

Application program description

Electromotoric actuator

SSA118.09HKN



With KNX communication for radiator valves, PICV and small valves

- Support of KNX S-Mode (integration with ETS)
- Support of KNX PL-Link (integration with Desigo™ Room Automation)
- Direct mounting with coupling nut, no tools required
- Position and actuator motion indication (LED)
- Positioning force 100 N
- Parallel operation of multiple actuators possible
- Integral cable length 1.5 m

Introduction

- Usage: Application program usage
- Product family: HVAC valve actuators
- Manufacturer: Siemens
- Name: SSA KNX Networked Actuator
- ASN: SSA118.09HKN

Function overview

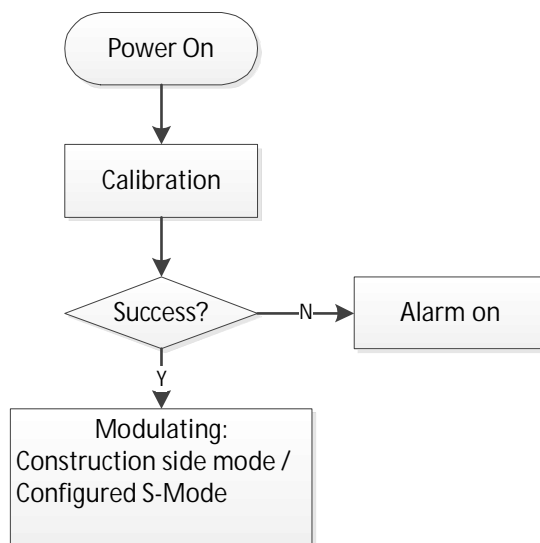
Workflow

If no application has been downloaded (factory setting), the actuator enters construction mode immediately following self-calibration. In this mode, the actuator has limited functionality and the valve position is set to 25 % to prevent freezing of the radiator. You can change the valve position via group address 30/0/26 (0xF01A).

After users download the configuration with PL-Link controller, the actuator will then work in PL-Link mode.

Use ETS5 (Engineering tool software) to download the application via KNX bus after the actuator is connected to bus voltage. The following basic functions are available when the actuator is operated in KNX S-Mode:

- By using central heating boilers with demand-controlled flow temperature, the device sends feedback on current energy demand (current max. valve position) via group address to the central heating boiler.
- Operating modes available in KNX S-Mode: Forced mode, summer mode, emergency mode, override control mode, night mode, and office mode.



HMI (button and LED)

The KNX programming button and KNX programming LED are designed as per the design concept of the KNX device, defining common use of KNX programming mode, stimulation for a connection test and factory reset (multi-color mode). See the [datasheet](#) for details.

The stem position LED indicator is intended for motor behavior. It indicates different actuator movements. See the [datasheet](#) for details.

Factory reset

Use the KNX programming button or the KNX bus command to reset the device.



When switching between PL-Link and S-mode, remember to do a factory set.

Self-calibration

Result	KNX button: Press button > 20 s	KNX bus erase code =	
		02	07
All group object bindings are reset/deleted	X	X	X
All parameters are reset to default values	X	X	X
Individual addresses are reset	X	X	

Self-calibration can be triggered by KNX command. It also occurs after:

- Applying bus voltage for the first time
- Downloading application each time
- Regular interval (180 days)

Two different self-calibration strategies are available in KNX S-Mode and displayed as **Calibration strategy** parameters in ETS5.

Diagnostics

Diagnostics data is directly accessible as on-demand property by a tool or optionally via a dedicated BA diagnostics object.

The actuator measures and stores the following information:

Object type = 352 Object instance = 1 Object index = 11	Description
RunTimeActr	Indicates the open/close motor time [s] of the valve actuator
CumulRunRime	Indicates the total motor power on time [s] of the actuator
CounterRePos	Indicates the total number of valve repositioning events of the actuator
CounterDeviceJam	Indicates how many times the valve was blocked by an obstacle
CounterPowerUp	Indicates the total number of power up events of the actuator
CounterLowVoltage	Indicates the total number of low voltage events of the actuator

Alarms

Alarms are defined to indicate abnormal behavior. There are two kinds of alarms in the actuator: calibration and mechanical failure/jam. The stem position LED indicator turns to red if either happens. If there is an alarm and the report function is enabled, the telegram of the alarm information is sent at an interval of 15 minutes.

Mechanical failure/jam

Mode	Description	Define	Telegram
S-Mode	Log number	01	PID=51: AlarmInfo: 01 00 0A 03 0C 05
	Alarm priority	00	
	Application area	HAVC General =0A Hex	
	Error class	Actuator fault = 03	
	Attributes	AlarmTextSupport +	

Mode	Description	Define	Telegram
		ErrorCodeSupport = 12 = 0C	
	Alarm state	InAlarm / Locked = 05	

Calibration error

Mode	Description	Define	Telegram
S-Mode	Log number	02	PID=51: AlarmInfo: 02 01 01 03 0C 05
	Alarm priority	Medium = 01	
	Application area	System & function of common interest = 01 dec = 01 hex	
	Error class	Actuator fault = 03	
	Attributes	AlarmTextSupport + ErrorCodeSupport = 12 = 0C	
	Alarm state	InAlarm / Locked = 05	

No alarm (HB repeat every 30 min)

In case of no alarm indication, the following telegram is sent at an interval of 30 minutes:

Time stamp	IA	Group address	Command	Data	Frame
2019/9/24 12:42:16:27	0.2.1	30/3/250	A_GroupValue _Write	80 00 03 00 00 00 00	b8 e0 02 01 f3 fa 07 00 80 00 03 00 00 00 00

Release alarms

When an alarm occurs, calibration movement can be triggered via KNX command or manual override mode entered via alarm release button. The alarm occurs again if another failure (e.g., mechanical jam) exists.

Application

Fields of application

Connect the actuator to the valve and integrate it in a KNX S-Mode system containing other KNX devices (integration with ETS and freely programmable). It can be used with controllers (central functions) controlling the water or chilled water supply to groups and/or single rooms.

Equipment combinations

KNX-certified HVAC controllers may be connected to all KNX devices with compatible KNX S-Mode data points.

Device/tool	Type
Controllers and room units	
RDG..	RDG100KN, RDG160KN, RDG165KN, RDG200KN, RDG260KN
Engineering and commissioning tools (partially suitable for device configuration)	
Tool for KNX S-Mode	ETS5

The actuator works in PL-Link mode if the following controllers are connected:

Device/tool	Type
Controllers	
DXR2	DXR2.M18, DXR2.E18, DXR2.M09, DXR2.E09
PXC3	PXC3.E75A
Engineering and commissioning tools (partially suitable for device configuration)	
Tool for PL-Link	ABT Site 4.1.1 or higher

System network

Below is a sample topology for system network connection:

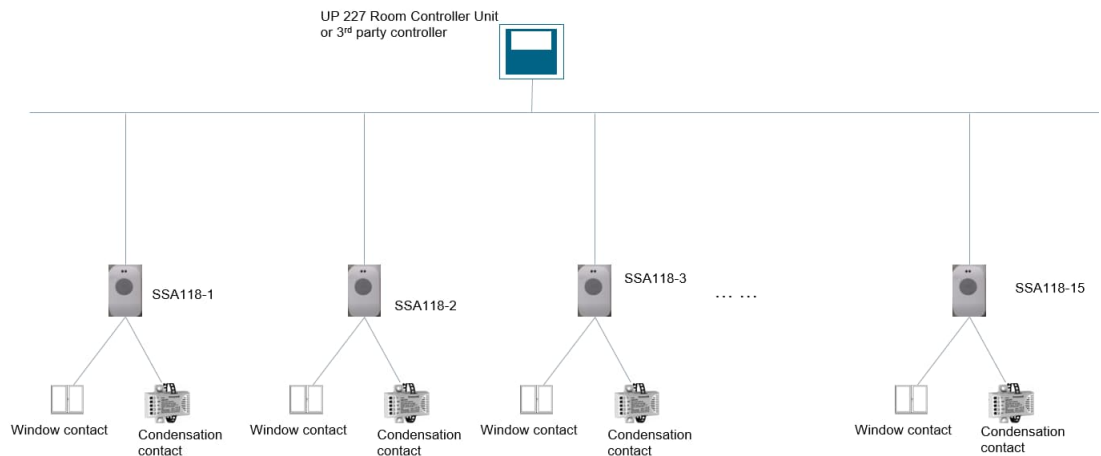


Fig. 1: KNX S-Mode network example



For KNX PL-Link topology, see the [Design installation guide](#).

Parameters and objects in KNX S-Mode

Communication objects

No.	Name in ETS	Object function	Flags					Data point type KNX			Range
			C	R	W	T	U	ID	DPT_Name	Format	
1	Fault information	Transmit	1	1	0	1	0	219.001	alarm info	6 bytes	[0..255] = Log Nr. [0...2] = Alarm priority [0...14] = Application area [0..4] = Error class [0...7] = Attributes [0...7] = Alarm state

No.	Name in ETS	Object function	Flags					Data point type KNX			Range
			C	R	W	T	U	ID	DPT_Name	Format	
2	Fault state	Transmit	1	1	0	1	0	1.005	alarm	1 bit	0 = No alarm 1 = Alarm
3	Fault transmission	Receive	1	0	1	0	1	1.003	enable	1 bit	0 = Disable 1 = Enable
4	Setpoint position	Receive	1	0	1	0	1	5.001	scaling	1 byte	0...100 %
5	Forced position	Receive	1	1	1	0	1	1.003	enable	1 bit	0 = Disable 1 = Enable
6	Actual position	Transmit	1	1	0	1	0	5.001	scaling	1 byte	0...100 %
7	Maximum position	Transmit / Receive	1	1	1	1	0	5.001	scaling	1 byte	0...100 %
8	Summer mode	Receive	1	0	1	0	1	1.003	enable	1 bit	0 = Disable 1 = Enable
9	Night mode	Receive	1	0	1	0	1	1.003	enable	1 bit	0 = Disable 1 = Enable
10	Office mode	Receive	1	0	1	0	1	1.003	enable	1 bit	0 = Disable 1 = Enable
11	Overridden	Transmit	1	1	0	1	0	1.002	boolean	1 bit	0 = False 1 = True
12	Emergency mode	Transmit	1	1	0	1	0	1.005	alarm	1 bit	0 = No alarm 1 = Alarm
13	Start calibration	Receive	1	0	1	0	0	1.017	trigger	1 bit	0, 1 = trigger
14	Calibration mode	Transmit	1	1	0	1	0	1.002	boolean	1 bit	0 = False 1 = True
15	Window contact	Transmit	1	1	0	1	0	1.019	window/door	1 bit	0 = close 1 = open
16	Condensation contact	Transmit	1	1	0	1	0	1.005	alarm	1 bit	0 = No alarm 1 = Alarm

Objects	Range	Description
Fault information	[0...255] = Log Nr. [0...2] = Alarm priority [0...14] = Application area [0...4] = Error class [0...7] = Attributes [0...7] = Alarm state	Alarm information on the actuator. There are two types of alarms: 1. Mechanical failure/jam 2. Calibration failure
Fault state	0 = No alarm 1 = Alarm	Indicates if there is an alarm in the actuator.
Fault transmission	0 = Disable 1 = Enable	Enables or disables transmission of "Fault information" and "Fault state".
Setpoint position	0...100 %	Via this object, the set actuating value (0...100 %) is received via bus, approaching the corresponding "Actual position". The object needs to be connected to default group address 30/0/26 (0xF01A).

Objects	Range	Description
Forced position	1 = Enter Force Mode 0 = Exit Force Mode	If this object receives value "1", the valve is driven to the position parametrized under "Forced mode" → "Actual position". The valve remains in this position until value "0" is sent from this object, thus cancelling "Forced mode". When this happens, the previous position is approached. This position is not changed even receiving another "Setpoint position".
Actual position	0...100 %	This object sends the current actual valve position via the KNX bus. The frequency can be parameterized according to the percentile position change. This function is not needed for normal operation and is used mainly for diagnostics and troubleshooting.
Maximum position	0...100 %	This object provides the following functionality: <ul style="list-style-type: none"> Receiving current actuating values of other valve actuators or heating boilers with the same group address, comparing them to their own actuating values and sending them from this object, if higher than the others. Sending the own actuating value to other valve actuators to initiate comparison. <p>Example: There is one master ("Transmission of maximum position" is set to "Every x min") actuator in the plant sending the maximum position of the system every X min, and other slaves ("Transmission of maximum position" is set to "No cyclical transmission") receive the group of maximum position and compare. If the position is larger than their own, slaves do nothing, otherwise they send their own actual positions via group maximum position. Then, the master updates the maximum position and sends a new one every X min, which becomes the maximum position in the KNX local plants after a while.</p> <p>Note: To avoid network congestion, the actuator doesn't respond to a maximum position frame if it just sent one 20 s ago.</p>
Summer mode	0 = Disable 1 = Enable	If this object receives value "1", summer mode is activated and the valve remains closed (actuating value 0 %). The valve remains in this position and the actuator ignores any received "Setpoint position" until the object receives value "0". After value "0" is received, the actuator is driven to the last "Setpoint position" (received before or during summer mode). The earliest time of change of this position is when the actuator receives a different "Setpoint position".
Night mode	0 = Disable 1 = Enable	If this object receives value "1", the actuator moves at reduced speed to reduce noise level. The actuator continues operating on reduced speed until the object receives value "0", thus returning the actuator to normal operation.
Office mode	0 = Disable 1 = Enable	<ul style="list-style-type: none"> If this object receives value "1", the LED switches off. If this object receives value "0", the LED resumes normal operation.
Overridden	0 = False	This object indicates whether the actuator is in override

Objects	Range	Description
	1 = True	mode. Any "Setpoint position" is ignored until the override is completed. If the "Emergency mode" object was set to "1" before the local override occurs, it is resumed once the override process is completed.
Emergency mode	0 = No alarm 1 = Alarm	This object sends an alarm telegram if no new actuating value is received via the bus during a defined period. In case of no new actuating values, the actuating value to be approached can be parametrized to "Backup position" or "Keep last position" under "Valve actuator" → "Standard settings" → "Reception of valve position setpoint" at the "Parameter" page. This object is only available if the "Backup timeout" parameter at the same location has been activated.
Start calibration	0 = trigger (0) 1 = trigger (1)	This object receives either value "0" or "1". The actuator maps the end position of the actuator to the valve and goes back to the control mode.
Calibration mode	0 = False 1 = True	This mode indicates that the actuator is being calibrated to find the end position of the valve.
Window contact	0 = close 1 = open	This object sends potential-free input window contact state "DI1", if used. The state is sent out periodically or upon change. If this object is linked with the "Forced position" object in a group address, the actuator drives the valve to the specified forced position (by receiving value "1" in the defined forced position). This object is available only if window contact "DI1" was activated under "External interface" at the "Parameter" page.
Condensation contact	0 = No alarm 1 = Alarm	This object sends potential-free input condensation contact state "DI2", if used. The state is sent out periodically or upon change. If this object is linked with e.g. the Comfort mode object of the controller in a group address, the actuator acts as an extension of the Comfort operating mode. This object is available only if condensation contact "DI2" was activated under "External interface" at the "Parameter" page.

Standard settings

<ul style="list-style-type: none"> — Valve actuator <ul style="list-style-type: none"> Standard settings Advanced Settings Valve characteristics — External interface <ul style="list-style-type: none"> Window contact Condensation contact 	<p>Transmission of valve position</p> <p>Hysteresis (COV) No COV, send when target position is reached ▾</p> <p>Cyclical transmission No cyclical transmission ▾</p> <p>Minimum repetition time 10 ▾ [s]</p> <hr/> <p>Reception of valve position setpoint</p> <p>Drive to new valve position setpoint (COV) At change of min. 5% ▾</p> <p>Backup timeout 1 ▾ [min.]</p> <p>Backup mode <input checked="" type="radio"/> Backup position <input type="radio"/> Keep last position</p> <p>Backup position 50 ▾ [%]</p> <hr/> <p>Transmission of emergency mode</p> <p>Cyclical transmission No cyclical transmission ▾</p>
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Parameters	Description
Hysteresis (COV)	<p>This function is not needed for normal operation. It is used mainly for diagnostics and troubleshooting.</p> <ul style="list-style-type: none"> No COV, send when target position is reached: The current valve position is only sent after position adjustment. At change of x %: The current valve position is sent if different from the last sent value as of a value of x %. When the defined actuating value is reached, the valve position is sent as well. This happens even if the change is not reached as of the last actuating value telegram. <p>NOTE: When no valve position is sent, the "Actual position" of the object is not linked with a group address.</p>
Cyclical transmission	<p>Defines if and how often the current valve position/actuating value is transmitted.</p> <ul style="list-style-type: none"> No cyclical transmission: The valve position is not transmitted. Every x min: The valve position is transmitted at intervals of x min.
Minimum repetition time	<p>Defines the minimum repetition time interval for sending "Actual position".</p>
Drive to new valve position setpoint (COV)	<p>Defines the change of received "Setpoint position" that triggers valve readjustment.</p> <ul style="list-style-type: none"> Position always accurate: The valve is positioned upon each actuating value change. At change of min. x %: The valve readjusts after actuating value changes over x %.
Backup timeout	<p>Time communication is lost before the actuator enters emergency mode. This parameter defines if and when reception of "Setpoint position" via bus is monitored.</p> <ul style="list-style-type: none"> 0 min: No monitoring of actuating values. x min: Time after which an actuating value is expected. The recommended time is twice the expected cycle time.

Parameters	Description
Backup mode	<p>Defines the valve position when no "Setpoint position" ("Emergency mode") is received. As soon as a new actuating value is received, the new position is assumed. This parameter is displayed only if a value larger than 0 min is selected for "Backup timeout".</p> <ul style="list-style-type: none"> Backup position: The valve is driven to a predefined position. This position is adjustable by dragging the value bar below. Keep last position: The valve is driven to the last position received.
Backup position	<p>Predefined but customizable position the valve can be driven to in "Emergency mode". This parameter is displayed only if a value larger than 0 min is selected for "Backup timeout".</p>
Cyclical transmission of emergency mode	<p>Defines the transmission time for emergency mode:</p> <ul style="list-style-type: none"> No cyclical transmission: No period transmission of the emergency mode. The state is transmitted only if changed. x min: Time interval of emergency mode state transmission.

Advanced settings

- Valve actuator

Standard settings

Advanced Settings

Valve characteristics

+ External interface

Forced mode

Valve position 50 [%]

Valve protection

Automatic decalcification function Inactive Active

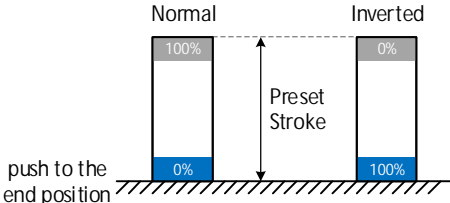
Transmission of maximum position

Cyclical transmission None; send only if own actuating value is higher ▾

Valve calibration

Calibration strategy Strategy 1 Strategy 2

Parameters	Description
Valve position	<p>Predefined but customizable valve position when "Forced mode" is activated.</p>
Automatic decalcification function	<p>Activates the valve protection function.</p> <ul style="list-style-type: none"> Inactive: Valve protection is not executed. Active: The valve is fully opened and closed once if the valve position has not changed for 7 days.

Parameters	Description
Cyclical transmission (Transmission of maximum position)	<p>Defines the time interval for sending the actuating value with object "Maximum position".</p> <ul style="list-style-type: none"> • If there is more than one device (valve actuator or heating boiler) in a plant, option "No cyclical transmission" must be selected. • If there is only one device (valve actuator or heating boiler) in a plant, the transmission cycle for maximum position can be parametrized into every x min to define the time when the device initiates comparison of actuating values by sending its own value.
Cyclical transmission (Transmission of overridden mode)	<p>Defines the transmission period of the overridden mode:</p> <ul style="list-style-type: none"> • No cyclical transmission: No period transmission of the "Overridden" mode. The state is transmitted only when changed. • x min: Time interval of overridden mode transmission.
Calibration strategy	<p>Two calibration strategies are available:</p> <ul style="list-style-type: none"> • If the first strategy is selected, the valve is measured during a calibration run (e.g. after reset) and the "valve open" and "valve closed" positions are stored. The calibration run is performed twice after download and the resulting values are compared for plausibility. The calibration runs max. three times until two successive matching value pairs are measured. These values are stored and the positions used for future runs. The measured values are compared to the values saved during calibration so that the process is only performed once for plausibility. • If the second strategy is selected, only the "Open" valve position is calculated by working back a set path from the closing position. To close the valve, the actuator pushes out the tappet until the set force is exerted on the valve. <p>If the second strategy is selected, as shown below, the stroke is calculated based on the position where the actuator pushes the valve to the end regardless of the parameter "Opening/closing direction" set to "Normal (closed with pushed tappet)" or "Inverted (open with pushed tappet)". When combining strategy 2 with inverted mode, set "Calibration Stroke" to a proper value and make sure normally-closed valves can be fully closed.</p> 

Valve characteristics

- Valve actuator
- Standard settings
- Advanced Settings
- Valve characteristics
- + External interface

Mode of operation of valve

Opening/closing direction Normal (closed with pushed tappet)
 Inverted (open with pushed tappet)

Valve adaptation

Method for additional pressing of rubber seal End limit point by position
 End limit point by force

Position for additional pressing of rubber seal 20 [1/100 mm]

i In order to avoid a damage of the seal, the value should be raised in steps of maximum 10 (representing 1/10 mm)

Valve position limitation

Maximum position 100 [%]

Minimum position 10 [%]

Behavior at minimum position underflow 0% 0% = 0%, otherwise min. valve position

Characteristic curve of valve

Valve type Linear characteristic curve ▾

Linear characteristic curve of valve

Volume flow	10%	20%	30%	40%	50%	60%	70%	80%	90%
Valve position [%]	10	20	30	40	50	60	70	80	90

Parameters	Description
Opening/closing direction	<p>Defines the operating mode of the installed valve and valve actuator.</p> <ul style="list-style-type: none"> Normal (closed with pushed tappet): The valve closes when the actuator stem extends. Suitable for all common valves. Inverted (open with pushed tappet): The valve opens when the actuator stem extends. Designed for inverted valves.
Method for additional pressing of rubber seal	<p>Defines how automatic adjustment is executed. Depending on the installed valve, optimized adaptation can be carried out as follows:</p> <ul style="list-style-type: none"> End limit point by force: Evaluate the end limit position by closing the valve with a defined force of 100 N during each positioning. End limit point by position: Evaluate the end limit position by closing the valve with not only a defined force of 100 N, but also an additional stroke that can be set in the "Position for additional pressing of rubber seal" field. Use this method if the valve cannot be fully closed by applying the defined force.
Maximum position	Defines the maximum position the valve can reach.

Parameters	Description
Minimum position	Defines the minimum valve position the valve can reach.
Behavior at minimum position underflow	Defines which valve position is reached if the position/actuating value is lower than the defined minimum position. <ul style="list-style-type: none"> 0%: The valve actuator closes the valve completely. 0 % = 0 %, otherwise min. valve position: The valve actuator reaches the defined minimum position.
Valve type	Defines the following valve types that typically have different characteristic curves: <ul style="list-style-type: none"> Linear characteristic curve: Use for valves with linear characteristic curves only. Valve positions are fixed and linearly mapped to volume flows. Own characteristic curve: Use for special valves with known characteristic curves. The valve actuator can be adapted to a specific characteristic curve by adjusting the valve positions where volume flows in different percentages are reached. Equal percentage characteristic curve: Use for valves with equal-percentage characteristics.

Window contact

- Valve actuator
- Standard settings
- Advanced Settings
- Valve characteristics
- External interface
- Window contact
- Condensation contact

Transmission of window state


Cyclical transmission No cyclical transmission ▾

Minimum repetition time 10 ▾ [s]

Type of connected window contact

Window open
 Contact closed (Normally open)
 Contact open (Normally closed)


Parameters	Description
Cyclical transmission	Defines if and how often the state of the connected window contact is sent. No cyclical transmission: Send only when the state changes. Every x min: The state is sent at intervals of x min.
Minimum repetition time	Defines the minimum interval of sending state changes. Upon frequent state changes, the parameter helps prevent bus traffic congestion.
Window open	Defines whether a normally closed contact (NCC) or a normally opened contact (NOC) is used as window contact.

	NOTICE
	"Window contact" is displayed in ETS regardless of the device connected to DI1 of the actuator. If, e.g., a presence detector is connected to DI1, "Window contact" displayed in ETS indicates presence.

Condensation contact

<ul style="list-style-type: none"> - Valve actuator Standard settings Advanced Settings Valve characteristics - External interface Window contact Condensation contact 	<p>Transmission of condensation state</p> <p>Cyclical transmission No cyclical transmission ▾</p> <p>Minimum repetition time 10 ▾ [s]</p> <hr/> <p>Type of connected condensation sensor</p> <p>Condensation <input checked="" type="radio"/> Contact closed (Normally open) <input type="radio"/> Contact open (Normally closed) </p>
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Parameters	Description
Cyclical transmission	Defines if and how often the state of the connected condensation contact is sent. No cyclical transmission: Send only when the state changes. Every x min: The state is sent at intervals of x min.
Minimum repetition time	Defines the minimum interval for sending state changes. Upon frequent state changes, the parameter helps prevent bus traffic congestion.
Condensation	Defines whether a normally closed contact (NCC) or a normally opened contact (NOC) is used as condensation contact.

	NOTICE
<p>"Condensation contact" is displayed in ETS regardless of the device connected to DI2 of the actuator. If, e.g., a presence detector is connected to DI2, "Condensation contact" displayed in ETS indicates presence.</p>	


Mode priorities

If different modes are triggered at the same time, the priorities are as follows (if applicable):

Priorities	Communication
1	Override control mode
2	Calibration mode
3	Decalcification
4	Forced mode
5	Summer mode
6	Setpoint
7	Emergency mode

If, e.g., forced mode is triggered when the actuator is in summer mode, the actuator enters forced mode. After forced mode is released, the actuator reenters summer mode.

System environments

	NOTICE
	Good knowledge about KNX networks and tool operation (depending on the system environment) is required.

To connect a PC with USB interface to a KNX network, an interface converter (e.g. OCI700, contained in OCI700.1) is required.

Supported system/network environment and available engineering and commissioning tools are:

System environment	Engineering and commissioning tools
KNX S-Mode	ETS5
KNX PL-Link	ABT Site 4.1.1 or higher

Engineering

Documentation of engineering

It is highly recommended to document all planning data and settings in a way that is easily accessible after a long time. This should be especially noted if parameter calculation or plant-specific adaptations have to be made during engineering and commissioning. For KNX LTE-mode systems, the engineering and commissioning protocol C3127 ([15]) is available. For KNX S-Mode systems, this functionality can be covered by ETS.

KNX S-Mode engineering

See Parameters and objects in KNX S-Mode [► 5] for information about parameters and KNX S-Mode objects.

Controllers should be KNX-certified so that the usual ETS workflows in KNX projects can apply.

For KNX S-Mode engineering, the required product data (*.knxprod) have to be downloaded from the Siemens website and imported into the ETS device catalog. To obtain the product data, navigate to www.siemens.com/hvac-td or www.siemens.com/openair and locate the "Downloads" section.

KNX PL-Link engineering

All engineering and commissioning work is done via the controller (room automation station), using ABT Site. ABT Site is never connected directly to an actuator.

Commissioning

Before commissioning, mount the actuator onto the valve using the correct adapter ring and apply bus voltage. The self-calibration starts automatically afterwards.

KNX S-Mode commissioning

Before KNX S-Mode commissioning, connect the device to KNX bus via the included bus connection terminals.

To integrate in KNX S-Mode devices, the usual S-Mode commissioning procedures apply to ETS5. The HMI conforms to the KNX standard. Briefly pressing the key opens device programming mode.

Download the ETS application file (.knxprod) from the GAMMA-TD page (www.siemens.com/gamma-td). After downloading the application to the actuator, it is available for KNX S-Mode communication.

KNX PL-Link commissioning

When the device is connected to KNX PL-Link bus, conduct manual commissioning as follows:

- a) Connect ABT Site to the room automation station and activate the online commissioning function.
- b) Load **Configuration** page and select **KNX PL-Link device**.
- c) Configure SSA118.09HKN in this page.
- d) Download the configured project to room automation station. After download is completed, SSA118.09HKN restarts automatically.

Revision history

Edition	Date	Changes	Section	Pages
2	August 2021	<ul style="list-style-type: none">• Minor editorial changes• Added information about PL-Link	---	---
1	January 2021	New document	---	---

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