpDown	(MUD)	(IMUD)	Info Move Up Down
StopStep UpDown	(SSUD)	(CAPBL)	Current Absolute Position Blinds Length
Dedicated Stop	(STOP)	(CAPBP)	Current Absolute Position Blinds Percentag
Preset Position	(PP)	(CAPSP)	Current Absolute Position Slat Percentage
Set Absolute Position Blinds Percentage	(SAPBP)	(CAPSD)	Current Absolute Position Slats Degrees
Set Absolute Position Blinds Length	(SAPBL)	(VCAP)	Valid Current Absolute Position
Set Absolute Position Slats Percentage	(SAPSP)		
Set Absolute Position Slats Degrees	(SAPSD)		
Scene Number	(SN)		
Scene Control	(SC)		
Forced	(FO)		
Wind Alarm	(WA)		
Rain Alarm	(RA)		
Frost Alarm	(FA)		
additional I/Os		**Parameters**	
Sensor for detecting END Positions		Reversion Pause Time	(RPT)
		Move Up/Down Time	(MUDT)
		Slat Step Time	(SST)
		Preset Position Time	(PPT)
		Preset Position Percentage	(PPP)
		Preset Position Length	(PPL)
		Preset Slat Percentage	(PSP)
		Preset Slat Angle	(PSA)
		Blinds Position for Scene Number	(BPSN)
		Slats Position for Scene Number	(SPSN)
		Storage Function for Scene Number	(SFSN)
		Reaction on Wind Alarm	(RWA)
		Heartbeat Wind Alarm	(HWA)
		Reaction on Rain Alarm	(RRA)
		Heartbeat Rain Alarm	(HRA)
		Reaction on Frost Alarm	(RFA)
		Heartbeat Frost Alarm	(HFA)
		Maximum Slat Move Time	(MSMT)
		Enable Blinds Mode	(EBM)
		Scene Learning Mode Enable	(SLME)

mandatory optional

Figure 10 – Functional Block Diagram for Sunblind Actuator Basic

2.5 Datapoints

Table 4 – Datapoint overview

Datapoint	Description/Remarks	Datapoint Type
Inputs		
Move UpDown	To move sunblind up (“0”) and down (“1”).	DPT_UpDown (1.008)
StopStep UpDown	To stop the sunblind and to step it up/down.	DPT_Step (1.007)
Dedicated Stop	To stop the sunblind.	DPT_Trigger (1.017)
Preset Position	0 = move to preset position 1. 1 = move to preset position 2.	DPT_SceneAB (1.022)
Set Absolute Position Blinds Percentage	To move the sunblind into a specified position	DPT_Scaling (5.001)
Set Absolute Position Blinds Length	To move the sunblind into a specified position	DPT_Length_mm (7.011)
Set Absolute Position Slat Percentage	To move the slats of a sunblind into a specified position	DPT_Scaling (5.001)
Set Absolute Position Slat Degrees	To move the slats of a sunblind into a specified position	DPT_Rotation_Angle (8.011)
Scene Number	This input shall be used to move the sunblind to a scene position.	DPT_SceneNumber (17.001)
Scene Control	The input shall be used to move the sunblind to a scene position as well as to save the current position as part of a scene.	DPT_SceneControl (18.001)
Forced	To move the sunblind to a forced position and to block it for any further control.	DPT_Direction1_Control (2.008)
Wind Alarm	To move the sunblind to a secure position and to block it for any further control.	DPT_Alarm (1.005)
Frost Alarm	To move the sunblind to a secure position in case of frost alarm and to block it. for any further control.	DPT_Alarm (1.005)
Rain Alarm	To move the sunblind to a secure position in case of rain alarm and to block it for any further control.	DPT_Alarm (1.005)
Outputs		
Info Move Up Down	To indicate the last moving direction	DPT_UpDown (1.008)
Current Absolute Position Blinds Percentage	To indicate the current position of the sunblinds in percentage	DPT_Scaling (5.001)
Current Absolute Position Blinds Length	To indicate the current position of the sunblinds in mm	DPT_Length_mm (7.011)
Current Absolute Position Slats Percentage	To indicate the current position of the slats in percentage	DPT_Scaling (5.001)
Current Absolute Position Slats Degrees	To indicate the current position of the slats in degrees	DPT_Rotation_Angle (8.011)
Valid Current Absolute Position	To indicate whether the Datapoints CAPBP, CAPBL, CAPSP, CAPSD are valid	DPT_Bool (1.002)

Datapoint	Description/Remarks	Datapoint Type
Parameters		
Reversion Pause Time	Stop Time before changing the moving direction	DPT_TimePeriodMsec (7.002)
Move Up/Down Time	Time to move the sunblind from the final upper to the final lower position.	DPT_TimePeriodSec (7.005)
Slat Step Time	Time to move the slat for one step.	DPT_TimePeriodMsec (7.002)
Preset Position Time	Time to move the sunblind from the final upper position to the preset positions.	DPT_TimePeriod10Msec (7.003)
Preset Position Percentage	% of the move up/down to move the sunblind from the final upper position to the preset positions.	DPT_Scaling (5.001)
Preset Position Length	distance in mm between the final upper position and the preset positions.	DPT_Length_mm (7.011)
Preset Slat Percentage	% of the slat angle to move the slats from the 0° position to the preset positions	DPT_Scaling (5.001)
Preset Slat Angle	angle in degrees between the 0° position of the slats and the preset positions.	DPT_Rotation_Angle (8.011)
Reaction on Wind Alarm	Defines whether to move the sunblind to final upper or final lower position.	DPT_Alarm_Reaction (23.002)
Heartbeat Wind Alarm	Defines the timeout period for receiving a telegram on input Wind Alarm.	DPT_TimePeriodMin (7.006)
Reaction on Rain Alarm	Defines whether to move the sunblind to final upper or final lower position.	DPT_Alarm_Reaction (23.002)
Heartbeat Rain Alarm	Defines the timeout period for receiving a telegram on input Rain Alarm.	DPT_TimePeriodMin (7.006)
Reaction on Frost Alarm	Defines whether to move the sunblind to final upper or final lower position.	DPT_Alarm_Reaction (23.002)
Heartbeat Frost Alarm	Defines the timeout period for receiving a telegram on input Frost Alarm.	DPT_TimePeriodMin (7.006)
Maximum Slat Move Time	Time to move the slats from the final upper 0% to the final lower 100% position.	DPT_TimePeriodMsec (7.002)
Enable Blinds Mode	Determines whether the actuator functions as a blinds actuator (with slats) or only as a shutter (no slats – step is interpreted as stop)	DPT_Enable (1.003)
Storage Function for Scene Number	Determines whether the storage function for scenes is enabled or disabled	DPT_Enable (1.003)
Blinds Position for Scene Number	array of max. 64 elements including for each scene number a percentage value corresponding to a particular blinds position	DPT_Scaling (5.001)
Slats Position for Scene Number	array of max. 64 elements including for each scene number a percentage value corresponding to a particular slats position	DPT_Scaling (5.001)
Scene Learning Mode Enable	This input shall be used to activate and deactivate the scene learn mode.	DPT_Enable (1.003)

2.5.1 FB Profiles [2)]

FB Profile 1 is for a blinds actuator with slats.

FB Profile2 is for a shutter actuator, without slats

Features and options	Basic FB	Standard Mode	
		FB Profile 1 [3)]	FB Profile 2
MUD	M	GO	GO
select 1 of 2 {			
SSUD	M	GO	(GO)
STOP	M	(GO)	GO
}			
State Machine for Direct Control	M	M	M
Functionality “Positioning of blinds” {	O	O	O
Input SAPBP	M	M	M
}			
Functionality “Positioning of slats” {	O	O	O
Input SAPSP	M	M	M
}			
Functionality of reversion pause time	M	M	M
Parameter RPT	O	O	O
Functionality Scene Control {	O	O	O
dependencies SLME and SFSN	M	M	M
}			

2) Please refer to [02] for the definition of the syntax and symbols used in this FB Profile definition.

3) This is for controlling a blinds actuator with slats.

		Basic FB
Parameters	RPT	O
	MUDT	O
	SST	O
	PPT	O
	PPP	O
	PPL	O
	PSP	O
	PSA	O
	RWA	O
	HWA	O
	RRA	O
	HRA	O
	RFA	O
	MSMT	O
	EBM	O
	HFA	O
	BPSN	O
	SPSN	O
	SFSN	O
	SLME	O

Figure 11 - Runtime Interworking – Parameters

2.5.2 Detailed specification of Datapoints

2.5.2.1 Input Move UpDown (MUD)

Standard Mode

DP Name:	Move UpDown	Abbr.:	MUD	Mandatory	☒
FB Name:	Sunblind Actuator Basic (SAB)			Can be internal	☐

Description
The behaviour of the Functional Block on the reception of data on the input „Move UpDown" shall comply with the state machine description as laid in clause 2.2.3. The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type					
DPT_Name:	DPT_UpDown				
DPT Format:	B_1	DPT_ID:	1.008		
Field	Description	Supp.	Range	Unit	Default
b	Indicates request to move up or down the shutters or blinds.	M	{0, 1}	none	none

Access Type							
♦ Input							
	N → this	☒	1 → this	☐			
	Spontaneous	☒	Cyclically:	☐	Time-out:	no	
	Request	☐	Polling:	☐	Period:		

Communication Type			
♦ Group Object Datapoint		Mandatory:	☒
	Default Group Address:	None.	

Dynamics						
	Power down:	Save:	☐			
	Power up:	Value:	No initialisation:	☒	Default value:	☐
			Saved value:	☐	Current value (not for in input):	☐
		Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling
NOTE A read response received on an attributed Group Address may cause a stopped sunblind actuator to set in motion.

Special Features
The upper and lower position of the blind/shutter actuator can be detected by either dedicated hardwired sensors or can be supervised via internal timers or counters in combination with the parameter.

2.5.2.2 Input StopStep UpDown (SSUD)

Standard Mode

DP Name:	StopStep UpDown	Abbr.:	SSUD	Mandatory	☒
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description
The behaviour of the Functional Block on the reception of data on the input „StopStep UpDown" shall comply with the state machine description as laid in clause 2.2.3. The interaction of this input with other optional Datapoints shall comply to the specifications of 2.2.7

Datapoint Type					
DPT_Name:	DPT_Step				
DPT Format:	B_1	DPT_ID:	1.007		
Field	Description	Supp.	Range	Unit	Default
b	Indicates a request to perform a gradual movement.	M	{0, 1}	none	none

Access Type							
♦ Input							
	N → this	☒	1 → this	☐			
	Spontaneous	☒	Cyclically:	☐	Time-out:	NO	
	Request	☐	Polling:	☐	Period:		

Communication Type			
♦ Group Object Datapoint		Mandatory:	☒
	Default Group Address:	None.	

Dynamics						
	Power down:	Save:	☐			
	Power up:	Value:	No initialisation:	☒	Default value:	☐
			Saved value:	☐	Current value (not for in input):	☐
		Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling
NOTE A read response (A_GroupValue_Response-PDU) received on an attributed Group Address may cause a moving sunblind actuator to stop or a stopped sunblind actuator to perform a step.

Special Features
NOTE As regards the realisation of shutters or blinds, see 2.5.1.

2.5.2.3 Input Dedicated Stop (STOP)

Standard Mode

DP Name:	Dedicated Stop	Abbr.:	STOP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

According to clause 2.5.1 this input is the mandatory stop input for shutters. It may be used for blinds applications for realisation of a dedicated stop (e.g. central function).
The behaviour of the Functional Block on the reception of data on the input „Dedicated Stop" shall comply with the state machine description as laid in clause 2.2.3. The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Trigger				
DPT Format:	B_1	DPT_ID:	1.017		
Field	Description	Supp.	Range	Unit	Default
b	Requests to stop the movement.	M	{0, 1}	none	none

Access Type

♦ Input

N → this	☒	1 → this	☐			
Spontaneous	☒	Cyclically:	☐	Time-out:	NO	
Request	☐	Polling:	☐	Period:		

Communication Type

♦ Group Object Datapoint — Mandatory: ☒

Default Group Address: None.

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.4 Input Preset Position (PP)

Standard Mode

DP Name:	Preset Position	Abbr.:	PP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „Preset Position“ is used to move the sunblind to one of two possible predefined positions and to adjust the slat position, when the sunblind position is reached.
When the current movement direction has to be changed for reaching the predefined position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Scene_AB		
DPT Format:	B_1	DPT_ID:	1.022

Field	Description	Supp.	Range	Unit	Default
b	Request to move the sunblind in position A (value 0) or B (value 1).	M	{0,1}	none	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	NO
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint — Mandatory: ☒

Default Group Address: None.

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☒
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.5 Input Set Absolute Position Blinds Percentage (SAPBP)

Standard Mode

DP Name:	Set Absolute Position Percentage	Abbr.:	SAPBP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „Set Absolute Position Blinds Percentage“ is used to move the sunblind to a specified position between 0 % (fully open) and 100 % (fully closed).
When the current movement direction has to be changed for reaching the requested position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Scaling		
DPT Format:	U_8	DPT_ID:	5.001

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	Requested position of the sunblind in percent.	M	0 % … 100 %	%	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	no
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint		Mandatory:	☒
Default Group Address:	None.		

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.6 Input Set Absolute Position Blinds Length (SAPBL)

Standard Mode

DP Name:	Set Absolute Position length	Abbr.:	SAPBL	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „ Set Absolute Position Blinds Length “ is used to move the sunblind into a requested position between 0 mm (fully open) and the lowest position (fully closed).
When the current movement direction has to be changed for reaching the requested position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Length_mm		
DPT Format:	U_{16}	DPT_ID:	7.011

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	Requested position of the sunblind in mm.	M	0 mm … 65 535 mm	mm	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	no
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint			Mandatory:	☒
Default Group Address:	None.			

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

If a value is received larger than the maximal drive length of the sunblind, the sunblind shall move to its maximum position

Special Features

None.

2.5.2.7 Input Set Absolute Position Slat Percentage (SAPSP)

Standard Mode

DP Name:	Set Absolute Slat Position Percentage	Abbr.:	SAPSP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „ Set Absolute Position Slat Percentage “ is used to move the blind into a specified slat position between 0% and 100% (see 2.2.5.2.1).
When the current movement direction has to be changed for reaching the requested position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Scaling		
DPT Format:	U_8	DPT_ID:	5.001

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	Requested position of the slats in percent.	M	0 % … 100 %	%	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	no
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint			Mandatory:	☒
Default Group Address:	---			

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.8 Input Set Absolute Position Slat Degrees (SAPSD)

Standard Mode

DP Name:	Set Absolute Slat Position Degrees	Abbr.:	SAPSD	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „Set Absolute Position Slat Degrees“ is used to move the sunblind into a specified slat position between 0° and the maximum slat-angle (positive value) or 0° and the minimum slat-angle (negative value) (see 2.2.5.2.2).
When the current movement direction has to be changed for reaching the requested position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Rotation_Angle		
DPT Format:	V_{16}	DPT_ID:	8.011

Field	Description	Supp.	Range	Unit	Default
SignedValue	Requested position of the slats in degrees.	M	-180° … 180°	°	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	no
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint	Mandatory:	☒
Default Group Address:	---	

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

In the case where the sunblind would receive a value out of its supported range, it shall move the slats to its maximum supported slat position (both negative as well as positive).

Special Features

None.

2.5.2.9 Input Scene Number (SN)

Standard Mode

DP Name:	Scene Number	Abbr.:	SN	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The Input Scene Number shall be used to move the sunblind to a scene position related to the encoded scene number.
Up to 64 scene numbers (0 … 63) can be assigned to the actuator (see parameters) [a].

Datapoint Type

DPT_Name:	DPT_SceneNumber				
DPT Format:	r_2U_6	DPT_ID:	17.001		
Field	Description	Supp.	Range	Unit	Default
r	Reserved field. Shall be zero.	M	0	none	none
SceneNumber	Scene number.	M	{0…63}	none	none

Access Type

♦ Input

N → this	☒	1 → this	☐			
Spontaneous	☒	Cyclically:	☐	Time-out:	none	
Request	☐	Polling:	☐	Period:		

Communication Type

♦ Group Object Datapoint		Mandatory:	☒
Default Group Address:	---		

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

[a] An application may support less than the maximal encodable number of 64 scenes. In the case, if a scene is called with a scene number higher than the maximum supported, the device shall not react.

Special Features

None.

2.5.2.10 Input Scene Control (SC)

Standard Mode

DP Name:	Scene Control	Abbr.:	SC	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The Input Scene Control shall be used to move the sunblind to a scene position as well as to save the current position as part of a scene.
Up to 64 scene numbers (0 … 63) can be assigned to the actuator (see parameters) [a].
If none of the parameters SLME or SFSN is implemented, then the DP Scene Control shall be supported in full: it shall be possible to call and learn all of the supported scene numbers.
If one or both of the parameters SLME or SFSN is implemented, then the request to learn a scene n, this is an access to DP Scene Control with a value of the field C = 1 and the scene number n in the field SceneNumber - shall function as follows:

	SFSN(array element n)		
SLME	**Not implemented**	**Disable (= 0)**	**Enable (= 1)**
Not implemented	Learn	Ignore	Learn
Disable (= 0)	Ignore	Ignore	Ignore
Enable (= 1)	Learn	Ignore	Learn

The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_SceneControl				
DPT Format:	$B_1r_1U_6$	DPT_ID:	18.001		
Field	Description	Supp.	Range	Unit	Default
C	1 = learn the current position as a scene and store it as a scene number in the field U_6 0 = activate the required scene as contained in field SceneNumber.	O	{0,1}	-	none
r	Reserved. Shall be zero.	M	0	-	0
SceneNumber	scene number to be learned or activated	M	[0 … 63] [a]	-	none

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	NO
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint — Mandatory: ☒

Default Group Address: ---

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

[a] An application may support less than the maximal encodable number of 64 scenes. In the case, if a scene is learned or called with a scene number higher than the maximum supported, the device shall not react.

Special Features

None.

2.5.2.11 Input Forced (FO)

Standard Mode

DP Name:	Forced	Abbr.:	FO	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The input „Forced Up/Down“ shall be used to receive forced control information.
In case a telegram is received, the actuator shall move up („10b”) or down („11b”) and cannot be moved any further by any of the Datapoints with low priority unless a telegram with the value „00b“ or the value „01b“ is received. From that moment onwards, the sunblind actuator can be controlled by the Datapoints of low priority again.
If the current movement direction has to be changed for reaching the requested position, the actuator has to wait until the „ Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.
The interaction of this input with other optional Datapoints shall comply with the specifications of 2.2.7.

Datapoint Type

DPT_Name:	DPT_Direction1_Control		
DPT Format:	B_2	DPT_ID:	2.008

Field	Description	Supp.	Range	Unit	Default
c, v		M	[0 … 3]	none	none

c	v	Function
0b	0b	no forced state
0b	1b	no forced state
1b	0b	forced move up
1b	1b	forced move down

Access Type

♦ Input

N → this	☒	1 → this	☐		
Spontaneous	☒	Cyclically:	☐	Time-out:	none
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint	Mandatory:	☒
Default Group Address:	---	

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☒	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.12 Input Wind Alarm (WA)

Standard Mode

DP Name:	Wind Alarm	Abbr.:	WA	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

As regards priority of this Datapoint, see clause 2.2.7.
The input „Wind Alarm“ shall be used to receive information about wind.
In case the value of this Datapoint is set to “1” or if the heart-beat timer expires, the actuator shall move into a secure position according to the settings in the parameter „Reaction on Wind Alarm“. The actuator shall in the alarm status. During wind alarm, all other control commands with lower priority shall not be executed. The Alarm status shall be cleared if the value of this Datapoint is set to „0“.
If the current movement direction has to be changed for reaching the secure position, the actuator shall wait until the „Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.

Datapoint Type

DPT_Name:	DPT_Alarm				
DPT Format:	B_1	DPT_ID:	1.005		
Field	Description	Supp.	Range	Unit	Default
b	Shall indicate whether there is a wind alarm or not.	M	{0,1}	none	none

Access Type

♦ Input

N → this	☐	1 → this	☒		
Spontaneous	☒	Cyclically:	☒	Time-out:	see parameter
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint			Mandatory:	☒
Default Group Address:	---			

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐ [a)]

Exception Handling

[a)] Exception handling after power up shall be described by the manufacturer.

Special Features

None.

2.5.2.13 Input Frost Alarm (FA)

Standard Mode

DP Name:	Frost Alarm	Abbr.:	FA	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

As regards priority of this Datapoint, see clause 2.2.7.
The input „Frost Alarm“ shall be used to receive information about frost.
IN case the value of this DP is set to “1” or if a heart-beat time-out expires, the actuator shall move into a secure position according to the settings in the parameter „Reaction on Frost Alarm“. The actuator shall be in the alarm status. During frost alarm, all other control commands with lower priority shall not be executed. The Alarm status shall be resolved, when the value of the DP is set to „0“.
If the current movement direction has to be changed for reaching the secure position, the actuator shall wait until the „Reversion Pause Time (RPT) “ (see parameters) has elapsed and only then start the new movement.

Datapoint Type

DPT_Name:	DPT_Alarm		
DPT Format:	B_1	DPT_ID:	1.005

Field	Description	Supp.	Range	Unit	Default
b	Shall indicate whether there is a frost alarm or not.	M	{0,1}	none	none

Access Type

♦ Input

N → this	☐	1 → this	☒		
Spontaneous	☒	Cyclically:	☒	Time-out:	see parameter
Request	☐	Polling:	☐	Period:	

Communication Type

♦ Group Object Datapoint — Mandatory: ☒

Default Group Address: ---

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐ [a)]

Exception Handling

[a)] Exception handling after power up shall be described by the manufacturer.

Special Features

None.

2.5.2.14 Input Rain Alarm (RA)

Standard Mode

DP Name:	Rain Alarm	Abbr.:	RA	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

As regards priority of this Datapoint, see clause 2.2.7.
The input „Rain Alarm“ shall be used to receive information about rain.
In case the value of this Datapoint is set to “1” or shall move into a secure position according to the settings in the parameter „Reaction on Rain Alarm“. The actuator shall be in the alarm status. During Rain alarm, all other control commands with lower priority shall not be executed. The Alarm status shall be resolved if the value of this Datapoint is set to “0”.
If the current movement direction has to be changed for reaching the secure position, the actuator has to wait until the „ Reversion Pause Time” (RPT) (see parameters) has elapsed and only then start the new movement.

Datapoint Type

DPT_Name:	DPT_Alarm				
DPT Format:	B_1	DPT_ID:	1.005		
Field	Description	Supp.	Range	Unit	Default
b	Shall indicate whether there is a rain alarm or not.	M	{0,1}	none	none

Access Type

♦ Input

N → this	☐	1 → this	☒			
Spontaneous	☒	Cyclically:	☒	Time-out:	see parameter	
Request	☐	Polling:	☐	Period:		

Communication Type

♦ Group Object Datapoint		Mandatory:	☒
Default Group Address:	---		

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☒ a)

Exception Handling

a) The manufacturer shall describe the behaviour after power up.

Special Features

None.

2.5.2.15 Output Info Move Up Down (IMUD)

Standard Mode

DP Name:	Info Move Up Down	Abbr.:	IMUD	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description
The output „Info Move Up Down“ shall be used to indicate the last moving direction of the sunblind. The value shall be sent when the sunblind starts moving and not when entering in the state stepping.

Datapoint Type					
DPT_Name:	DPT_UpDown				
DPT Format:	B_1	DPT_ID:	1.008		
Field	Description	Supp.	Range	Unit	Default
b	Shall indicate whether the last moving direction is up or down.	M	{0, 1}	none	none

Access Type							
♦ Output							
this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☒	Δ-Value:		Min repetition period:	
		Cyclic	☐	Period:	NO		
Request	☒						

Communication Type			
♦ Group Object Datapoint		Mandatory:	☒
Default Group Address:	---		

Dynamics						
Power down:	Save:	☒				
Power up:	Value:	No initialisation:	☐	Default value:		☐
		Saved value:	☒	Current value (not for in input):		☐
	Transmit on bus (only for output):		☒	Read from bus (only for input):		☐

Exception Handling
None.

Special Features
None.

2.5.2.16 Output Current Absolute Position Blinds Percentage (CAPBP)

Standard Mode

DP Name:	Current Absolute Position Blinds Percentage	Abbr.:	CAPBP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The output „Current Absolute Position Blinds Percentage“ shall be used to indicate the current position of the sunblind as a percentage value.
The value of CAPBP shall be transmitted on change of value when the drive has completed a motion.
It is additionally optionally allowed to transmit the value of CAPBP during a motion, however, at maximum once per minute.

Datapoint Type

DPT_Name:	DPT_Scaling		
DPT Format:	U_8	DPT_ID:	5.001

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	The position of the sunblind as a percentage. 0 % = final upper position 100 % = final lower position See 2.2.5.1.1.	M	0 % … 100%	%	none

Access Type

♦ Output

this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☒	Δ-Value:	c.s.	Min repetition period:	1 minute
		Cyclic	☐	Period:			
Request	☒						

Communication Type

♦ Group Object Datapoint				Mandatory:	☒
Default Group Address:	---				

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

The Datapoint shall at any rate be sent when the drive has completed its motion; it may additionally be transmitted during a motion with a minimum repetition period of 1 min.

2.5.2.17 Output Current Absolute Position Blinds Length (CAPBL)

Standard Mode

DP Name:	Current Absolute Position Blinds Length	Abbr.:	CAPBL	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The output „Current Absolute Position Blinds Length“ shall be used to indicate the current position of the sunblind as a length value in mm.
The value of CAPBL shall be transmitted on change of value when the drive has completed a motion.
It is additionally optionally allowed to transmit CAPBL during a motion, however, at maximum once per minute.

Datapoint Type

DPT_Name:	DPT_Length_mm		
DPT Format:	U_{16}	DPT_ID:	7.011

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	The current position of the sunblind in millimeter.	M	cs	mm	none

Access Type

♦ Output

this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☒	Δ-Value:		Min repetition period:	
		Cyclic	☒	Period:	≥ 1 minute		
Request	☒						

Communication Type

♦ Group Object Datapoint	Mandatory:	☒
Default Group Address:	---	

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

The Datapoint shall at any rate be sent when the drive has completed its motion; it may additionally be transmitted during a motion with a minimum repetition period of 1 minute.

2.5.2.18 Output Current Absolute Position Slats Percentage (CAPSP)

Standard Mode

DP Name:	Current Absolute Position Slats Percentage	Abbr.:	CAPSP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The output „Current Absolute Position Slats Percentage“ shall be used to indicate the current position of the slats as a percentage value. The value of the Datapoint shall only be sent when the drive has completed its motion; it shall not be transmitted during a motion.
The value of CAPSP shall only be transmitted when the slats have completed a motion. It shall not be transmitted during a motion of the slats.

Datapoint Type

DPT_Name:	DPT_Scaling		
DPT Format:	U_8	DPT_ID:	5.001

Field	Description	Supp.	Range	Unit	Default
UnsignedValue	The current position of the slats expressed in percentage. The coding shall be as in clause 2.2.5.2.1	M	0 % … 100 %	%	none

Access Type

♦ Output

this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☐	Δ-Value:		Min repetition period:	
		Cyclic	☐	Period:	NO		
Request	☒						

Communication Type

♦ Group Object Datapoint	Mandatory: ☒
Default Group Address:	---

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

None.

Special Features

None.

2.5.2.19 Output Current Absolute Position Slats Degrees (CAPSD)

Standard Mode

DP Name:	Current Absolute Position Slats Degrees	Abbr.:	CAPSD	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description
The output „Current Absolute Position Slats Degrees“ shall be used to indicate the current position of the slats as an angle. The value of the Datapoint shall only be sent when the drive has completed its motion; it shall not be transmitted during a motion.

Datapoint Type			
DPT_Name:	DPT_Rotation_Angle		
DPT Format:	V_{16}	DPT_ID:	8.011

Field	Description	Supp.	Range	Unit	Default
SignedValue	The current position of the slats expressed in degrees. The coding shall be as in clause 2.2.5.2.2.	M	-180° … 180°	°	none

Access Type							
♦ Output							
this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☐	Δ-Value:		Min repetition period:	
		Cyclic	☐	Period:	none		
Request	☒						

Communication Type		
♦ Group Object Datapoint	Mandatory:	☒
Default Group Address:	---	

Dynamics						
Power down:	Save:	☐				
Power up:	Value:	No initialisation:	☐	Default value:		☐
		Saved value:	☐	Current value (not for in input):		☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):		☐

Exception Handling
None.

Special Features
None.

2.5.2.20 Output Valid Current Absolute Position (VCAP)

Standard Mode

DP Name:	Valid Current Absolute Position	Abbr.:	VCAP	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

The output „Valid Current Absolute Position“ shall be used to indicate whether one or more of the output DPs CAPBP, CAPBL, CAPSP, and CAPSD contain valid data. This can be the case if a drive that is newly installed or passed through a reset still needs a reference movement to calculate its timing for a full movement.

Datapoint Type

DPT_Name:	DPT_Bool		
DPT Format:	B_1	DPT_ID:	1.002

Field	Description	Supp.	Range	Unit	Default
b	Shall indicate whether any of the current positions DPs is invalid (False) or if all these DPs contain valid data (True).	M	{0,1}	none	“True”

Access Type

♦ Output

this → M	☒	this → 1	☐				
Spontaneous	☒	COV:	☐	Δ-Value:		Min repetition period:	
		Cyclic	☐	Period:	NO		
Request	☒						

Communication Type

♦ Group Object Datapoint — Mandatory: ☒

Default Group Address: ---

Dynamics

Power down:	Save:	☐			
Power up:	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

The value of this Datapoint shall be initialised at power up.

Special Features

None.

2.5.2.21 Parameter Reversion Pause Time (RPT)

FB: SAB	Property Name (Server):	PID_ReversionPauseTime	Mandatory ☐ Optional ☒

Description:

The parameter Reversion Pause Time shall be used to prevent destruction of the drive as a result of too fast a direction change. Although this DP is optional, the functionality shall always be ensured via appropriate hardware.

DPT:	Name	DPT_TimePeriodMsec	DPT_ID	7.002	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriod	Reversion Time	M	cs	ms	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	51
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.22 Parameter Move UpDown Time (MUDT)

FB: SAB	Property Name (Server):	PID_MoveUpDownTime	Mandatory ☐ Optional ☒

Description:

The parameter shall define the time needed by the shutter/blinds mechanics to complete a full motion for moving the sunblind from upper to lower position.

DPT:	Name	DPT_TimePeriodSec	DPT_ID	7.005	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriodSec	time needed by the shutter/blinds mechanics for a complete move up or down movement	M	cs	s	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	52
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

If a sensor (hardwired) is implemented that detects that the upper or lower position is reached, this parameter may not be needed.

2.5.2.23 Parameter Slat Step Time (SST)

FB: SAB	Property Name (Server):	PID_SlatStepTime	Mandatory ☐ Optional ☒

Description:

The parameter shall define the time needed by the shutter mechanics to execute a slat step.

DPT:	Name	DPT_TimePeriodMsec	DPT_ID	7.002	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriodMsec	Time needed for the blinds mechanics to move the slat for one step	M	cs	ms	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	53
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

This parameter is only useful if the sunblind can be operated in steps (see also DP StopStep UpDown)

2.5.2.24 Parameter Preset Position Time (PPT)

FB: SAB	Property Name (Server): PID_MovePresetPosition_Time	Mandatory ☐ Optional ☒

Description:

In case the input DP Preset Position (PP) is set to „0", the sunblind shall move to the position that is defined by index 0 of this parameter.
In case input DP Preset Position (PP) is set to „1", the sunblind shall move to the position that is defined by index 1 of this parameter.
This position shall be defined as the time needed to move the sunblind from the final upper position to the preset position 1 or 2.

DPT:	Name	DPT_TimePeriod10Msec[]	DPT_ID	7.003	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriod	Time that the sunblind shall move from the final upper position to the preset positions	M	cs	ms	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	54
	start_index:	1	nr_of_elem:	2
Property access:	Read only ☐		Read/Write ☒	
Protection [a]:	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

[a] If the preset position functionality is determined by the setting of the parameter PPT, it shall be ensured that any other preset position parameter (PPP and PPL) is either simply not implemented (e.g. as given by a channel definition) or inactivated by additional means (e.g. parameter dependency in S-Mode).

2.5.2.25 Parameter Preset Position in % (PPP)

FB: SAB	Property Name (Server): PID_MovetoPresetPositionin%	Mandatory ☐ Optional ☒

Description:

In case the input DP Preset Position (PP) is set to „0", the sunblind shall be moved to the position that is defined by index 0 of this parameter.
In case the input DP Preset Position (PP) is set to „1", the sunblind shall be moved to the position that is defined by index 1 of this parameter.
This position shall be defined as the percentage of the move up/down to move the sunblind from the final upper position to the preset positions.

DPT:	Name	DPT_Scaling	DPT_ID	5.001	Datatype format	U_8

Field	Description	Sup.	Range	Unit	Default
UnsignedValue	Position of the preset expressed as percentage.	M	0 % … 100 %	%	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	55
	start_index:	1	nr_of_elem:	2
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

If the preset position functionality is determined by the setting of the parameter PPP, it shall be ensured that the any other preset position parameter (PPT and PPL) is either simply not implemented (e.g. as given by a channel definition) or inactivated by additional means (e.g. parameter dependency in S-Mode).

2.5.2.26 Parameter Preset Position Length (PPL)

FB: SAB	Property Name (Server): PID_MovetoPresetPositionLength	Mandatory ☐ Optional ☒

Description:

In case the input DP Preset Position (PP) is set to „0“, the sunblind shall move to the position that is defined by index 0 of this parameter.
In case the input DP Preset Position (PP) is set to „1“, the sunblind shall move to the position that is defined by index 1 of this parameter. This position shall be defined as the distance in mm between the final upper position and the preset positions.

DPT:	Name	DPT_Length_mm	DPT_ID	7.011	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
UnsignedValue	Position of the preset expressed as a length.	M	cs	mm	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	57
	start_index:	1	nr_of_elem:	2
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

If the preset position 1 functionality is determined by the setting of the parameter PPL, it shall be ensured that the any other preset position parameter (PPT and PPP) is either simply not implemented (e.g. as given by a channel definition) or inactivated by additional means (e.g. parameter dependency in S-Mode).

2.5.2.27 Parameter Preset Slat Position in % (PSP)

FB: SAB	Property Name (Server): PID_PresetSlatPosition%	Mandatory ☐ Optional ☒

Description:

In case the input DP Preset Position (PP) is set to „0“, the slats shall be moved to the position that is defined by index 0 of this parameter.
In case the input DP Preset Position (PP) is set to „1“, the slats shall be moved to the position that is defined by index 1 of this parameter. This position shall be defined by the percentage between the 0° position and the preset position 1.

DPT:	Name	DPT_Scaling	DPT_ID	5.001	Datatype format	U_8

Field	Description	Sup.	Range	Unit	Default
UnsignedValue	Value of the preset position parameter.	M	0 % … 100 %	%	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	58
	start_index:	1	nr_of_elem:	2
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

If the preset position functionality is determined by the setting of the parameter PSP, it shall be ensured that the any other preset position parameter (PSA) is either simply not implemented (e.g. as given by a channel definition) or inactivated by additional means (e.g. parameter dependency in S-Mode).

2.5.2.28 Parameter Preset Slat Position Angle (PSA)

FB: SAB	Property Name (Server): PID_PresetSlatPositionAngle	Mandatory ☐ Optional ☒

Description:

In case the input DP Preset Position (PP) is set to „0“, the slats shall be moved to the position that is defined by index 0 of this parameter.
In case the input DP Preset Position (PP) is set to „1“, the slats shall be moved to the position that is defined by index 1 of this parameter. This position shall be defined as the angle in degrees between the 0° position and the preset positions.

DPT:	Name	DPT_Rotation_Angle	DPT_ID	8.011	Datatype format	V_{16}

Field	Description	Sup.	Range	Unit	Default
SignedValue	The angle between the 0° position of the slats and preset slat positions.	M	[-359° … 360°]	°	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	60
	start_index:	1	nr_of_elem:	2
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

If the preset position functionality is determined by the setting of the parameter PSA, it shall be ensured that the any other preset position parameter (PSP) is either simply not implemented (e.g. as given by a channel definition) or inactivated by additional means (e.g. parameter dependency in S-Mode).

2.5.2.29 Parameter Reaction on Wind Alarm (RWA)

FB: SAB	Property Name (Server): PID_ReactionWindAlarm	Mandatory ☐ Optional ☒

Description:

Defines whether to move the sunblind to final upper or final lower position in case of wind alarm received on the input Wind Alarm (WA)

DPT:	Name	DPT_UpDown	DPT_ID	1.008	Datatype format	B_1

Field	Description	Sup.	Range	Unit	Default
b	Reaction on wind alarm	M	{0, 1}	none	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	61
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.30 Parameter Heartbeat of Wind Alarm (HWA)

FB: SAB	Property Name (Server):	PID_HeartbeatWindAlarm	Mandatory ☐ Optional ☒

Description:

Defines the timeout period for receiving a telegram on input Wind Alarm

DPT:	Name	DPT_TimePeriodMin	DPT_ID	7.006	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriod	Heartbeat for input Wind alarm	M	0 min … 65 535 min	min	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	62
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.31 Parameter Reaction on Rain Alarm (RRA)

FB: SAB	Property Name (Server):	PID_Reaction on Rain Alarm	Mandatory ☐ Optional ☒

Description:

Defines whether to move the sunblind to final upper or final lower position in case of wind alarm received on the input Rain Alarm (RA)

DPT:	Name	DPT_Alarm_Reaction	DPT_ID	23.002	Datatype format	N_2

Field	Description	Sup.	Range	Unit	Default
s	Reaction in case of rain alarm	M	{0,1}	none	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	63
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.32 Parameter Heartbeat of Rain Alarm (HRA)

FB: SAB	Property Name (Server):	PID_HeartbeatRainAlarm	Mandatory ☐ Optional ☒

Description:

Defines the timeout period for receiving a telegram on input Rain Alarm

DPT:	Name	DPT_TimePeriodMin	DPT_ID	7.006	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
TimePeriod	Heartbeat Rain Alarm	M	0 min … 65 535 min	min	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	64
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.33 Parameter Reaction on Frost Alarm (RFA)

FB: SAB	Property Name (Server):	PID_ReactionFrostAlarm	Mandatory ☐ Optional ☒

Description:

Defines whether to move the sunblind to final upper or final lower position in case of alarm received on the input Frost Alarm (FA).

DPT:	Name	DPT_AlarmReaction	DPT_ID	23.002	Datatype format	N_2

Field	Description	Sup.	Range	Unit	Default
s	Reaction in case of frost alarm	M	{0, 1}	none	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	65
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.34 Parameter Heartbeat of Frost Alarm (HFA)

FB: SAB	Property Name (Server): PID_HeartbeatFrostAlarm	Mandatory ☐ Optional ☒

Description:

Defines the timeout period for receiving a telegram on input Frost Alarm.

DPT:	Name	DPT_TimePeriodMin	DPT_ID	7.006	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
Time Period	Heartbeat for frost alarm	M	0 min … 65 535 min	min	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	66
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.35 Parameter Max Slat Move Time (MSMT)

FB: SAB	Property Name (Server): PID_MaxSlatMoveTime	Mandatory ☐ Optional ☒

Description:

Time that is needed by the shutter/blinds mechanics to complete a full motion of the slats from the final upper 0 % to the final lower 100 % position.

DPT:	Name	DPT_TimePeriodMsec	DPT_ID	7.002	Datatype format	U_{16}

Field	Description	Sup.	Range	Unit	Default
Time Period	Time needed by the shutter/blinds mechanics to complete a full motion of the slats from the final upper 0 % to the lower 100 % position.	M	0 ms … 65 336ms	ms	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	67
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐		Read/Write ☒	
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.36 Parameter Enable Blinds Mode (EBM)

FB:	SAB	Property Name (Server):	PID_EnableBlindsMode	Mandatory ☐ Optional ☒

Description:

Determines whether the actuator functions as a blinds actuator (with slats) or only as a shutter (no slats; step shall be interpreted as stop)

DPT:	Name	DPT_Enable	DPT_ID	1.003	Datatype format	B_1

Field	Description	Sup.	Range	Unit	Default
Enable	Activates blinds (value 0) or shutter (value 1).	M	{0, 1}	none	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	68
	start_index:	1	nr_of_elem:	1
Property access:	Read only ☐	Read/Write ☒		
Protection *)	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

None.

2.5.2.37 Parameter Storage Function for Scene Number (SFSN)

FB:	Sunblind Actuator Basic	Property Name (Server):	PID_StorageFunctionforScene	Mandatory ☐ Optional ☒

Description:

Enabling memory storage for a received scene number with a new blinds and slats position.

DPT:	Name	DPT_Enable[]	DPT_ID	1.003	Datatype format	B_1

Field	Description	Sup.	Range	Unit	Default
b	Indicates whether the storing of a scene with the scene number equal to the array index is enabled or not.	M	{0,1}	none	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	69
	start_index:	1	nr_of_elem:	64
Property access:	Read only ☐	Read/Write ☒		
Protection	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

It is allowed to implement the array with less than the given number of 64 elements.

2.5.2.38 Parameter Blinds Position for Scene Number (BPSN)

FB:	Sunblind Actuator Basic	Property Name (Server):	PID_BlindsPositionforScene	Mandatory ☐ Optional ☒

Description:

Stored blinds position for recalling after receiving the dedicated scene number

DPT:	Name	DPT_Scaling[]	DPT_ID	5.001	Datatype format	U_8

Field	Description	Sup.	Range	Unit	Default
UnsignedValue	Blinds position for the scene number indicated by the array index of this parameter.	M	1 % … 100 %	%	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	68
	start_index:	1	nr_of_elem:	64
Property access:	Read only ☐		Read/Write ☒	
Protection	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

It is allowed to implement the array with less than the given number of 64 elements

2.5.2.39 Parameter Slats Position for Scene Number (SPSN)

FB:	Sunblind Actuator Basic	Property Name (Server):	PID_SlatsPositionforScene	Mandatory ☐ Optional ☒

Description:

Stored slats position for recalling after receiving the dedicated scene number

DPT:	Name	DPT_Scaling[]	DPT_ID	5.001	Datatype format	U_8

Field	Description	Sup.	Range	Unit	Default
UnsignedValue	Slats position for the scene number indicated by the array index of this parameter.	M	1 % … 100 %	%	cs

Communication:

DP Address: (in the server)	object_type:	800	Property ID:	69
	start_index:	1	nr_of_elem:	64
Property access:	Read only ☐		Read/Write ☒	
Protection	Read level	-	Write level	-

Exception Handling: Value after Power-up: Stored Value ☒ Act Value ☐ Default Value ☐

None.

Special Features:

It is allowed to implement the array with less than the given number of 64 elements

2.5.2.40 Parameter Scene Learning Mode Enable (SLME)

DP Name:	Scene Learning Mode Enable	Abbr.:	SLME	Mandatory	☐
FB Name:	Sunblind Actuator Basic			Can be internal	☐

Description

Via this parameter, it shall be possible to activate or deactivate the scene learning mode (e.g. to prevent unauthorised modification of scenes). If the input Datapoint is enabled, it shall be only possible to store the scenes, for which the corresponding bit in the parameter SFSN is set to “enable learning”.
This Datapoint is optional, even if the scene functionality is implemented.

Datapoint Type

DPT_Name:	DPT_Enable				
DPT Format:	B_1	DPT_ID:	1.003		
Field	Description	Supp.	Range	Unit	Default
b	Enables or disables the scene learning.	M	V = {0,1}	none	none

Access Type

♦ Input

N → this	☒	1 → this	☐			
Spontaneous	☒	Cyclically:	☐	Time-out:	none	
Request	☐	Polling:	☐	Period:		

Communication Type

Group Object Datapoint		Mandatory:	☒
Default Group Address:	---		

Dynamics

Power down:	Save:	☐			
Power up:[a)]	Value:	No initialisation:	☐	Default value:	☐
		Saved value:	☐	Current value (not for in input):	☐
	Transmit on bus (only for output):		☐	Read from bus (only for input):	☐

Exception Handling

[a)] Usually after power up the default value is set to “0”. If parameter ILD is set to “inversion” it is manufacturer specific, to enter the lock-state after power up or not.

Special Features

None.