

This appendix describes all the aspects of configuration, status and detail view.

Please note that some items are only available when the panel is used in a smoke ventilation solution (panel type WSC 310 or WSC 320).

Please note that some items are only available when the panel is used in a NV Embedded® solution and a NV Dongle has been inserted into the panel

All items are also available as help text in smoke control touch screen.

## Key to the signatures:



### **CONFIGURATION**

The icon for configuration indicates where it is possible to configure. All connected components (motors, break glass units, keypads, weather station etc.) as well as motor lines, motor groups and smoke zones are to be configured.

The smoke ventilation panel comes with a factory set PIN for access level 3. To be able to configure the PIN shall be entered. See chapter about 'Log in' in the installation instruction.



### **STATUS / SHOW DETAILS**

The status icon indicates the items that cannot be configured. These items are shown in order to provide information about the type of motor, type of input, type of output, the current opening degree etc



### **OPERATE**

The Operate icon indicates the items where commands can be given

## Main Menu content:

### **1 Configuration**

- 4 Motor line [ALL]
- 4 Motor line [1..13]
- 3 Motor group [1..13]
- 5 WSK-Link™ [ALL]
- 5 WSK-Link™ [1..30]
- 2 Smoke zone [ALL]
- 2 Smoke zone [1..13]
- 19 NV controller [Common]
- 19 NV controller [1..10]
- 23 Pulse schedule [Common]
- 23 Pulse schedule [1..10]
- 26 Building schedule [Common]
- 20 Mech. vent. controller
- 20 Mech. vent. controller, objects [1...10]
- 21 Heating controller [Common]
- 21 Heating controller, objects
- 25 Sun [Common]
- 25 Sun [1..10]
- 6 Local input [Common]
- 6 Local input [1..26]
- 7 Local output [1..24]

# Appendix – compact panel touch screen menus

Version: WSC 310/320 P, WCC 310/320 P SW Ver 2.05

ENGLISH

- 8 Weather
- 24 Cloud
- 9 Power supply
- 11 CAN
- 12 Network
- 10 Slots
- 10 Slots [1..5]
- 13 Fieldbus [Module]
- 13 Fieldbus [1..10]
- 16 BACnet [Common]
- 16 BACnet, object [1..10]
- 18 Modbus TCP [Common]
- 18 Modbus TCP [1..10]
- 22 AOnet [Common]
- 22 AOnet [1..23]
- 1 Login
- 1 Login [Inst]
- 15 Configuration files, USB [All]
- 15 Configuration files, USB [1..24]
- 0 System

## 2 Status



- 4 Motor line [1..13]
- 3 Motor group [1..13]
- 5 WSK-Link™ [ALL]
- 5 WSK-Link™ [1..30]
- 2 Smoke zone [ALL]
- 2 Smoke zone [1..13]
- 19 NV controller [Common]
- 19 NV controller [1..10]
- 23 Pulse schedule [Common]
- 23 Pulse schedule [1..10]
- 26 Building schedule [Common]
- 20 Mech. vent. controller
- 20 Mech. vent. controller, objects [1...10]
- 21 Heating controller [Common]
- 21 Heating controller, objects
- 25 Sun [Common]
- 25 Sun [1..10]
  - 6 Local input [Common]
  - 6 Local input [1..26]
  - 7 Local output [1..24]
- 8 Weather
- 24 Cloud
  - 9 Power supply
- 11 CAN
- 12 Network
- 10 Slots
- 10 Slots [1..5]
- 13 Fieldbus [Module]
- 13 Fieldbus [1..10]
- 16 BACnet, object [1..10]
- 18 Modbus TCP [Common]
- 18 Modbus TCP [1..10]
- 22 AOnet [Common]
- 22 AOnet [1...23]
  - 1 Login
  - 1 Login [Inst]
- 15 Configuration files, USB [All]
- 15 Configuration files, USB [1..24]
- 0 System

## 3 View all details

- 4 Motor line [ALL]
- 4 Motor line [1..13]
- 3 Motor group [1..13]
- 5 WSK-Link™ [ALL]
- 5 WSK-Link™ [1..30]
- 2 Smoke zone [ALL]
- 2 Smoke zone [1..13]
- 19 NV controller [Common]
- 19 NV controller [1..10]
- 23 Pulse schedule [Common]
- 23 Pulse schedule [1..10]
- 26 Building schedule [Common]
- 20 Mech. vent. controller
- 20 Mech. vent. controller, objects [1...10]
- 21 Heating controller [Common]
- 21 Heating controller, objects
- 25 Sun [Common]
- 25 Sun [1..10]
  - 6 Local input [Common]
  - 6 Local input [1..26]
  - 7 Local output [1..24]
- 8 Weather
- 24 Cloud
  - 9 Power supply
- 11 CAN
- 12 Network
- 10 Slots
- 10 Slots [1..5]
- 13 Fieldbus [Module]
- 13 Fieldbus [1..10]
- 16 BACnet [Common]
- 16 BACnet, object [1..10]
- 18 Modbus TCP [Common]
- 18 Modbus TCP [1..10]
- 22 AOnet [Common]
- 22 AOnet [1...23]
  - 1 Login
  - 1 Login [Inst]
- 15 Configuration files, USB [All]
- 15 Configuration files, USB [1..24]
- 0 System





## Configuration








### 4 Motor line [ALL]










PARAMETER:	DESCRIPTION:
<p><b>18 Output mode</b></p>	<p>Specify the mode of the all motor outputs. The output modes are: 'Not used': the output is disabled. 'MotorLink®': the output is used for MotorLink® motors. '±24V motor': the output is used for 'standard' ±24V motors.</p> <p>If 'Detect' is selected the output mode will be automatically detected. this is done by trying to communicate with MotorLink® motors. If this is possible the output mode will be set to 'MotorLink®' and all motors will be discovered, i.e. that is not subsequently necessary to press 'Discover on MotorLink®'.</p> <p>If it is not possible to communicate with MotorLink® motors the output mode will be set to '±24V motor'.</p> 
<p><b>16 Discover on MotorLink®</b></p>	<p>By pressing 'Discover MotorLink®' all the window motors and locking motors (WMBs) on all MotorLink® outputs are discovered. If no errors are found, this number will be equivalent to the actual number of connected motors and locking motors (WMBs).</p> 

## Configuration











### 4 Motor line [1..13]

PARAMETER:	DESCRIPTION:	
16 Motor type	Shows the type of the actual motor output.	
106 Output mode	<p>Specify the mode of the motor output. The output modes are: 'Not used': the output is disabled. 'MotorLink®': the output is used for MotorLink® motors. '±24V motor': the output is used for 'standard' ±24V motors.</p> <p>If 'Detect' is selected the output mode will be automatically detected. this is done by trying to communicate with MotorLink® motors. If this is possible the output mode will be set to 'MotorLink®' and all motors will be discovered, i.e. that is not subsequently necessary to press 'Discover on MotorLink®'.</p> <p>If it is not possible to communicate with MotorLink® motors the output mode will be set to '±24V motor'.</p> <p><b>Factory default value:</b> Not used</p>	
17 Expected no. of motors Displayed if motor type = MotorLink®	<p>Specify the number of motors that are connected on this motorline (except locking motors (WMBs)) or if there are magnetic clamps. Choose between: None = no motors on the motorline, 1 = one motor (1 x -1), 2 = two motors (2 x -2), 3=three motors (3 x -3), 4=four motors (4 x -4). Magnetic clamp = the output has voltage until it is triggered by alarm. Not set = factory setting. 'Discover' (is used in two situations): 1. When the touchscreen informs that there is a discrepancy between the specified number of motors and the detected number of motors. Press 'Discover' to discover the number of connected motors on the line. the number will be displayed and the number can now be compared to the entered number of motors. 2. When the cable connection has been changed, if a motor has been changed or the number of motors has been changed.</p> <p><b>Factory default value:</b> Not set</p>	
60 No. of found motors Displayed only if the motor configuration does not correspond with the discovered motor status.	Shows the number of motors detected on the motor line.	

<p><b>19 Motor configuration</b> Displayed if motor type = ±24V motor</p>	<p>Choose between: None = no motors connected on the motor line. No cable monitoring = the motors on the line has no cable monitoring. 3 wire cable monitoring = with 3 wire cable monitoring (notice: the type is to be set in the next step). Magnetic clamp = the output has voltage until it is triggered by alarm. Magnetic clamp, 3 w. monitoring = magnetic clamp and cable monitoring. Not set = factory setting.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>None</li> <li>No cable monitoring</li> <li>3 wire cable monitoring</li> <li>Magnetic clamp</li> <li>Magnetic clamp, 3 w. surveillance</li> <li>Not set</li> <li>Pyrotechnic gas generator</li> <li>Alarm output</li> <li>Sunscreening, WSA380</li> <li>Heating valve</li> <li>Sunscreening</li> </ul> <p><b>Factory default value:</b> Not set</p>	
<p><b>79 Wire cable check type</b> Displayed if 3 wire cable monitoring</p>	<p>Specify the type (WSA 423 or WSA 510) of the 3-wire cable check end module.</p> <p><b>Factory default value:</b> 10kOhm resistors (WSA 510)</p>	
<p><b>66 Stroke time</b> Displayed if motor type = ±24V motor</p>	<p>Specify the time it takes the motor to run from fully closed position to fully open.</p> <p><b>Factory default value:</b> 60 s</p>	
<p><b>131 Louvre time</b></p>	<p>Configures the time for a full louvre movement in milliseconds. This value is used to calculate the actual louvre position.</p> <p><b>Factory default value:</b> 1000 ms</p>	
<p><b>21 Motor group</b></p>	<p>Specify the number of the motor group to which the motorline is to be associated with. . One or more motor lines can be associated to the same motor group. All the motor lines in the group will be operated at the same time on the break glass unit/keypads of the group.</p> <p><b>Factory default value:</b> None</p>	
<p><b>132 Louvre position</b></p>	<p>Set the louvre position. After a up / down movment the louvres will be aligned to this position. 50% is horisontal, 0% is closed.</p> <p><b>Factory default value:</b> 50%</p>	
<p><b>150 Hand louvre position</b></p>	<p>Set the louvre position with hand priority. 50% is horisontal, 0% is closed.</p> <p><b>Factory default value:</b> 50%</p>	

<p><b>18 Expected no. of locking motors</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of locking motors (WMBs) that are connected on the motor line. If the number discrepancy the detected number a hardware error is displayed.</p> <p><b>Factory default value:</b> None</p>	
<p><b>61 No. of found locking motors</b> Displayed only if the motor configuration does not correspond with the discovered motor status.</p>	<p>Shows the actual number of locking motors (WMBs) detected on the motor line.</p>	
<p><b>37 Manual speed</b> Displayed if motor type = MotorLink®</p>	<p>Specify the opening speed that the motor shall run at when operated manually on a keypad. The speed is a percentage of the max speed of the motor.</p> <p><b>Factory default value:</b> 75%</p>	
<p><b>38 Auto. speed</b> Displayed if motor type = MotorLink®</p>	<p>Specify the opening speed that the motor shall run at when automatic comfort ventilation. The speed is a percentage of the max speed of the motor.</p> <p><b>Factory default value:</b> 30%</p>	
<p><b>40 Manual command - default auto. off period</b></p>	<p>Specify for how long the automatic/comfort priority is to be ignored after a manual action has been done e.g. an opening on the keypad.</p> <p><b>Factory default value:</b> 30 min.</p>	
<p><b>43 Retry during alarm</b></p>	<p>Specify if the motors are to be reactivated for 30 minutes during a heat / smoke situation. Function as specified in EN12101-9, 5.2.1.5.</p> <p><b>Factory default value:</b> No</p>	
<p><b>71 Max. unexpected overcurrent</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of times an overcurrent must be detected before the 0%-point of the motor is updated. When the motor position reaches fully open or fully closed the 'unexpected breaks' counter is reset. If the value is set to 0, the 0%-point will never be changed. It is recommended to set the value to 0 after the correct 0% point (closed) is found.</p>	
<p><b>90 Max. unexpected overcurrent (motor)</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of times an overcurrent must be detected before the 0%-point of the motor is updated. When the motor position reaches fully open or fully closed the 'unexpected breaks' counter is reset. If the value is set to 0, the 0%-point will never be changed. It is recommended to set the value to 0 after the correct 0% point (closed) is found.</p> <p><b>Factory default value:</b> 0</p>	
<p><b>92 Sequential control type</b></p>	<p>Configure the sequential control type None, open or close. When open or close is selected the sequential control becomes active. the parameters 'Position limitation', 'Invert' and 'Position logic' define the conditions under which the constrained motor line can move beyond the defined limitation.</p> <p><b>Factory default value:</b> None</p>	



<p><b>93 Sequential control position limit</b></p>	<p>Configures the position limitation when sequential control is active.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>102 Sequential control position limit</b></p>	<p>Configures the open / close position limitation when sequential control is active.</p> <p><b>OPTIONS:</b>          Closed 0%          Open 100%</p> <p><b>Factory default value:</b> Closed 0%</p>	
<p><b>94 Sequential control with</b></p>	<p>Configures what the Motor line is to control together with. Motor Line, Local input, KNX input, BACnet input or a delay timer.</p> <p><b>Factory default value:</b> Motor line</p>	
<p><b>95 Sequential control with no</b></p>	<p>Configures with which number the sequential control should work.</p> <p><b>Factory default value:</b> -</p>	
<p><b>96 Sequential control position logic</b></p>	<p>Configures if the sequential control is active if position is greater than or equal or less than or equal.</p> <p><b>Factory default value:</b> Greater than or equal</p>	
<p><b>97 Sequential control position</b></p>	<p>Configures the sequential control position threshold to compare the actual position of the controlled motor line with.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>103 Sequential control position</b></p>	<p>Configures the sequential control open / close position threshold with which the actual position of the sequential control motor line is compared with.</p> <p><b>OPTIONS:</b>          Closed 0%          Open 100%</p> <p><b>Factory default value:</b> Closed 0%</p>	
<p><b>98 Sequential control invert</b>          Displayed only if relevant</p>	<p>Configures if the state of the control input should be inverted.</p> <p><b>Factory default value:</b> No</p>	
<p><b>99 Sequential control max. wait time</b></p>	<p>Configures the maximal time a command is pending due to sequential control. If the timer runs out the window will continue its movement.</p> <p><b>Factory default value:</b> 0 s</p>	
<p><b>130 Sequential control only continue after wait if fire</b></p>	<p>Configures if a pending command only is executed after the wait timer expires if it is fire priority command.</p> <p><b>Factory default value:</b> Yes</p>	

**119 Pos. limitation watchdog**

Configures which position limitation signals that are monitored. Maximum position and close from fieldbus (KNX or Modbus RTU), BACnet and Modbus TCP can be monitored. If a signal is not updated within the specified timeout the windows will be closed to the safety position. Default timeout is 20 minutes.



**OPTIONS:**

- None
- Max FB
- Close FB
- Max. BACnet
- Close BACnet
- Max Modbus TCP
- Close Modbus TCP

**Factory default value:** None

**129 High priority open is 1st comfort priority**










Configures that 'high priority open' has the first comfort priority, i.e. higher than any position limitation (maximum positions or close).



**Factory default value:** Yes




## Configuration

### 3 Motor group [1..13]

PARAMETER:	DESCRIPTION:	
<b>16 Controlling smoke zone</b>	Specify the number of the smoke zone that controls the motor group.  <u>Factory default value:</u> 1	
<b>47 Controlling NV controller</b>	Specify the number of the NV Controller that controls the motor group.  <u>Factory default value:</u> -	
<b>31 Comfort open position</b>	Specify the position that is used in the event, when a 'comfort-open' command is sent to the motor group.  <u>Factory default value:</u> 15%	
<b>43 Comfort open close time</b>	Specify an optional time out to close the windows after a comfort open event. If 0 is specified the windows will not be closed automatically.  <u>Factory default value:</u> 0 s	
<b>50 Maximum position, unoccupied</b>	Maximum position, unoccupied  <u>Factory default value:</u> 0%	
<b>51 Maximum position, occupied</b>	Maximum position, occupied  <u>Factory default value:</u> 100%	
<b>52 Maximum position, secure</b>	Maximum position, secure  <u>Factory default value:</u> 50%	
<b>36 Use 'safety' from smoke zone</b>	Specify is the 'safety' signal from the smoke zone should be used in the motor group.  <u>Factory default value:</u> Yes	
<b>37 Wind directions, where to close during alarm</b>	Specify the wind directions where the windows in the motor group should close during wind dependant heat & smoke ventilation. The direction interval is $\pm 7^\circ$ around the shown direction.  <u>Factory default value:</u> None	










## Configuration





### 5 WSK-Link™ [ALL]














PARAMETER:	DESCRIPTION:	
<b>17 Bus topology is ring</b>	Specify if the bus topology of the break glass unit bus is closed (Yes) or not closed (No). If the setting is set to 'Yes' an error message will appear if the ring is broken.  <b>Factory default value:</b> No	
<b>24 Foreign outdoor temperature</b>	Foreign outdoor temperature  <b>Factory default value:</b> 0.0 °C	
<b>27 Send foreign outdoor temp. to AOnet</b>	Configures which controllers on the AOnet to send foreign outdoor temperature to.  <b>Factory default value:</b> None	










## Configuration

### 5 WSK-Link™ [1..30]

PARAMETER:	DESCRIPTION:	
35 Device type	<p>Device type</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>WSK 501/2</li> <li>WSK 503/4</li> <li>WSC 3XX</li> <li>Unknown</li> <li>WWS 100</li> </ul>	
16 Serial number	<p>Shows the serial number for the connected break glass unit. The serial number is unique for this break glass unit and the serial number is also stated on the label of the break glass unit.</p>	
17 Associated smoke zone	<p>Specify the smoke zone which the break glass unit shall operate.</p> <p><b>Factory default value:</b> None</p>	
37 Associated NV controller	<p>Specify the number of the NV controller where the sensor values are to be used.</p> <p><b>Factory default value:</b> None</p>	
31 Use comfort inputs in smoke zone	<p>Specify if the comfort inputs should be associated with the smoke zone.</p> <p><b>Factory default value:</b> Yes</p>	
89 Touch keys motor group	<p>Specify which motor group/groups that the touch keys shall control.</p> <p><b>Factory default value:</b> None</p>	
23 Comfort motor group	<p>Specify which motor group/groups that comfort keypad/-pads shall control.</p> <p><b>Factory default value:</b> None</p>	
55 Open input smoke zone	<p>Specify which smoke zone/zones that comfort Open input shall control.</p> <p><b>Factory default value:</b> None</p>	
56 Open input function in smoke zones	<p>Specify the function that the open input applies to the associated smoke zones.</p> <p><b>Factory default value:</b> None</p>	

<p><b>57 Open input target smoke zone output</b></p>	<p>Shows the actual output that the Open input applies to the smoke zones.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Line A</li> <li>Line B</li> <li>Reset</li> <li>Line C</li> <li>Line D</li> <li>Line E</li> <li>Line F</li> <li>Comfort stop</li> <li>Comfort open</li> <li>Comfort close</li> <li>Comfort safety</li> <li>Line A error</li> <li>Line B error</li> <li>Line C error</li> <li>Line D error</li> <li>Line E error</li> <li>Line F error</li> <li>Comfort safety error</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>58 Close input smoke zone</b></p>	<p>Specify which smoke zone / zones that comfort close input shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>59 Close input function in smoke zones</b></p>	<p>Specify the function that the close input applies to the associated smoke zones.</p> <p><b>Factory default value:</b> None</p>	
<p><b>60 Close input target smoke zone output</b></p>	<p>Shows the actual output that the Close input applies to the smoke zones.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Line A</li> <li>Line B</li> <li>Reset</li> <li>Line C</li> <li>Line D</li> <li>Line E</li> <li>Line F</li> <li>Comfort stop</li> <li>Comfort open</li> <li>Comfort close</li> <li>Comfort safety</li> <li>Line A error</li> <li>Line B error</li> <li>Line C error</li> <li>Line D error</li> <li>Line E error</li> <li>Line F error</li> <li>Comfort safety error</li> </ul> <p><b>Factory default value:</b> None</p>	






<p><b>28 Br.glass unit+sensor one smoke zone</b></p>	<p>Specify if there is connected smoke sensor to the break glass unit and also specify if the smoke detector shall release the same smoke zone or another smoke zone. In case where ex. the break glass unit of the smoke zone shall release the opening of the windows in the facade and the smoke detector shall release the opening of the roof windows, the function is set to 'Other smoke zone' (it/they are selected afterwards).</p> <p><b>Factory default value:</b> Not used</p>	
<p><b>29 Smoke sensor associated with smoke zone</b></p> <p>Displayed only if smoke detector is assigned to specific smoke zone(s)</p>	<p>Specify the smoke zone, that the break glass unit shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>51 Sensor 1 input config</b></p>	<p>Configures the external sensor input 1.</p> <p><b>Factory default value:</b> Move / Step</p>	
<p><b>68 Sensor input 1 function in the NV controller</b></p>	<p>Specify the function the Sensor input 1 has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>77 Use Sensor input 1 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>52 Sensor 2 input config</b></p>	<p>Configures the external sensor input 2.</p> <p><b>Factory default value:</b> Move / Step</p>	
<p><b>69 Sensor input 2 function in the NV controller</b></p>	<p>Specify the function the Sensor input 2 has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>78 Use Sensor input 2 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>53 Sensor input 3 config</b></p>	<p>Configures the external sensor input 3.</p> <p><b>Factory default value:</b> Move / Step</p>	
<p><b>70 Sensor input 3 function in the NV controller</b></p>	<p>Specify the function the Sensor input 3 has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>79 Use Sensor input 3 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>54 Sensor input 4 config</b></p>	<p>Configures the external sensor input 4.</p> <p><b>Factory default value:</b> Move / Step</p>	
<p><b>71 Sensor input 4 function in the NV controller</b></p>	<p>Specify the function the Sensor input 4 has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	

<p><b>80 Use Sensor input 4 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>49 Outdoor temperature</b></p>	<p>Outdoor temperature</p> <p><b>Factory default value:</b> None</p>	
<p><b>61 Outdoor temperature</b></p>	<p>Shows the outdoor temperature if configured.</p> <p><b>Factory default value:</b> None</p>	
<p><b>62 Send outdoor temp. to AOnet</b></p>	<p>Configures which controllers on the AOnet to send outdoor temperature to.</p> <p><b>Factory default value:</b> None</p>	
<p><b>25 Unit beep / flash 1 min. for locating</b></p>	<p>Specify if the WSK-Link™ unit shall beep 1 minute (WWS 100 will flash with green LED) to locate unit when configuration. The buzzer will beep for 1 min. or until the reset button on the break glass unit unit is pressed.</p>	
<p><b>24 Delete this unit</b></p>	<p>Specify if the this unit shall be deleted from the overview of units. If the unit is no longer in use or are replaced with a new unit, the unit shall be removed. Also remove cable connection to the unit, otherwise the unit will be redetected and assigned with the first available number on the overview.</p>	
<p><b>90 Outdoor temperature, offset</b></p>	<p>Specify if the temperature from the sensor should be offset.</p> <p><b>Factory default value:</b> None</p>	
<p><b>91 Temperature, offset</b></p>	<p>Specify if the temperature from the sensor should be offset.</p> <p><b>Factory default value:</b> None</p>	
<p><b>92 Temperature, sensor</b></p>	<p>Shows the temperature from the sensor before the offset is applied.</p> <p><b>Factory default value:</b> None</p>	












## Configuration

### 2 Smoke zone [ALL]

PARAMETER:	DESCRIPTION:	
20 High temperature threshold	Shows the high temperature threshold for generating error and activate smoke zone(s).	
22 Target smoke zones	Specify which smoke zone(s) a high temperature error shall control.  <u>Factory default value:</u> 1 2 3 4 5 6 7 8 9 10	
23 Target smoke zone function	Specify which command a high temperature error in the panel should use in the smoke zones. Factory setting = 'Line A'.  <u>OPTIONS:</u> - Line A Line B Line C Line D Line E Line F  <u>Factory default value:</u> Line A	
27 Associated WSK bus master smoke zone	This smoke zone is assigned to a master device over the WSK master/slave bus.	
30 WSK bus slave serial number	This is serial number shown in the 'Break glass unit' menu of the WSC master where this controller is connected as slave.	






## Configuration

### 2 Smoke zone [1..13]

PARAMETER:	DESCRIPTION:	
<b>25 Reset higher priority than break glass unit (Line A)</b>	Specify if a reset should have higher priority than a triggered break glass unit (Line A alarm).  <b>Factory default value:</b> No	
<b>26 Buzzer active during alarm</b>	Specify if the break glass unit shall buzz during alarm.  <b>Factory default value:</b> Yes	
<b>35 Controlled smoke zone</b>	Specify which smoke zone / zones that this smoke zone should control.  <b>Factory default value:</b> -	
<b>36 Function in target smoke zone</b> Displayed only if the smoke zone is linked to one or more smoke zones.	Specify which function this smoke zone should apply to the target smoke zone(s). Also specify if the controlling smoke zone are to reset the controlled smoke zone.  <b>Factory default value:</b> -	
<b>39 Error generates alarm</b>	Specify if an error in the smoke zone should trigger a smoke alarm in the smoke zone.  <b>Factory default value:</b> No	
<b>19 Line B (smoke detector) smoke opening pos.</b>	Specify the opening percentage to which the motors shall open, when line B (e.g. smoke detector) is triggered. 100% = the windows will open fully when triggered. 0%=the windows will close fully when triggered. For Standard actuators the position can only be 100% or 0%.  <b>Factory default value:</b> 100%	
<b>68 Use comfort commands</b>	Specify if the comfort commands should control the motor groups of this smoke zone.  <b>Factory default value:</b> Yes	
<b>69 Wind direction speed threshold</b>	Specify the wind speed threshold for wind direction dependant heat & smoke strategy to be used. If the wind speed is lower than this limit when an alarm occurs, the window opening will not be dependant of the wind direction.  <b>Factory default value:</b> 1.0 m/s	
<b>82 Buzzer active during error</b>	Specify if the break glass unit shall buzz during error.  <b>Factory default value:</b> #N/A	














## Configuration














### 19 NV controller [Common]













PARAMETER:	DESCRIPTION:	
17 Retransmit time	Retransmit time  <b>Factory default value:</b> 10 min.	
30 Use WSK-Link™ AOnet outdoor temp. in zones	Configures in which zones that the outdoor temperature from WSK-Link™ via AOnet should be used.  <b>Factory default value:</b> -	
34 Use AOnet function input	Configures if the AOnet function input should be used in the function input calculation.  <b>Factory default value:</b> No	
35 Send function input to AOnet	Configures which controllers on the AOnet to send function input to.  <b>Factory default value:</b> -	
36 Building mode output calculation	Configures how the resulting building mode output is calculated.  <b>Factory default value:</b> None	









## Configuration












### 19 NV controller [1..10]

PARAMETER:	DESCRIPTION:	
161 Name	Shows the assigned name of the NV controller.	
157 Building	Building  <u>Factory default value:</u> 1	
158 Part	Part  <u>Factory default value:</u> 1	
159 Zone	Zone  <u>Factory default value:</u> 1	
46 Room active	Room active  <u>Factory default value:</u> No	
47 Window control	Window control  <u>Factory default value:</u> Yes	
48 Light	Light  <u>Factory default value:</u> No	
49 Sunscreen control	Sunscreen control  <u>Factory default value:</u> No	
55 Temperature sensor	Specify whether a temperature sensor is connected in the room.  <u>Factory default value:</u> Yes	
56 CO <sub>2</sub> sensor	Specify whether a CO <sub>2</sub> (carbon dioxide) sensor is connected in the room.  <u>Factory default value:</u> Yes	
57 RH sensor	Specify whether a relative humidity (RH) sensor is connected in the room.  <u>Factory default value:</u> Yes	
54 PIR detector	Specify whether a PIR detector (presence detector) is connected in the room.  <u>Factory default value:</u> No	
176 Use building 'Function inputs sum'	Configures if the building 'Function inputs sum' should be used in zone.  <u>Factory default value:</u> Yes	








<p><b>177 Use building states</b></p>	<p>Configures if the building states should be used.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>185 Use Building night</b></p>	<p>Specify if Building night should be used.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>131 Room volume</b></p>	<p>Specify the room volume.</p> <p><b>Factory default value:</b> 250 m<sup>3</sup></p>	
<p><b>67 Comfort temperature set point</b></p>	<p>Specify the default base comfort temperature set point.</p> <p><b>Factory default value:</b> 24.0 °C</p>	
<p><b>98 Heating temp. setpoint offset, standby</b></p>	<p>Specify the default offset of the heating temperature setpoint during 'standby'.</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>99 Heating temp. setpoint offset, night</b></p>	<p>Specify the default offset of the heating temperature setpoint during 'night'.</p> <p><b>Factory default value:</b> -2.0 °K</p>	
<p><b>81 Ventilation temp. setpoint offset, standby</b></p>	<p>Ventilation temp. setpoint offset, standby</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>82 Ventilation temp. setpoint offset, night</b></p>	<p>Ventilation temp. setpoint offset, night</p> <p><b>Factory default value:</b> -2.0 °K</p>	
<p><b>97 Min. dead band between heating and ventilation</b></p>	<p>Specify the minimum difference between the ventilation and the heating set point. This ensures that no overlap will occur between the heating and the temperature controlled ventilation.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>132 Max. AER, winter extra</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter extra' for the room.</p> <p><b>Factory default value:</b> 4 1/hour</p>	
<p><b>133 Max. AER, winter</b></p>	<p>Specify the maximum allowed air exchange rate during winter for the room.</p> <p><b>Factory default value:</b> 5 1/hour</p>	
<p><b>134 Max. AER, winter eco.</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter eco.' for the room.</p> <p><b>Factory default value:</b> 6 1/hour</p>	
<p><b>135 Max. AER, summer extra</b></p>	<p>Specify the maximum allowed air exchange rate during 'summer extra' for the room.</p> <p><b>Factory default value:</b> 7 1/hour</p>	










<p><b>136 Max. AER, summer</b></p>	<p>Specify the maximum allowed air exchange rate during summer for the room.</p> <p><b>Factory default value:</b> 8 1/hour</p>	
<p><b>137 Max. AER, summer economy</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter economy' for the room.</p> <p><b>Factory default value:</b> 9 1/hour</p>	
<p><b>138 AER Temperature reduction reference, winter</b></p>	<p>This parameter rules the outdoor temperature where under the air exchange rate is reduced.</p> <p><b>Factory default value:</b> 16.0 °C</p>	
<p><b>139 AER Temperature reduction, winter</b></p>	<p>This parameter rules the reduction-rate in the air exchange rate when the outdoor temperature is below the reduction temperature reference.</p> <p><b>Factory default value:</b> 0.05 1/K</p>	
<p><b>140 Min. AER, winter</b></p>	<p>This parameter rules the minimum allowable air exchange rate.</p> <p><b>Factory default value:</b> 1 1/hour</p>	
<p><b>141 AER Temperature increase reference, winter</b></p>	<p>This parameter rules the outdoor temperature where over the air exchange rate is increased.</p> <p><b>Factory default value:</b> 18.0 °C</p>	
<p><b>142 AER Temperature increase, winter</b></p>	<p>This parameter rules the increase-rate of the air exchange rate when the outdoor temperature is over the increase temperature reference.</p> <p><b>Factory default value:</b> 0.10 1/K</p>	
<p><b>143 AER Temperature reduction reference, summer</b></p>	<p>This parameter rules the outdoor temperature where under the air exchange rate is reduced.</p> <p><b>Factory default value:</b> 18.0 °C</p>	
<p><b>144 AER Temperature reduction, summer</b></p>	<p>This parameter rules the reduction-rate in the air exchange rate when the outdoor temperature is below the reduction temperature reference.</p> <p><b>Factory default value:</b> 0.10 1/K</p>	
<p><b>145 Min. AER, summer</b></p>	<p>This parameter rules the minimum allowable air exchange rate.</p> <p><b>Factory default value:</b> 2 1/hour</p>	
<p><b>146 AER Temperature increase reference, summer</b></p>	<p>This parameter rules the outdoor temperature where over the air exchange rate is increased.</p> <p><b>Factory default value:</b> 23.0 °C</p>	
<p><b>147 AER Temperature increase, summer</b></p>	<p>This parameter rules the increase-rate of the air exchange rate when the outdoor temperature is over the increase temperature reference.</p> <p><b>Factory default value:</b> 0.20 1/K</p>	
















<p><b>50 Threshold for low room temperature</b></p>	<p>Specify the threshold when the windows are to close due to low room temperature. Note, the threshold should be lower than the desired night cooling threshold. If the room temperature is lower than the threshold* during summer mode, heating is activated until the room temperature again is higher.*if the heating threshold for the room is lower, this will be used as threshold for heating.</p> <p><b>Factory default value:</b> 17.0 °C</p>	
<p><b>51 Threshold for low outdoor temperature</b></p>	<p>Specify the threshold for low outdoor temperature used for determination of summer/winter mode. Summer mode: Summer mode is active if the outdoor temperature is above the limit mentioned above AND the room temperature is higher than the set point for cooling / ventilation. Winter mode: Winter mode is active if heating is needed in the room, i.e. room temperature is lower than the heating set point.</p> <p><b>Factory default value:</b> 10.0 °C</p>	
<p><b>52 Close handcontrolled windows at low room temperature</b></p>	<p>Specify whether the windows should close at low ambient temperature at a higher priority than hand operation, i.e. using the max. position output object.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>53 Occupancy time</b></p>	<p>Specify the expiry time of the occupancy timer. Each time a signal from the PIR sensor (presence/movement sensor) is received, the occupancy timer restarts.</p> <p><b>Factory default value:</b> 10 min.</p>	
<p><b>59 Condition for warm outdoor conditions</b></p>	<p>Specify the condition for changing the status to 'Warm outdoor conditions'</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>None</li> <li>High outdoor temp.</li> <li>High apparent temp.</li> <li>Outdoor higher than indoor temp.</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>60 Mode during 'Warm outdoor conditions'</b></p>	<p>Specify the mode during 'Warm outdoor conditions'.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Closed</li> <li>Only hand</li> <li>Pulse ventilation</li> </ul> <p><b>Factory default value:</b> Closed</p>	
<p><b>61 Threshold for high outdoor temp.</b></p>	<p>Specify the outdoor temperature threshold above which the status changes to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 35.0 °C</p>	
<p><b>62 Threshold for high apparent outdoor temperature</b></p>	<p>Specify the felt outdoor temperature threshold above which the status changes to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 30.0 °C</p>	












<p><b>63 Hysteresis</b></p>	<p>Specify the hysteresis for the calculation of 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>64 Temperature difference</b></p>	<p>Specify how much the outdoor temperature are to be higher than the room temperature before changing to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 2.0 °K</p>	
<p><b>65 Close manual controlled windows at mode change</b></p>	<p>Specify if manual controlled windows should be closed when the mode changes to 'Warm outdoor conditions'.The windows can subsequently be controlled manually.</p> <p><b>Factory default value:</b> No</p>	
<p><b>66 Enable temperature controlled ventilation</b></p>	<p>Specify if temperature controlled ventilation is enabled.Disables temperature controlled ventilation, but not night cooling during unoccupied building.If night cooling also needs to be disabled set the temperature offset for unoccupied building to 0.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>68 Min. ventilation set point</b></p>	<p>Specify the minimum allowable ventilation temperature threshold.Despite high CO<sub>2</sub> and RH effects the temperature threshold never go lower than this limit</p> <p><b>Factory default value:</b> 21.0 °C</p>	
<p><b>69 Max. allowed temperature drop</b></p>	<p>Specify the maximum allowable temperature drop.If the temperature drops more than this value below the current set point the windows are closed completely in one step.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>58 Clear 'auto. off' when room unoccupied</b></p>	<p>Specify whether automatic control should be enabled, when the room becomes unoccupied.</p> <p><b>Factory default value:</b> No</p>	
<p><b>160 Close at Auto Off</b></p>	<p>Configures if the windows in the zone should be closed (once) when automatic control is disabled in the zone.</p> <p><b>Factory default value:</b> No</p>	
<p><b>70 CO<sub>2</sub> level</b></p>	<p>Specify the CO<sub>2</sub> level above which the CO<sub>2</sub> level is to affect the natural ventilation.If the set point is exceeded the temperature set point will be lowered.</p> <p><b>Factory default value:</b> 1000 ppm</p>	
<p><b>71 CO<sub>2</sub> influence</b></p>	<p>Specify the CO<sub>2</sub> influence on the temperature set point.The temperature set point is reduced by the parameter value multilied the current CO<sub>2</sub> level, when the level rises above the CO<sub>2</sub> threshold.</p> <p><b>Factory default value:</b> 0.005</p>	
<p><b>72 RH threshold</b></p>	<p>Specify the set point above which the relative humidity is to affect the natural ventilation.If this threshold is exceeded the temperature threshold will be lowered.</p> <p><b>Factory default value:</b> 50%</p>	







<p><b>73 RH influence</b></p>	<p>Specify the relative humidity's influence on the temperature set point. The temperature set point is reduced by the parameter value multiplied with the current relative humidity, when the level rises above the relative humidity threshold.</p> <p><b>Factory default value:</b> 0.020 K/%</p>	
<p><b>74 Ventilation, RH Kd</b></p>	<p>Ventilation, RH Kd</p> <p><b>Factory default value:</b> 0.000</p>	
<p><b>75 Proportional gain</b></p>	<p>Specify the proportional gain, i.e. relationship between temperature error (actual temperature - temperature set point) and how much the windows will open when adjusted. If the proportional gain is 20%/K, the window opening are to increase 20% for each 1 degree temperature error which are adjusted.</p> <p><b>Factory default value:</b> 0.200 1/K</p>	
<p><b>76 Differential gain</b></p>	<p>Specify the differential gain, i.e. how much a temperature increase between two adjustments are to affect on how much the windows open when adjusted.</p> <p><b>Factory default value:</b> 0.050 1/(Kmin.<sup>2</sup>)</p>	
<p><b>77 Wind reduction set point</b></p>	<p>Specify the wind speed set point for when each step of opening the windows is to be reduced due to high wind speed. Below this threshold each opening step is not reduced. Notice that closing steps are not reduced.</p> <p><b>Factory default value:</b> 2.0 m/s</p>	
<p><b>78 Closing gain</b></p>	<p>Specify how much larger the closing steps of the windows are in proportion to the opening steps. By specifying a closing gain that is higher than the opening gain the windows will close in a shorter time than they open. The gain can also be used to prioritise that one group of windows opens faster than another group.</p> <p><b>Factory default value:</b> 2.0</p>	
<p><b>85 Pulse ventilation, enable</b></p>	<p>Specify if the automatic demand-driven pulse ventilation is to be enabled. The ventilation is performed when the CO<sub>2</sub> or RH values exceeds the configured thresholds. The ventilation pulse duration and the interval between the pulses are calculated from the actual measured values and parameter settings. The maximum window opening is limited by the outdoor temperature and the wind speed. It should be considered, if a demand-driven pulse ventilation should be used in combination with ventilation on fixed schedule, as the two ventilation strategies are controlled entirely independant of each other. Demand-driven pulse ventilation is only used during winter mode.</p> <p><b>Factory default value:</b> Yes</p>	

<p><b>83 Pulse vent./ventilate, CO<sub>2</sub> threshold</b></p>	<p>Specify the lower CO<sub>2</sub> threshold at which the pulse ventilation or venting is done. When the CO<sub>2</sub> level exceeds this threshold, the demand driven pulse ventilation is performed. Venting at fixed times also use this threshold. If the ventilation is specified to 'Automatic', the ventilation is only performed if the CO<sub>2</sub> level is higher than this threshold.</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>84 Pulse vent./ventilate, RH threshold</b></p>	<p>Specify the lower RH threshold at which the pulse ventilation or venting is done. When the RH level exceeds this threshold the demand driven pulse ventilation is performed. Venting at fixed times also use this threshold. If the ventilation is configured to 'Automatic', the ventilation is only performed if the RH level is higher than this threshold.</p> <p><b>Factory default value:</b> 70%</p>	
<p><b>86 Pulse ventilation, min. duration</b></p>	<p>Specify the shortest duration of a pulse ventilation during the demand-driven pulse ventilation.</p> <p><b>Factory default value:</b> 30 s</p>	
<p><b>87 Pulse ventilation, max. duration</b></p>	<p>Specify the longest duration of a pulse ventilation during demand-driven pulse ventilation. Notice, that the actual pulse ventilation duration is calculated from the measured values and thresholds for CO<sub>2</sub> and RH and influential parameters. If the desired CO<sub>2</sub> and RH level is reached before the ending of the max. pulse limit, the windows will close.</p> <p><b>Factory default value:</b> 180 s</p>	
<p><b>88 Pulse ventilation, min. Interval between</b></p>	<p>Specify the shortest interval between two pulse ventilations.</p> <p><b>Factory default value:</b> 30 min.</p>	
<p><b>89 Max. interval between two pulses</b></p>	<p>Specify the longest interval between two pulse ventilations. The actual interval is calculated from measured values and thresholds for CO<sub>2</sub> and RH and influential parameters. Note that although time since last demand-driven pulse ventilation is exceeded, the ventilation is not performed before there is an actual demand.</p> <p><b>Factory default value:</b> 60 min.</p>	
<p><b>90 Pulse ventilation, temperature influence</b></p>	<p>Specify the temperature influence on the pulse ventilation/ventilation. If the temperature exceeds the current threshold for ventilation the amount of ventilation is gradually increased. If the value is eg. 0.2 1/K the ventilation will be at a maximum when the current temperature is 5 degree higher than the set point.</p> <p><b>Factory default value:</b> 0.2 1/K</p>	
<p><b>183 Pulse vent., threshold for low room temperature</b></p>	<p>Specify the threshold when the windows are to close due to low room temperature.</p> <p><b>Factory default value:</b> 22.0 °C</p>	
<p><b>182 Trickle vent., number of pulses without reduction</b></p>	<p>Shows the number of pulses where the CO<sub>2</sub> has not decreased below the CO<sub>2</sub> limit.</p> <p><b>Factory default value:</b> 0</p>	

178 Trickle ventilation enabled	Configures if Trickle ventilation is enabled.	
	<u>Factory default value:</u> No	
179 Trickle ventilation, number of pulses before	Configures the number of pulses without the CO2 level is decreased under the limit, before Trickle ventilation is started.	
	<u>Factory default value:</u> 5	
180 Trickle vent., CO2 for min.	Configures the CO2 level for min. opening during Trickle ventilation.	
	<u>Factory default value:</u> 800 ppm	
181 Trickle vent., CO2 for max.	Configures the CO2 level for max. opening during Trickle ventilation.	
	<u>Factory default value:</u> 2000 ppm	
184 Trickle vent., threshold for low room temperature	Specify the threshold when the windows are to close due to low room temperature.	
	<u>Factory default value:</u> 21.0 °C	
91 Ventilate fixed duration	Ventilate fixed duration	
	<u>Factory default value:</u> 300 s	
92 Wind maximum opening reduction K	Wind maximum opening reduction K	
	<u>Factory default value:</u> 1.0	
93 Wind maximum opening reduction Exp	Wind maximum opening reduction Exp	
	<u>Factory default value:</u> 1	
94 Use wind chill	Use wind chill	
	<u>Factory default value:</u> No	
95 Wind chill reference temperature	Wind chill reference temperature	
	<u>Factory default value:</u> 25.0 °C	
101 Winter, Extra, CO2 offset	Winter, Extra, CO2 offset	
	<u>Factory default value:</u> -200 ppm	
102 Winter, Eco., CO2 offset	Winter, Eco., CO2 offset	
	<u>Factory default value:</u> 200 ppm	
103 Winter, Extra, Ventilation when unoccupied	Winter, Extra, Ventilation when unoccupied	
	<u>Factory default value:</u> Yes	
104 Winter, Normal, Ventilation when unoccupied	Winter, Normal, Ventilation when unoccupied	
	<u>Factory default value:</u> No	
105 Winter, Eco., Heating setpoint offset	Winter, Eco., Heating setpoint offset	
	<u>Factory default value:</u> -1.0 °K	

<p><b>106 Winter, Eco., night heating setpoint offset</b></p>	<p>Winter, Eco., night heating setpoint offset</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>107 Winter, Normal, Pulse Ventilation</b></p>	<p>Winter, Normal, Pulse Ventilation</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>108 Summer, Extra, temperature setpoint offset</b></p>	<p>Summer, Extra, temperature setpoint offset</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>109 Summer, Eco., temperature setpoint offset</b></p>	<p>Summer, Eco., temperature setpoint offset</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>110 Summer, Extra, CO2 offset</b></p>	<p>Summer, Extra, CO2 offset</p> <p><b>Factory default value:</b> -200 ppm</p>	
<p><b>111 Summer, Eco., CO2 offset</b></p>	<p>Summer, Eco., CO2 offset</p> <p><b>Factory default value:</b> 200 ppm</p>	
<p><b>112 Summer, Extra outdoor temp. setpoint offset</b></p>	<p>Summer, Extra outdoor temp. setpoint offset</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>113 Summer, Eco., outdoor temp. setpoint offset</b></p>	<p>Summer, Eco., outdoor temp. setpoint offset</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>114 Summer, Eco., Night Cooling temp. setpoint offset</b></p>	<p>Summer, Eco., Night Cooling temp. setpoint offset</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>96 Temperature sensor value calculation method</b></p>	<p>Configure how the resulting value of multiple temperature sensors are calculated.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Average</li> <li>Minimal</li> <li>Maximum</li> </ul> <p><b>Factory default value:</b> Average</p>	
<p><b>115 CO2 sensor value calculation method</b></p>	<p>Configure how the resulting value of multiple CO2 sensors are calculated.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Average</li> <li>Minimal</li> <li>Maximum</li> </ul> <p><b>Factory default value:</b> Average</p>	















<b>100 RH sensor value calculation method</b>	Configure how the resulting value of multiple relative humidity sensors are calculated.  <b>OPTIONS:</b> Average Minimal Maximum  <b>Factory default value:</b> Average	
<b>117 Use local wind speed</b>	Configures if locally connected weather sensor should be used. Alternatively the data from fieldbus is used.  <b>Factory default value:</b> Yes	
<b>118 Use local outdoor temperature</b>	Configures if locally connected outdoor temperature sensor should be used. Alternatively the data from fieldbus is used.  <b>Factory default value:</b> Yes	
<b>119 Use local rain</b>	Configures if locally connected rain sensor should be used. Alternatively the data from fieldbus is used.  <b>Factory default value:</b> Yes	











## Configuration

### 23 Pulse schedule [Common]

## Configuration


### 23 Pulse schedule [1..10]

PARAMETER:	DESCRIPTION:	
16 Pulse 1 time	Pulse 1 time <u>Factory default value:</u> 00:00 A A	
17 Pulse 1 settings	Pulse 1 settings <u>Factory default value:</u> None 5 min.	
18 Pulse 2 time	Pulse 2 time <u>Factory default value:</u> 02:00 A A	
19 Pulse 2 settings	Pulse 2 settings <u>Factory default value:</u> None 5 min.	
20 Pulse 3 time	Pulse 3 time <u>Factory default value:</u> 04:00 A A	
21 Pulse 3 settings	Pulse 3 settings <u>Factory default value:</u> None 5 min.	
22 Pulse 4 time	Pulse 4 time <u>Factory default value:</u> 06:00 A A	
23 Pulse 4 settings	Pulse 4 settings <u>Factory default value:</u> None 5 min.	
24 Pulse 5 time	Pulse 5 time <u>Factory default value:</u> 08:00 A A	
25 Pulse 5 settings	Pulse 5 settings <u>Factory default value:</u> None 5 min.	
26 Pulse 6 time	Pulse 6 time <u>Factory default value:</u> 10:00 A A	
27 Pulse 6 settings	Pulse 6 settings <u>Factory default value:</u> None 5 min.	
28 Pulse 7 time	Pulse 7 time <u>Factory default value:</u> 12:00 A A	
29 Pulse 7 settings	Pulse 7 settings <u>Factory default value:</u> None 5 min.	

<b>30 Pulse 8 time</b>	Pulse 8 time  <u>Factory default value:</u> 14:00 A A	
<b>31 Pulse 8 settings</b>	Pulse 8 settings  <u>Factory default value:</u> None 5 min.	
<b>32 Pulse 9 time</b>	Pulse 9 time  <u>Factory default value:</u> 16:00 A A	
<b>33 Pulse 9 settings</b>	Pulse 9 settings  <u>Factory default value:</u> None 5 min.	
<b>34 Pulse 10 time</b>	Pulse 10 time  <u>Factory default value:</u> 18:00 A A	
<b>35 Pulse 10 settings</b>	Pulse 10 settings  <u>Factory default value:</u> None 5 min.	
<b>36 Pulse 11 time</b>	Pulse 11 time  <u>Factory default value:</u> 20:00 A A	
<b>37 Pulse 11 settings</b>	Pulse 11 settings  <u>Factory default value:</u> None 5 min.	
<b>38 Pulse 12 time</b>	Pulse 12 time  <u>Factory default value:</u> 22:00 A A	
<b>39 Pulse 12 settings</b>	Pulse 12 settings  <u>Factory default value:</u> None 5 min.	

## Configuration

### 26 Building schedule [Common]










PARAMETER:	DESCRIPTION:	
<b>17 Feature is licensed</b>	This function is enable by a USB license stick.  <u>Factory default value:</u> Yes	

## Configuration











### 20 Mech. vent. controller















## Configuration
















### 20 Mech. vent. controller, objects [1...10]





PARAMETER:	DESCRIPTION:	
21 Mech. vent. control	Mech. vent. control  <u>Factory default value:</u> No	
47 Mech. vent. type	Mech. vent. type  <u>OPTIONS:</u> Assisting mech. vent. ZoneVent™ FutureVent™  <u>Factory default value:</u> Assisting mech. vent.	
16 Mech. vent. override, Fieldbus	Show the override input received from fieldbus.  <u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override	<u>Factory default value:</u> No	
16 Mech. vent. override, Fieldbus	Show the override input received from Modbus TCP.  <u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override	<u>Factory default value:</u> No	
16 Mech. vent. override, Fieldbus	Show the local override.  <u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override	<u>Factory default value:</u> No	
67 BACnet, temp. setpoint offset	Shows the temperature setpoint offset from BACnet.  <u>Factory default value:</u> 0.0 °K	
68 Fieldbus, temp. setpoint offset	Shows the temperature setpoint offset from fieldbus.  <u>Factory default value:</u> 0.0 °K	
69 Modbus TCP, temp. setpoint offset	Shows the temperature setpoint offset from Modbus TCP.  <u>Factory default value:</u> 0.0 °K	
22 Temperature offset for start	Specify how much the temperature must rise above the current ventilation temperature set point before the mechanical ventilation is activated due to high temperature. The temperature set point is also affected by the current setting of the temperature set point adjustment for the room.  <u>Factory default value:</u> 0.0 °K	



<p><b>23 Temperature gain</b></p>	<p>Specify the influence of the temperature on the mechanical ventilation output. If this parameter is set to e.g. 50 %/K, 1 degree temperature difference will influence the mechanical ventilation output with 50 %. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventilation output.</p> <p><b>Factory default value:</b> 0.5 %/K</p>	
<p><b>24 CO<sub>2</sub> level for start</b></p>	<p>Specify the CO<sub>2</sub> level, where the CO<sub>2</sub> level are to influence the mechanical ventilation output. The contribution of CO<sub>2</sub> increases linearly between the parameter for the 'start' and 'full' level. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventilation output.</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>25 CO<sub>2</sub> level for full output</b></p>	<p>Specify the CO<sub>2</sub> level, where the mechanical ventilation output is 100 % due to CO<sub>2</sub>. The contribution of CO<sub>2</sub> increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventilation output.</p> <p><b>Factory default value:</b> 2000 ppm</p>	
<p><b>26 RH level start</b></p>	<p>Specify the relative humidity level, where the relative humidity levels are to influence the mechanical ventilation output. The contribution of the relative humidity increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventilation output.</p> <p><b>Factory default value:</b> 60%</p>	
<p><b>27 RH level full output</b></p>	<p>Specify the relative humidity level where the mechanical ventilation output is 100 % due to the relative humidity. The contribution of the relative humidity increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventilation output.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>28 Mech. vent. temperature offset, summer</b></p>	<p>Mech. vent. temperature offset, summer</p> <p><b>Factory default value:</b> 2.0 °K</p>	
<p><b>29 Mech. vent. temperature gain, summer</b></p>	<p>Mech. vent. temperature gain, summer</p> <p><b>Factory default value:</b> 0.5 %/K</p>	
<p><b>30 Mech. vent. CO<sub>2</sub> Level without output, summer</b></p>	<p>Mech. vent. CO<sub>2</sub> Level without output, summer</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>31 Mech. vent. CO<sub>2</sub> Level for full output, summer</b></p>	<p>Mech. vent. CO<sub>2</sub> Level for full output, summer</p> <p><b>Factory default value:</b> 2000 ppm</p>	
<p><b>32 Mech. vent. RH level without output, summer</b></p>	<p>Mech. vent. RH level without output, summer</p> <p><b>Factory default value:</b> 60%</p>	

<p><b>33 Mech. vent. RH level for full output, summer</b></p>	<p>Mech. vent. RH level for full output, summer</p> <p><u>Factory default value:</u> 100%</p>	
<p><b>34 Output threshold for On</b></p>	<p>Specify the threshold of the output, where the binary mechanical ventilation output is activated.</p> <p><u>Factory default value:</u> 0.0</p>	
<p><b>35 Mech. vent. output gain</b></p>	<p>Mech. vent. output gain</p> <p><u>Factory default value:</u> 100.0</p>	
<p><b>36 Mech. vent. output gain unoccupied</b></p>	<p>Mech. vent. output gain unoccupied</p> <p><u>Factory default value:</u> 100.0</p>	
<p><b>37 Mech. vent. output gain FutureVent™</b></p>	<p>Mech. vent. output gain FutureVent™</p> <p><u>Factory default value:</u> 60.0</p>	
<p><b>38 Mech. vent. output gain, High, FutureVent™</b></p>	<p>Mech. vent. output gain, High, FutureVent™</p> <p><u>Factory default value:</u> 80.0</p>	
<p><b>39 Mech. vent. output gain, Empty building, FutureVent™</b></p>	<p>Mech. vent. output gain, Empty building, FutureVent™</p> <p><u>Factory default value:</u> 100.0</p>	
<p><b>40 Mech. vent. output gain, High threshold, FutureVent™</b></p>	<p>Mech. vent. output gain, High threshold, FutureVent™</p> <p><u>Factory default value:</u> 1.2</p>	
<p><b>41 Mech. vent. transmit threshold</b></p>	<p>Mech. vent. transmit threshold</p> <p><u>Factory default value:</u> 2.0</p>	
<p><b>42 Mech. vent., use user temperature offset</b></p>	<p>Mech. vent., use user temperature offset</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>43 Allow mechanical ventilation during winter</b></p>	<p>Specify if the mechanical ventilation may be used during winter. The setting can be used if an air condition unit is used.</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>44 Allow the mechanical ventilation to run when the building is unoccupied</b></p>	<p>Specify if the mechanical ventilation may be used when the building is unoccupied. The setting can be used if an air condition unit is used.</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>45 Allow mechanical ventilation running when the room is unoccupied</b></p>	<p>Specify if the mechanical ventilation may be used when the room is unoccupied. The setting can be used if an air condition unit is used.</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>46 Only use mechanical ventilation during warm outdoor conditions</b></p>	<p>Specify whether the mechanical ventilation must only be used during warm outdoor conditions, e.g. if an air conditioning unit is being controlled.</p> <p><u>Factory default value:</u> No</p>	

<p><b>48 Mech. vent., FutureVent™ window open threshold</b></p>	<p>Mech. vent., FutureVent™ window open threshold</p> <p><u>Factory default value:</u> 5%</p>	
<p><b>49 Air supply temperature gain</b></p>	<p>Air supply temperature gain</p> <p><u>Factory default value:</u> -2.0 %/K</p>	
<p><b>50 Min. air supply temperature setpoint</b></p>	<p>Min. air supply temperature setpoint</p> <p><u>Factory default value:</u> 18.0 °C</p>	
<p><b>51 Air supply temperature setpoint offset</b></p>	<p>Air supply temperature setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>52 Winter, Extra, CO2 offset</b></p>	<p>Winter, Extra, CO2 offset</p> <p><u>Factory default value:</u> -200 ppm</p>	
<p><b>53 Winter, Eco., CO2 offset</b></p>	<p>Winter, Eco., CO2 offset</p> <p><u>Factory default value:</u> 200 ppm</p>	
<p><b>54 Winter, Extra, Ventilation when unoccupied</b></p>	<p>Winter, Extra, Ventilation when unoccupied</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>55 Winter, Normal, Ventilation when unoccupied</b></p>	<p>Winter, Normal, Ventilation when unoccupied</p> <p><u>Factory default value:</u> No</p>	
<p><b>56 Winter, Eco., Heating setpoint offset</b></p>	<p>Winter, Eco., Heating setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>57 Winter, Eco., night heating setpoint offset</b></p>	<p>Winter, Eco., night heating setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>58 Winter, Normal, Pulse Ventilation</b></p>	<p>Winter, Normal, Pulse Ventilation</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>59 Summer, Extra temperature setpoint offset</b></p>	<p>Summer, Extra temperature setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>60 Summer, Eco. temperature setpoint offset</b></p>	<p>Summer, Eco. temperature setpoint offset</p> <p><u>Factory default value:</u> 1.0 °K</p>	
<p><b>61 Summer, Extra, CO2 offset</b></p>	<p>Summer, Extra, CO2 offset</p> <p><u>Factory default value:</u> -200 ppm</p>	
<p><b>62 Summer, Eco., CO2 offset</b></p>	<p>Summer, Eco., CO2 offset</p> <p><u>Factory default value:</u> 200 ppm</p>	

<b>63 Summer, Extra outdoor temp. setpoint offset</b>	Summer, Extra outdoor temp. setpoint offset  <u>Factory default value:</u> 1.0 °K	
<b>64 Summer, Eco., outdoor temp. setpoint offset</b>	Summer, Eco., outdoor temp. setpoint offset  <u>Factory default value:</u> -1.0 °K	
<b>65 Summer, Eco., Night Cooling temp. setpoint offset</b>	Summer, Eco., Night Cooling temp. setpoint offset  <u>Factory default value:</u> -1.0 °K	
<b>66 Summer, Extra, mech. vent. during unoccupied</b>	Summer, Extra, mech. vent. during unoccupied  <u>Factory default value:</u> Yes	

## Configuration



### 21 Heating controller [Common]

## Configuration

### 21 Heating controller, objects








## Configuration

### 25 Sun [Common]

PARAMETER:	DESCRIPTION:	
<b>16 Debug</b>	Debug  <u>Factory default value:</u> No	
<b>17 Licensed features</b>	Shows functions enabled by the USB license stick.  <u>Factory default value:</u> Yes	














## Configuration








25 Sun [1..10]

PARAMETER:	DESCRIPTION:	
17 Enabled	Specify if the controller is enabled.  <u>Factory default value:</u> No	
16 Illumination	Illumination  <u>Factory default value:</u> 0	
18 NV Controller	Specify the associated NV Controller  <u>Factory default value:</u> -	
19 Auto. Off	Specify if the automatic control is turned off.  <u>Factory default value:</u> No	
20 Use zone occupancy	Specify if the NV controllers 'occupancy' is to be used.  <u>Factory default value:</u> No	
21 Temp. hysteresis	Specify the hysteresis used for the outdoor temperature.  <u>Factory default value:</u> 2.0 °K	
22 Reposition time	Specify the repositioning time for unchanged values. 0 means no repositioning.  <u>Factory default value:</u> 10 min.	

## Configuration











### 6 Local input [Common]

PARAMETER:	DESCRIPTION:	
16 Local safety active	Indicates that one or more input with 'Safety function' is active.	
17 WSK Link™ master safety active	Indicates that safety is received from master on WSK Link™ (X5 / X6).	
18 WSK Link™ slave input active	Indicates that safety is received from WSK Link™ (X5 / X6).	
19 WSK Link™ slave output active	Indicates that safety is sent to WSK Link™ (X11). Sum of 'Local' and 'Slave input'.	
24 Safety from AOnet	Shows the safety received from AOnet.  <u>Factory default value:</u> No	
20 Safety sum	This is the sum of 'Local', 'WSK Link™ master' and 'WSK Link™ slave input' safety. This is used by this controller.	
21 Control motor groups	Specify which motor group(s) the 'Safety sum' shall control.  <u>Factory default value:</u> -	
22 Control smoke zones	Specify which smoke zone/zones the 'Safety sum' shall control.  <u>Factory default value:</u> -	
23 Send local safety to AOnet	Configures which controllers on the AOnet to send the local safety to.  <u>Factory default value:</u> -	
25 Usage of safety from AOnet	Configure if safety from AOnet is used. If received it will be set to 'present' unless it is set to 'not used'.  <u>Factory default value:</u> Not present	
26 Safety from AOnet, error	Shows an error if the safety is not received from AOnet in 3 minutes.  <u>Factory default value:</u> No	
27 Local rain active	Indicates that one or more input with 'Rain function' is active.	
27 Rain sum	<u>Factory default value:</u> #N/A	
27 Send local rain to AOnet		
27 Local rain active	This is the sum of 'Local' and 'AOnet rain'. This is used by this controller.	
27 Rain sum	<u>Factory default value:</u> #N/A	
27 Send local rain to AOnet		













27	<b>Local rain active</b>	Configures which controllers on the AOnet to send the local rain to.	
27	<b>Rain sum</b>	<u>Factory default value:</u> #N/A	
27	<b>Send local rain to AOnet</b>		
28	<b>Rain from AOnet</b>	Shows the rain received from AOnet.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
28	<b>Rain from AOnet</b>	Specify which motor group(s) the 'Rain sum' shall control.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
28	<b>Rain from AOnet</b>	Configure if rain from AOnet is used. If received it will be set to 'present' unless it is set to 'not used'.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
29	<b>Rain from AOnet, error</b>	Shows an error if the rain is not received from AOnet in 3 minutes.	
		<u>Factory default value:</u> #REF!	
30	<b>Rain from AOnet, activate if error</b>	Configure if the AONet Rain error should activate the Rain signal.	
		<u>Factory default value:</u> #REF!	
31	<b>Safety from AOnet, activate if error</b>	Configure if the Aonet Safety error should activate the Safety signal.	
		<u>Factory default value:</u> #REF!	

## Configuration

### 6 Local input [1..26]











PARAMETER:	DESCRIPTION:	
<b>16 Input type</b>	Shows the type of the selected input.	
<b>42 Enable input</b>	Enables the input. If not enabled the motor group and smoke zone output are 0.  <b>Factory default value:</b> Yes	
<b>25 Control smoke zones</b>	Specify which smoke zone/zones the input shall control. The input can either control smoke zones or motor groups. When smoke zone is chosen the option for controlling motor groups is lost.  <b>Factory default value:</b> -	
<b>26 Function in controlled smoke zones</b>  Displayed only if the input is linked to one or more smoke zones.	Specify the function that the input applies to the associated smoke zones.  <b>Factory default value:</b> -	
<b>39 Inactive function in controlled smoke zones</b>  Displayed only if the input is linked to one or more smoke zones.	Specify the function that the input applies to the associated smoke zones, when it becomes inactive.  <b>Factory default value:</b> None	
<b>46 Control motor lines</b>  Displayed only if the input is binary	Specify which motor line(s) the input shall control. The input can either control smoke zones, motor groups or motor lines. When motor lines is chosen the options for controlling smoke zones and motor groups are lost.  <b>Factory default value:</b> -	
<b>28 Control motor groups</b>  Displayed only if the input is binary	Specify which motor group(s) the input shall control. The input can either control smoke zones, motor groups or motor lines. When motor groups is chosen the option for controlling smoke zones and motor lines are lost.  <b>Factory default value:</b> -	
<b>47 Active function on controlled motors</b>  Displayed only if the input is linked to one or more motor group(s)	Specify the function that the input applies to the associated motors when it becomes active.  <b>Factory default value:</b> -	
<b>29 Active function on controlled motors</b>  Displayed only if the input is linked to one or more motor group(s)	Specify the function that the input applies to the associated motors when it becomes active.  <b>Factory default value:</b> -	
<b>40 Active position</b>	Specify the position that is sent to the motor group with the active function.  <b>Factory default value:</b> 100%	



<p><b>49 Inactive function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors, when it becomes inactive.</p> <p><b>Factory default value:</b> None</p>	
<p><b>38 Inactive function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors, when it becomes inactive.</p> <p><b>Factory default value:</b> None</p>	
<p><b>41 Inactive position</b></p>	<p>Specify the position that is sent to the motor group with the inactive function.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>43 Control NV controllers</b></p>	<p>Specify which NV controller the input shall control. The input can either control smoke zones, motor groups or NV controller.</p> <p><b>Factory default value:</b> -</p>	
<p><b>44 Function in the NV controller</b></p>	<p>Specify the function the input has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>48 Short output function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors after a short activation of the input.</p> <p><b>Factory default value:</b> -</p>	
<p><b>31 Short input function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors after a short activation of the input.</p> <p><b>Factory default value:</b> -</p>	
<p><b>22 Active state</b></p>	<p>Specify what logical state to use when the input is activated.</p> <p><b>Factory default value:</b> On</p>	
<p><b>36 Thresholds configuration</b></p>	<p>Specify the thresholds for the input. Select between:  Switch = is used for a simple switch with no surveillance.  Type 1 = enables surveillance of broken cable (open circuit).  Type 2 = enables surveillance of broken and short (circuit) cable.  Manual = enables manual setting of thresholds.</p> <p><b>Factory default value:</b> Switch</p>	
<p><b>21 Error state</b></p> <p>Displayed only if the input has Surveillance enabled</p>	<p>Specify which state the input shall take, when an error is present on the input.</p> <p><b>Factory default value:</b> None</p>	
<p><b>54 Short input function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated smoke zone after a short activation of the input.</p> <p><b>Factory default value:</b> #N/A</p>	
<p><b>55 Idle time out</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the time after a short activation of the input where the hand commands to the smoke zone is set to idle.</p> <p><b>Factory default value:</b> #N/A</p>	

## Configuration

### 7 Local output [1..24]

PARAMETER:	DESCRIPTION:	
<b>16 Output type</b>	Shows the output type of the actual output.	
<b>26 Output mode</b>	Specify the output mode of the output. When 'Siren' is chosen it is assumed that a alarm signalling device is connected to the output. The siren can be stopped under 'Manual operation'.  <b>Factory default value:</b> Binary output	
<b>17 Controlled by smoke zones</b>	Specify which smoke zones that controls the output. One or more smoke zones can be selected. The logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> -	
<b>18 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones that controls the output.  <b>Factory default value:</b> None	
<b>19 Controlled by motor groups</b>	Specify which motor groups that controls the output. One or more motor groups can be selected. The logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>20 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None	
<b>30 Controlled by NV Controller</b>	Specify which NV Controller that controls the output. One or more motor groups can be selected. The logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>31 NV Controller output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated NV Controller that controls the output.  <b>Factory default value:</b> None	
<b>21 Logic function</b> Displayed only if the output is linked to one or more smoke zones or motor group(s)	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	
<b>22 Status when active</b> Displayed only if the output is linked to one or more smoke zones or motor group(s)	Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On	

## 23 Inactive delay

Displayed only if the output is linked to one or more smoke zones or motor group(s)










Specify an optional inactive time out. If the value is higher than 0, the output will be inactive after the specified time.  
If the value is 0, there is no time out.  
The factory settings 0 sec.






**Factory default value:** 0 s

## Configuration


### 8 Weather

PARAMETER:	DESCRIPTION:	
<b>16 Sensor type</b>	Specify which type of weather station that is connected to the WSA 5MC (S2X3.2). Choose between: None = no sensor. WOW = WOW 201 wind speed sensor and WOW 202 wind direction sensor. WLA = WLA 340 wind speed sensor. WLA 330 and WLA 331 are not configured as weather stations but as a normal local input.  <b>Factory default value:</b> None	
<b>30 WSK Link™ Master present</b>	The first time a Master is seen on X11 this parameter is automatically set to 'Master present'. If the Master goes offline the 'master safety active' is set to 'Yes'. If the Master no longer is connected to X11 the paramter must be set to 'Master not used'.  <b>Factory default value:</b> Master not present	
<b>22 Pulses/sec. per m/s</b> Displayed when weather station type = WLA 340	Specify the number of pulses per second that corresponds to 1 m/s. If sensor type 'WLA 340' is used the value i 2.  <b>Factory default value:</b> 2	
<b>23 Filter constant</b>	Specify the filter constant (tau) for the wind speed / wind direction. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.  <b>Factory default value:</b> 5 s	
<b>24 Slow filter constant</b>	Specify the filter constant (tau) for the slow wind speed / slow wind direction. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.  <b>Factory default value:</b> 10 min.	
<b>25 Use RMS in filter</b>	Specify if root-mean-square (RMS) is used in the filter.  <b>Factory default value:</b> No	
<b>46 Last sync. time (UTC)</b>	Shows the last UTC time this controller's time and date were synchronised with weather station.  <b>Factory default value:</b> -	
<b>47 AUX power forced on</b>	Shows if the AUX power is forced on.  <b>Factory default value:</b> #N/A	
<b>50 AUX power controlled during mains fail</b>	Configured if AUX power is turned on every 10th minute during mains fail.  <b>Factory default value:</b> #N/A	

<p><b>51 Activate 'Rain' if offline</b></p>	<p>Activate 'Rain' if WOW 600 or AOnet is offline.</p> <p><u>Factory default value:</u> #N/A</p>	
<p><b>52 Temperature, sensor</b></p>	<p>Shows the temperature from the sensor before the offset is applied.</p> <p><u>Factory default value:</u> #N/A</p>	
<p><b>53 Temperature, offset</b></p>	<p>Specify if the temperature from the sensor should be offset.</p> <p><u>Factory default value:</u> #N/A</p>	

## Configuration

### 24 Cloud


PARAMETER:	DESCRIPTION:	
<p><b>16 Cloud enabled</b></p>	<p>Configure if cloud connection is enabled.</p> <p><u>Factory default value:</u> No</p>	

## Configuration

### 9 Power supply













## Configuration

### 11 CAN

PARAMETER:	DESCRIPTION:	
<p><b>16 MC ID</b></p>	<p>Configures the ID on the CAN bus of the local WSA 5MC.</p> <p><u>Factory default value:</u> 1</p>	

## Configuration

### 12 Network

PARAMETER:	DESCRIPTION:	
<b>27 Restart to use new ip settings</b> Displayed only if relevant	The system must restart to use the new ip settings. When 'yes' is pressed the system will restart.  <u>Factory default value:</u> 10 0 0 1	
<b>23 DHCP</b>	Select 'Yes' to enable DHCP (automatic IP address) for the Ethernet interface (automatic IP address assignment).  <u>Factory default value:</u> Yes	
<b>16 IP address</b> Displayed only if DHCP disabled	Specify the IP address of the section.  <u>Factory default value:</u> 00 00 00 00	
<b>21 Subnet mask</b> Displayed only if DHCP disabled	Specify the subnet mask of the 20A section.  <u>Factory default value:</u> 255 255 255 0	
<b>22 Default gateway</b> Displayed only if DHCP disabled	Specify the default gateway of the 20A section.  <u>Factory default value:</u> 10 0 0 1	
<b>29 DNS 1</b>	Configures the primary DNS server.  <u>Factory default value:</u> 10 0 0 1	
<b>30 DNS 2</b>	Configures the secondary DNS server.  <u>Factory default value:</u> 10 0 0 1	
<b>24 IP address</b>	Shows the IP address of the section.  <u>Factory default value:</u> 00 00 00 00	
<b>17 Power setting</b>	Specify the power settings for the network interface. Auto. = when 230V mains voltage the gate is automatically on. In battery mode, this is disabled to save power. ON = the network connection is always on. OFF = network connection deactivated.  <u>Factory default value:</u> Auto.	
<b>18 Power state network</b>	Shows the actual power state of the network interface.	
<b>19 MAC (upper)</b>	Shows the first three bytes of the Ethernet MAC address.	
<b>20 MAC (lower)</b>	Shows the last three bytes of the Ethernet MAC address.	

## Configuration













### 10 Slots

## **Configuration**






**10 Slots [1..5]**

## Configuration

### 13 Fieldbus [Module]










PARAMETER:	DESCRIPTION:	
<b>16 Module type</b>	Show the connected field bus module type. Some types of modules need bus power to be detected.	
<b>18 Power setting</b>	Specify the power settings for the field bus interface. 'Auto' means that the module is powered off if there is no mains power. 'On' means that the module is always on. 'Off' means that the module is always off.  <b>Factory default value:</b> Auto.	
<b>21 Fieldbus protocol</b> Displayed only if a RS 485 Fieldbus module is mounted	Specify the fieldbus protocol to use on RS 485.  <b>Factory default value:</b> Disabled	
<b>22 BACnet MS/TP MAC address</b> Displayed only if relevant	Specify the BACnet MS/TP MAC address.  <b>Factory default value:</b> 7	
<b>49 BACnet MS/TP MAC address, pending</b> Displayed only if relevant	BACnet MS/TP MAC address, pending  <b>Factory default value:</b> 0	
<b>23 BACnet MS/TP baud rate</b> Displayed only if relevant	Specify the BACnet MS/TP baud rate. Default is 9,600 bps.  <b>Factory default value:</b> 9,600	
<b>38 BACnet MS/TP max. Master</b> Displayed only if relevant	Specify the BACnet MS/TP max. Master parameter.  <b>Factory default value:</b> 127	
<b>46 BACnet MS/TP max. Master, pending</b> Displayed only if relevant	BACnet MS/TP max. Master, pending  <b>Factory default value:</b> 255	
<b>47 BACnet MS/TP Max Info Frames</b> Displayed only if relevant	Specify the BACnet MS/TP max. info frames.  <b>Factory default value:</b> 1	
<b>48 BACnet MS/TP Max Info Frames, pending</b> Displayed only if relevant	BACnet MS/TP Max Info Frames, pending  <b>Factory default value:</b> 0	
<b>50 Changes pending</b> Displayed only if relevant	Changes pending  <b>Factory default value:</b> No	
<b>24 Modbus RTU baud rate</b> Displayed only if relevant	Specify the Modbus RTU baud rate. Default is 19,200 bps.  <b>Factory default value:</b> 19,200	



<p><b>25 Modbus RTU parity</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU parity. Default is 'Even'.</p> <p><b>Factory default value:</b> Even</p>	
<p><b>26 Modbus RTU stop bits</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU stop bits. Default is '1'. the use of no parity requires 2 stop bits.</p> <p><b>Factory default value:</b> 1</p>	
<p><b>27 Modbus RTU slave address</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU slave address. Default is 1.</p> <p><b>Factory default value:</b> 1</p>	
<p><b>39 Temperature unit from KNX</b> Displayed only if relevant</p>	<p>Configures the temperature unit of values received from KNX. The values will be converted if needed.</p> <p><b>Factory default value:</b> Celsius</p>	
<p><b>40 Temperature unit to KNX</b> Displayed only if relevant</p>	<p>Configures the temperature unit of values transmitted to KNX. The values will be converted if needed.</p> <p><b>Factory default value:</b> Celsius</p>	














## Configuration







### 13 Fieldbus [1..10]

PARAMETER:	DESCRIPTION:	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Controlled motor groups</b> Displayed only if object direction in input	Specify which motor group/groups the input shall control. The input can either control smoke zones oR motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. The logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that contols the output.  <b>Factory default value:</b> None	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that contols the output.  <b>Factory default value:</b> None	
<b>27 Logic function</b> Displayed only if object direction in output	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	
<b>28 Status when active</b> Displayed only if object direction in output	Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On	

## Configuration










### 16 BACnet [Common]

PARAMETER:	DESCRIPTION:	
<b>30 Enabled BACnet</b> Displayed only if registered as 'foreign device'	Configure if BACnet IP and MS/TP is enabled.  <u>Factory default value:</u> Yes	
<b>17 BACnet device instance</b>	Specify the device instance of the BACnet server.  <u>Factory default value:</u> 1	
<b>16 BACnet IP UDP port number</b>	Specify the UDP port for BACnet IP. The standard port is 47808.  <u>Factory default value:</u> 47808	
<b>18 Actual position COV increment</b>	Specify the COV increment for the actual position input objects.  <u>Factory default value:</u> 5%	
<b>19 Actual max. position COV increment</b>	Specify the COV increment for the actual maximum position input objects.  <u>Factory default value:</u> 1%	
<b>20 Wind speed COV increment</b>	Specify the COV increment for the wind speed input objects.  <u>Factory default value:</u> 0.1 m/s	
<b>21 Wind direction COV increment</b>	Specify the COV increment for the wind direction input objects.  <u>Factory default value:</u> 1°	
<b>26 Temperature COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for temperature input objects.  <u>Factory default value:</u> 0.2	
<b>27 Humidity COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for humidity input objects.  <u>Factory default value:</u> 2%	
<b>28 CO2 COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for CO2 input objects.  <u>Factory default value:</u> 50 ppm	
<b>29 Heating valve COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for heating valve input objects.  <u>Factory default value:</u> 5%	
<b>22 Register as 'foreign device'</b>	Specify if the 5MC must register as 'foreign device'. When enabled the 5MC will register as 'foreign device'. The registration interval is 1/3 of the 'time-to-live' time.  <u>Factory default value:</u> No	
<b>23 IP address of 'BBMD'</b> Displayed only if registered as 'foreign device'	Specify the IP address of the 'BBMD'.  <u>Factory default value:</u> 0. 0. 0. 0	

<p><b>31 IP address of 'BBMD' pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>IP address of 'BBMD' pending</p> <p><b>Factory default value:</b> 0. 0. 0. 0</p>	
<p><b>24 BACnet UDP port of BBMD</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Specify the UDP port of the BBMD. The standard port is 47808.</p> <p><b>Factory default value:</b> 47808</p>	
<p><b>33 BACnet UDP port of BBMD, Pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>BACnet UDP port of BBMD, Pending</p> <p><b>Factory default value:</b> 0</p>	
<p><b>25 Register as 'foreign device' 'Time-to-Live' value</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Specify the 'Time-to-Live' value. The 5MC will register with an interval of 1/3 of the 'time-to-live' time. If the value is 0 the 5MC will only register once. the 'time-to-live' will be the 'grace period' of 30 seconds.</p> <p><b>Factory default value:</b> 60 min.</p>	
<p><b>32 Register as 'foreign device' 'Time-to-Live' value, pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Register as 'foreign device' 'Time-to-Live' value, pending</p> <p><b>Factory default value:</b> 0 min.</p>	
<p><b>34 Changes pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Changes pending</p> <p><b>Factory default value:</b> No</p>	



## Configuration

### 16 BACnet, object [1..10]

PARAMETER:	DESCRIPTION:	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Control motor groups</b> Displayed only if object direction in input	Specify which motor group(s) the input shall control. The input can either control smoke zones or motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. the logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that controls the output.  <b>Factory default value:</b> None	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None	
<b>27 Logic function</b> Displayed only if object direction in output	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	
<b>28 Status when active</b> Displayed only if object direction in output	Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On	










## Configuration

### 18 Modbus TCP [Common]

PARAMETER:	DESCRIPTION:	
<b>16 Enabled</b>	Specify if Modbus TCP communication is enabled.  <b>Factory default value:</b> No	
<b>17 TCP port number</b>	Specify the TCP port for Modbus TCP. The standard port is 502.  <b>Factory default value:</b> 502	








## Configuration

### 18 Modbus TCP [1..10]

PARAMETER:	DESCRIPTION:	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Control motor groups</b> Displayed only if object direction in input	Specify which motor group(s) the input shall control. The input can either control smoke zones or motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. the logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that controls the output.  <b>Factory default value:</b> None	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None	
<b>27 Logic function</b> Displayed only if object direction in output	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	
<b>28 Status when active</b> Displayed only if object direction in output	Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On	

## Configuration

### 22 AOnet [Common]

PARAMETER:	DESCRIPTION:	
16 Enable AOnet	Specify if AOnet should be enabled.  <u>Factory default value:</u> No	
17 AOnet ID	Specify the ID on the AOnet. The master always has ID 1. If the ID is 0 AOnet is disabled.  <u>Factory default value:</u> 0	
18 Master IP address	Specify the IP address of the master of the address table.  <u>Factory default value:</u> 0. 0. 0. 0	
19 This controller is master	Shows if this controller is master of the AOnet address table.  <u>Factory default value:</u> No	
20 AOnet UDP port number	Specify the UDP port for AOnet. The standard port is 55557.  <u>Factory default value:</u> 55557	
23 Sync. time with this controller	Send the time and date of this controller to all other controllers once a day at 04:03.  <u>Factory default value:</u> No	
25 IP address of foreign AOnet	This address is used for sending weather data, safety, outdoor temperature and time to another AOnet network.  <u>Factory default value:</u> 0. 0. 0. 0	

## Configuration

### 22 AOnet [1...23]

## Configuration

### 1 Login

## Configuration

### 1 Login [Inst]





## Configuration

### 15 Configuration files, USB [All]















## Configuration

### 15 Configuration files, USB [1..24]

PARAMETER:	DESCRIPTION:	
<b>16 Ongoing operation</b> Displayed only if relevant	Appears if the system is in the process of writing / reading the selected configuration file.	
<b>17 Status</b>	Shows status for the chosen configuration file.	
<b>18 Time stamp</b> Displayed only if the file exists	Shows the time for the last change in the configuration file.	
<b>19 Command</b> Displayed only if the file exists	Specify if command are to given to manage configuration files.	











## Configuration

### 0 System

PARAMETER:	DESCRIPTION:	
<b>22 Language</b>	Specify the language to be used in the touch screen.  <u>Factory default value:</u> English	
<b>78 Time zone</b>	Sets the time zone for the controller.  <u>Factory default value:</u> UTC, Western European (UTC), No DST	
<b>28 Date</b>	Set the date in the internal clock.	
<b>27 Time</b>	Set the time of the internal clock.	
<b>35 Backup time stamp</b>	Shows the time stamp. the time stamp is updated each time the configuration is saved as a backup.	
<b>34 Unsaved changes</b>	Shows if there have been changes to the configuration since the last backup was saved. If so, this value will be 'Yes'.	
<b>23 Configuration command</b>	This option can be used to reset the device to factory default configuration. Save a configuration backup of the actual configuration or restore the configuration backup.	
<b>44 Disk operation</b> Displayed only if relevant	Shows any ongoing operation on the SD card and USB stick.	
<b>45 Copy log</b>	Set this to 'Yes' to copy all log files from the SD card to the USB stick.	
<b>26 LCD rotate view</b>	Specify if the picture on the touch screen should rotate 180 degrees. This can be used in combination with e.g.. turning the touch screen upside-down to optimise the viewing quality.  <u>Factory default value:</u> No	
<b>46 Enable parameter set from network</b>	Enable writing parameter values from ethernet If 'False' it is only possible to read parameter values from ethernet.  <u>Factory default value:</u> Yes	
<b>30 Show disabled instances</b>	Specify if disabled / non-existing items should be shown in the overview lists.  <u>Factory default value:</u> No	












## Status

### 4 Motor line [1..13]

PARAMETER:	DESCRIPTION:	
<b>67 Status</b>	Shows the status of the motor line.	
<b>60 No. of found motors</b> Displayed only if the motor configuration does not correspond with the discovered motor status.	Shows the number of motors detected on the motor line.	
<b>134 Louvre position after manual operation</b>	Configures the louvre position after a manual operation.	
<b>31 Actual maximum position</b>	Shows the actual resulting maximum opening. This is the lowest value of all limiting inputs.	
<b>32 Actual position</b>	Shows the actual opening of the connected motors.	
<b>133 Actual louvre position</b>	Shows the actual louvre position. 50% is horizontal, 0% is closed.	
<b>61 No. of found locking motors</b> Displayed only if the motor configuration does not correspond with the discovered motor status.	Shows the actual number of locking motors (WMBs) detected on the motor line.	
<b>39 Temp. manual timer</b>	Shows the remaining time of the manual priority timer. If the value is '0', the timer is not active.	
<b>41 Manual grace timer</b> Displayed only if relevant	Shows the remaining time of the manual grace timer. This is a safety feature so after a closing command the window can still be manually operated in a short time. If the value is '0', the timer is not active.	
<b>91 Pyrotechnic gas generator disabled</b>	Set this to test the system without activating the pyrotechnic gas generator on this output. As long as this setting is active an error will be shown on this output.	








## Status

### 3 Motor group [1..13]

PARAMETER:	DESCRIPTION:	
<b>17 Actual smoke position</b>	Shows the actual position with heat and smoke priority set to the motor group.	
<b>41 Alarm delay timer</b> Displayed only if relevant	Shows the delay of the command to the motor lines after an alarm is triggered. 0s (0 sec.) = the alarm command is forwarded with no delay.	
<b>22 Actual status</b>	Shows the actual status of the motor group.	
<b>23 Actual maximum position</b>	Shows the actual resulting maximum opening limitation. This is the lowest value of all limiting inputs.	
<b>44 Comfort open remaining time</b> Displayed only if relevant	Shows the remaining time of the comfort open.	
<b>24 No. of associated break glass units</b>	Shows the number of comfort inputs on break glass units that are associated to the motor group.	
<b>25 No. of associated local inputs</b>	Shows the number of local inputs that are associated to the motor group.	
<b>26 No. of associated motor lines</b>	Shows the number of motor lines that is associated to this motor group.	
<b>34 No. of associated field bus inputs</b>	Shows the number of field bus inputs that are associated to the motor group.	
<b>38 No. of associated BACnet inputs</b>	Shows the number of field bus inputs that are associated to the motor group.	
<b>45 No. of associated Modbus TCP inputs</b>	Shows the number of field bus inputs that are associated to the motor group.	
















## Status

















### 5 WSK-Link™ [ALL]





PARAMETER:	DESCRIPTION:	
23 Licensed features	Shows functions enabled by the USB license stick.	
18 Ring bus status	Shows the actual status of the break glass unit bus, if it is a closed ring or not.	
19 SHE bus 1 is OK	Shows if bus connection 1 is okay. If there is no break glass units on the connected bus line, or the connection is not used, the status will not be OK.	
20 SHE bus 2 is OK	Shows if bus connection 2 is okay. If there is no break glass units on the connected bus line, or the connection is not used, the status will not be OK.	
21 Bus error	Shows if there is a general error on the break glass unit bus. The is only relevant if the bus topology is set to 'ring'.	
22 Left connector (X6)	Left connector (X6)	
26 Send foreign outdoor temp. to foreign AOnet	Configures if the foreign outdoor temperature should be sent to the foreign AOnet.  <b>Factory default value:</b> None	

## Status

### 5 WSK-Link™ [1..30]










PARAMETER:	DESCRIPTION:	
35 Device type	Device type  <b>OPTIONS:</b> WSK 501/2 WSK 503/4 WSC 3XX Unknown WWS 100	
16 Serial number	Shows the serial number for the connected break glass unit. The serial number is unique for this break glass unit and the serial number is also stated on the label of the break glass unit.	
21 Device status	Device status	
36 Status of slave Displayed only if relevant	Status of slave	
22 Connection	Shows if there is connection to the break glass unit. Yes = there is connection. No = there is no connection.	
43 Touch key status	Shows the actual touch key input status.	
30 Status of smoke sensor Displayed only if smoke detector is assigned to specific smoke zone(s)	Status of smoke sensor	
38 Temperature	Shows the actual WSK sensor temperature.	
39 CO2	Shows the actual WSK sensor CO2 level.	
40 Relative humidity	Shows the actual WSK sensor relative humidity.	
41 Keypad 1 status	Shows the actual keypad pair 1 input status.	
42 Keypad 2 status	Shows the actual key pair 2 input status.	
64 Sensor input 1 status	Shows the status of WWS 100 Sensor input 1 when configured as 'on/off'.  <b>Factory default value:</b> None	
72 Sensor input 1 actual NV controller function	Shows the active function in the NV controller.  <b>Factory default value:</b> None	
81 Sensor input 1 function in NV controller 'all'	Configures the function in NV controller 'all'.  <b>Factory default value:</b> None	

<p><b>85</b> Sensor input 1, NV controller 'all' actual function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the actual status of the function.</p>	
<p><b>65</b> Sensor input 2 status</p> <p><u>Factory default value:</u> None</p>	<p>Shows the status of WWS 100 Sensor input 2 when configured as 'on/off'.</p>	
<p><b>73</b> Sensor input 2 actual NV controller function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the active function in the NV controller.</p>	
<p><b>82</b> Sensor input 2 function in NV controller 'all'</p> <p><u>Factory default value:</u> None</p>	<p>Configures the function in NV controller 'all'.</p>	
<p><b>86</b> Sensor input 2, NV controller 'all' actual function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the actual status of the function.</p>	
<p><b>66</b> Sensor input 3 status</p> <p><u>Factory default value:</u> None</p>	<p>Shows the status of WWS 100 Sensor input 3 when configured as 'on/off'.</p>	
<p><b>74</b> Sensor input 3 actual NV controller function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the active function in the NV controller.</p>	
<p><b>83</b> Sensor input 3 function in NV controller 'all'</p> <p><u>Factory default value:</u> None</p>	<p>Configures the function in NV controller 'all'.</p>	
<p><b>87</b> Sensor input 3, NV controller 'all' actual function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the actual status of the function.</p>	
<p><b>67</b> Sensor input 4 status</p> <p><u>Factory default value:</u> None</p>	<p>Shows the status of WWS 100 Sensor input 4 when configured as 'on/off'.</p>	
<p><b>75</b> Sensor input 4 actual NV controller function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the active function in the NV controller.</p>	
<p><b>84</b> Sensor input 4 function in NV controller 'all'</p> <p><u>Factory default value:</u> None</p>	<p>Configures the function in NV controller 'all'.</p>	
<p><b>88</b> Sensor input 4, NV controller 'all' actual function</p> <p><u>Factory default value:</u> None</p>	<p>Shows the actual status of the function.</p>	
<p><b>76</b> Send outdoor temp. to foreign AOnet</p> <p><u>Factory default value:</u> None</p>	<p>Configures if the outdoor temperature should be sent to the foreign AOnet.</p>	
<p><b>45</b> Sensor 1</p>	<p>Shows the value of the WWS 100 'sensor input 1'.</p>	
<p><b>46</b> Sensor 2</p>	<p>Shows the value of the WWS 100 'sensor input 2'.</p>	

<b>47 Sensor 3</b>	Shows the value of the WWS 100 'sensor input 3'.	
<b>48 Sensor 4</b>	Shows the value of the WWS 100 'sensor input 4'.	
<b>44 Sensors Status</b>	Shows the last WSK sensor status.	
<b>63 WWS 100 Error</b>	Show if there is a WWS 100 sensor error / invalid reading.  <b>Factory default value:</b> None	

## Status














### 2 Smoke zone [ALL]

PARAMETER:	DESCRIPTION:	
<b>16 Slot 1 maximum temperature</b>	Shows the maximum measures temperature since last reset of the value (the value can be reset).	
<b>17 Slot 3 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>18 Slot 4 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>19 Slot 5 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>21 High temperature error</b>	Shows the status of the high temperature error. To reset the error the maximum temperature must be reset.	
<b>24 Target smoke zone output</b>	Shows the actual output that is applied to the target smoke zones.  <b>OPTIONS:</b> Line A Line B Line C Line D Line E Line F	
<b>26 Master/slave bus online</b>	Master/slave bus online	
<b>27 Associated WSK bus master smoke zone</b>	This smoke zone is assigned to a master device over the WSK master/slave bus.	
<b>30 WSK bus slave serial number</b>	This is serial number shown in the 'Break glass unit' menu of the WSC master where this controller is connected as slave.	






















## Status

### 2 Smoke zone [1..13]

PARAMETER:	DESCRIPTION:	
<b>16 Status (local)</b> Displayed only if the Smoke zone is slave to another smoke zone.	Shows the status of the local smoke zone. Will only be showed if the smoke zone is a slave.	
<b>17 Status</b>	Shows the status of the smoke zone. If the smoke zone is a slave this the status received from the master smoke zone.	
<b>27 Actual smoke pos.</b>	Shows the actual position set point during an alarm situation.	
<b>70 Sampled alarm wind direction</b>	Shows the wind direction sampled when the alarm occurred. 0 = the wind dependant opening is not active. 1-24 = the wind dependant opening is active.	
<b>81 Use errors from other smoke zone</b>	Configures if smoke zone errors from other smoke zones should be used.	
<b>80 Smoke zone input</b>	Shows the actual input that that is applied to the smoke zone from other smoke zones.	
<b>37 Target smoke zone output</b>	Shows the actual output that the smoke zone applies to the target smoke zones.	
<b>38 Break glass unit output</b>	Shows the actual status sent to the associated break glass unit(s).	
<b>31 No. of associated break glass units</b>	Shows the number of break glass units that are associated to the smoke zone.	
<b>40 No. of associated break smoke sensors</b>	Shows the number of smoke sensors connected to break glass units that are associated to the smoke zone.	
<b>32 No. of associated local inputs</b>	Shows the number of local inputs which are associated to the smoke zone.	
<b>33 No. of associated motor groups</b>	Shows the number of motor groups which have the smoke zone associated.	
<b>34 No. of smoke zone sources</b>	Shows the number of smoke zones which have this smoke zone associated.	

## Status

### 19 NV controller [Common]

PARAMETER:	DESCRIPTION:	
18 Data OK timeout	If data not received within this time the zone will go into error state. 0 = Disables the surveillance.	
19 Fast wind speed	Fast wind speed	
20 Slow wind speed	Slow wind speed	
21 Raining, local	Raining, local	
22 Building mode, in	Building mode, in	
23 Building secure, in	Building secure, in	
38 Raining, sum	Combination of local and WOW 600	
37 Building night from scheduler	Raining, from WOW 600	
37 Raining, from WOW 600		
37 Building night from scheduler	Shows the buidling night from the scheduler.	
37 Raining, from WOW 600		
24 Building mode, out	Building mode, out	
25 Building error	Building error	
26 Building mech vent	Building mech vent	
27 Building heating demand	Building heating demand	
29 Temperature received from WSK-Link™ via AOnet	Shows the outdoor temperature received from WSK on WSK-Link™ via AOnet.	
31 Temp. from AOnet error	Shows an error is the temperature is not received within the last 3 minutes.	
32 Function inputs	Shows the resulting input functions from local input.	
33 AOnet function inputs	Shows the input functions from AOnet.	
35 Function inputs sum	Shows the resulting input functions from local input and AOnet.	
	<b>Factory default value:</b> -	
36 Building mode from scheduler	Shows the building mode from the scheduler.	
	<b>Factory default value:</b> None	























**28 Licensed features**























Shows functions enabled by the USB license stick.























## Status

### 19 NV controller [1..10]

PARAMETER:	DESCRIPTION:	
164 Building, part, zone cloud status	Shows the 'owner' status of 'Building', 'Part', 'Zone' parameters. If these parameters are changed locally the status changes to 'Changed locally'. If the parameters are changed from cloud the status changes to 'Changed cloud', and it is no longer possible to change them locally.	
16 Wind speed, fast	Wind speed, fast	
17 Wind speed, slow	Wind speed, slow	
18 Outdoor temperature	Outdoor temperature	
19 User temperature offset range	User temperature offset range	
175 Fieldbus outdoor temperature	Fieldbus outdoor temperature	
128 BACnet outdoor temperature	BACnet outdoor temperature	
129 Modbus outdoor temperature	Modbus outdoor temperature	
20 Temperature, WSK	Temperature, WSK	
21 Temperature, fieldbus	Temperature, fieldbus	
22 Temperature, BACnet	Temperature, BACnet	
23 Temperature, Modbus	Temperature, Modbus	
24 Temperature, input	Temperature, input	
25 CO2, WSK	CO2, WSK	
26 CO2, fieldbus	CO2, fieldbus	
27 CO2, BACnet	CO2, BACnet	
28 CO2, Modbus	CO2, Modbus	
29 CO2, input	CO2, input	
30 Relative humidity, WSK	Relative humidity, WSK	
31 Relative humidity, fieldbus	Relative humidity, fieldbus	
174 Relative humidity, fieldbus (scaling)	Relative humidity, fieldbus (scaling)	
32 Relative humidity, BACnet	Relative humidity, BACnet	

<b>33</b>	<b>Relative humidity, Modbus</b>	Relative humidity, Modbus	
<b>34</b>	<b>Relative humidity, input</b>	Relative humidity, input	
<b>148</b>	<b>Comfort, BACnet</b>	Input from BACnet for selecting the comfort setpoints.	
<b>170</b>	<b>Comfort, Fieldbus</b>	Input from fieldbus for selecting the comfort setpoints	
<b>171</b>	<b>Comfort, Modbus TCP</b>	Input from Modbus TCP for selecting the comfort setpoints	
<b>149</b>	<b>Night, BACnet</b>	Input from BACnet for selecting the night setpoints.	
<b>172</b>	<b>Night, Fieldbus</b>	Input from Fieldbus for selecting the night setpoints	
<b>173</b>	<b>Night, Modbus TCP</b>	Input from Modbus TCP for selecting the night setpoints	
<b>150</b>	<b>Comfort temperature set point</b>	Input for the base comfort temperature set point.	
<b>152</b>	<b>Heating standby offset input</b>	Shows the input for the heating temperature setpoint offset during 'standby'.	
<b>153</b>	<b>Heating night offset input</b>	Shows the input for the heating temperature setpoint offset during 'night'.	
<b>154</b>	<b>Cooling standby offset input</b>	Shows the input for the cooling temperature setpoint offset during 'standby'.	
<b>155</b>	<b>Cooling night offset input</b>	Shows the input for the cooling temperature setpoint offset during 'night'.	
<b>151</b>	<b>Heating / cooling deadband input</b>	Input for the deadband between heating and cooling.	
<b>35</b>	<b>Presence detection</b>	Presence detection	
<b>36</b>	<b>Disable automatic, BACnet</b>	Input from BACnet for disabling automatic control.	
<b>166</b>	<b>Disable automatic, Fieldbus</b>	Input from fieldbus for disabling automatic control.	
<b>167</b>	<b>Disable automatic, Modbus TCP</b>	Input from Modbus TCP for disabling automatic control.	
<b>37</b>	<b>Force winter, BACnet</b>	Input from BACnet for forcing winter mode.	
<b>168</b>	<b>Force winter, fieldbus</b>	Input from fieldbus for forcing winter mode.	
<b>169</b>	<b>Force winter, Modbus TCP</b>	Input from Modbus TCP for forcing winter mode.	
<b>38</b>	<b>Ventilate</b>	Ventilate	

<p><b>39 Comfort level</b></p>	<p>Comfort level</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Unknown</li> <li>Eco</li> <li>Normal</li> <li>Plus</li> </ul>	
<p><b>163 Local inputs</b></p>	<p>Shows the status of functions from local inputs.</p>	
<p><b>40 Ventilation status</b></p>	<p>Ventilation status</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Unknown</li> <li>Windows fixed closed</li> <li>Windows closed, all data missing</li> <li>Window opening limited due to bad weather</li> <li>Windows closed, only weather data missing</li> <li>Windows closed due to hot outdoor conditions</li> <li>Windows closed due to low indoor temperature</li> <li>Automatic ventilation off (only hand operation)</li> <li>Only hand operation due to missing room data</li> <li>Only hand operation due to hot outdoor conditions</li> <li>Demand driven pulse ventilation</li> <li>Pulse ventilation due to hot outdoor conditions</li> <li>Ventilation controlled by temperature</li> <li>Ventilation controlled by temperature during night</li> <li>Venting active</li> <li>Trickle ventilation</li> </ul>	
<p><b>41 Occupancy</b></p>	<p>Occupancy</p>	
<p><b>186 Windows comfort status</b></p>	<p>Shows the window comfort status of the zone. This is used to limit the opening of the windows in the motor group.</p>	
<p><b>156 Comfort status</b></p>	<p>Shows the comfort status of the zone. This is a combination of the Comfort and Night inputs, the Building status and the occupancy in the room.</p>	
<p><b>127 Ventilation temperature setpoint</b></p>	<p>Ventilation temperature setpoint</p>	
<p><b>42 Actual ventilation temperature setpoint</b></p>	<p>Actual ventilation temperature setpoint</p>	
<p><b>43 Actual heating temperature setpoint</b></p>	<p>Actual heating temperature setpoint</p>	
<p><b>44 Actual temperature setpoint</b></p>	<p>Actual temperature setpoint</p>	
<p><b>45 Winter</b></p>	<p>Winter</p>	
<p><b>124 Ligthing output</b></p>	<p>Output for controlling lighting.</p>	
<p><b>130 Error out</b></p>	<p>Error out</p>	
<p><b>116 WWS 100 LED output</b></p>	<p>Output to the LEDs of the WWS 100 in the NV Controller.</p>	

122	<b>Zone windows status</b>	Shows a consolidated status of all windows in the zone.	
123	<b>Zone average window position</b>	Shows the average position of all windows in the zone.	
162	<b>Air quality</b>	Shows the air quality. 100% is best, 0% is worst.	
165	<b>Local output status</b>	Status used for controlling local outputs.	
125	<b>Data status</b>	Data status	
126	<b>User temperature offset</b>	User temperature offset	

## Status

23 Pulse schedule [Common]

## Status

23 Pulse schedule [1..10]

## Status







26 Building schedule [Common]

## Status

20 Mech. vent. controller


## Status

### 20 Mech. vent. controller, objects [1...10]

PARAMETER:	DESCRIPTION:	
16 Mech. vent. override, BACnet	Show the override status.	
16 Mech. vent. override status	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
16 Mech. vent. override, BACnet	Mech. vent. override, BACnet	
16 Mech. vent. override status	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
18 Mech. vent. value	Mech. vent. value	
19 Mech. vent.	Mech. vent.	
17 FutureVent	FutureVent	
20 Air supply temperature setpoint	Air supply temperature setpoint	

## Status

### 21 Heating controller [Common]

PARAMETER:	DESCRIPTION:	
17 Licensed features	Shows functions enabled by the USB license stick.	

## Status

### 21 Heating controller, objects

## Status

### 25 Sun [Common]








## Status

### 25 Sun [1..10]












## Status

### 6 Local input [Common]

PARAMETER:	DESCRIPTION:	
16 Local safety active	Indicates that one or more input with 'Safety function' is active.	
17 WSK Link™ master safety active	Indicates that safety is received from master on WSK Link™ (X5 / X6).	
18 WSK Link™ slave input active	Indicates that safety is received from WSK Link™ (X5 / X6).	
19 WSK Link™ slave output active	Indicates that safety is sent to WSK Link™ (X11). Sum of 'Local' and 'Slave input'.	
20 Safety sum	This is the sum of 'Local', 'WSK Link™ master' and 'WSK Link™ slave input' safety. This is used by this controller.	
27 Local rain active	This is the sum of 'Local' and 'AOnet rain'. This is used by this controller.	
27 Rain sum	<u>Factory default value:</u> #N/A	
27 Local rain active	Indicates that one or more input with 'Rain function' is active.	
27 Rain sum	<u>Factory default value:</u> #N/A	



## Status

### 6 Local input [1..26]

PARAMETER:	DESCRIPTION:	
<b>16 Input type</b>	Shows the type of the selected input.	
<b>27 Target smoke zone output</b> Displayed only if the input is linked to one or more smoke zones.	Shows the actual output that the input applies to the smoke zones. <b>OPTIONS:</b> Line A Line B Reset Line C Line D Line E Line F Comfort stop Comfort open Comfort close Comfort safety Line A error Line B error Line C error Line D error Line E error Line F error Comfort safety error	
<b>51 Use input in NV controller 'all'</b> Displayed only if the input is linked to one or more motor group(s)	Configures if the input should be used to activate a function.	
<b>52 Function in NV controller 'all'</b> Displayed only if the input is linked to one or more motor group(s)	Configures the function.	
<b>53 Actual function</b> Displayed only if the input is linked to one or more motor group(s)	Show the actual status of the function.	
<b>45 Actual NV controller function</b>	Shows the active function in the NV controller.	
<b>50 Target motor output</b> Displayed only if the input is linked to one or more motor group(s)	Shows the actual output that the input applies to the motors.	
<b>32 Target motor output</b> Displayed only if the input is linked to one or more motor group(s)	Shows the actual output that the input applies to the motors.	
<b>23 State</b>	Shows the actual state of the input.	














## Status





### 7 Local output [1..24]




PARAMETER:	DESCRIPTION:	
<b>25 Actual output state</b>	Shows the actual state of the output.	
<b>27 Stop the active siren</b> Displayed only if relevant	Turn off the siren. If a new error occurs, the siren will restart.	

## Status

### 8 Weather











PARAMETER:	DESCRIPTION:	
<b>17 Status</b>	Shows the status for the weather station.	
<b>18 Wind speed</b>	Shows the actual wind speed. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>19 Filtered wind speed</b>	Shows the actual filtered wind speed. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>20 Wind direction</b> Displayed when weather station type = WOW	Shows the actual wind direction. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>21 Filtered wind direction</b> Displayed when weather station type = WOW	Shows the actual filtered wind direction. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>31 WSK Link™ master safety active</b>	Indicates that safety is received from master on WSK Link™ (X5 / X6).	
<b>33 Temperature</b>	Outputs the Temperature reading.	
<b>34 Rain</b>	Precipitation Status.	
<b>35 Precipitation Intensity</b>	Outputs Precipitation (Rain) Intensity. It is the sum of the last sixty lots of 1 minute accumulated Rain data. A new sum measurement is generated every minute in millimetres. It will be set to zero on power up.	
<b>36 Relative Humidity</b>	Outputs the measured Relative Humidity reading in %.	
<b>37 Absolute Humidity</b>	Outputs the measured absolute Humidity reading in %.	
<b>38 Dewpoint</b>	Output calculated Dewpoint from Temperature and Humidity readings in %. $T_d = T_n / (Y-1)$ Where $T_d$ = Dewpoint temperature $Y = \frac{m}{\log_{10}(P_w/A)}$ $T_n$ = Triple point temperature (in K) $P_w = P_{ws} \cdot RH / 100$ (hPa) $P_{ws}$ = water vapour saturation pressure (hPa)	
<b>41 Time</b>	The UTC time and date.	

<b>39 Sensor Status</b>	<p>Sensor Status Codes</p> <p>0000 OK. No fault conditions detected in measurement period.</p> <p>0001 Wind Measurement Fault. Wind Sensor faulty.</p> <p>0002 GPS Error. E.g. Locating Satellite fix.</p> <p>0004 Source for Corrected Wind Direction is GPS. GPS notification.</p> <p>0006 GPS Location Missing. GPS error.</p> <p>0010 Temperature Measurement Fault. Temperature sensor faulty.</p> <p>0020 Dewpoint fault. If Temperature and Humidity are reporting correctly then this code indicates a main pcb fault.</p> <p>0040 Humidity fault. Humidity Sensor faulty.</p> <p>0080 Pressure Sensor Warning. Pressure sensor reading not available/unit faulty.</p> <p>0100 Compass fault. Invalid heading due to compass fault.</p>	
<b>40 Wind Status</b>	<p>Wind Status Codes</p> <p>0000 OK No fault conditions detected in measurement period.</p> <p>0001 Wind Sensor Axis failed Wind U Axis blocked or faulty.</p> <p>0002 Wind Sensor Axis failed Wind V Axis blocked or faulty.</p> <p>0004 Wind Sensor both Axis failed Wind U and V Axis blocked or faulty.</p> <p>000B Wind Sensor readings failed Wind Sensor data output fault.</p> <p>0100 Wind Average Building WMO wind average building.</p> <p>0200 Corrected Wind Measurement not available. Compass corrected wind measurement failure.</p> <p>A NMEA Acceptable Data No fault conditions detected in measurement period.</p> <p>V NMEA Void Data Fault condition detected in measurement period.</p>	
<b>42 GPS Status</b>	<p>Location Fix and Number of Satellites.</p> <p>Result e.g. 010B.</p> <p>Where 0 is padding.</p> <p>1 is GPS SPS mode fix valid (0 is fix not available).</p> <p>0B is a hexadecimal representation of the number of satellites acquired,11 satellites found. 0A would be 10 satellites etc.</p>	
<b>32 Show offline as error</b>	<p>Configures if WOW not online should be indicated as a 'hardware error', that is report with yellow LED and on the error output.</p>	

<b>44 Use outdoor temp. as local temp. in zones</b>	Configures to use the outdoor temperature as local outdoor temperature in zones.	
<b>43 Send data to AOnet</b>	Configures which controllers on the AOnet to send weather data to.	
<b>45 Adjust clock</b>	Synchronise the controllers clock with the time from the weather station.	








## Status

### 24 Cloud

PARAMETER:	DESCRIPTION:	
<b>22 Licensed features</b>	Shows functions enabled by the USB license stick.	
<b>21 Device ID</b>	Shows the cloud id.	
<b>18 Connected</b>	Shows if the controller is connected to cloud.	
<b>19 Status</b>	Shows the status of the cloud connection.	
<b>20 Connection status</b>	Shows the detailed status of the cloud connection.	
<b>26 Last UTC time sync. From cloud</b>	Shows the last UTC time set received from the cloud.	
<b>24 'Publish' counter</b>	Incremented for every successful 'publish' to cloud.	
<b>25 Error counter</b>	Incremented everytime an error occurs in the cloud connection.	
<b>27 'Suspended' counter</b>	Incremented everytime the controller is 'suspended' by the cloud.	
<b>23 Activation code</b>	Activation code used for cloud inrollment.	


















## Status

### 9 Power supply

PARAMETER:	DESCRIPTION:	
17 Mains status	Shows the status of the main power supply.	
36 Battery status	Shows the status of the back-up batteries.	
19 Power supply voltage	Shows the actual power supply voltage.	
16 Detailed status	Shows the detailed power supply status.	
47 PSU voltage	PSU voltage from main board.	
21 Battery temperature	Shows the actual temperature of the back-up batteries.	
38 Mains off error time	Specify the time before a mains warning turns into a mains error.	
	<b>Factory default value:</b> 28 min.	

## Status














### 11 CAN




PARAMETER:	DESCRIPTION:	
16 MC ID	Configures the ID on the CAN bus of the local WSA 5MC.  <u>Factory default value:</u> 1	
35 CAN ID conflict, CAN1	The CAN ID of this device appears already to be in use on CAN1. possible reasons: 1: two devices have been configured with the same CAN ID. 2: the two CAN interfaces of the same device have been connected together, which is not allowed.	
21 CAN 1 connected.	CAN 1 connected.	
23 Received frames	Shows the number of received CAN frames.	
24 Transmitted frames	Shows the number of transmitted CAN frames.	
26 Tx queue size (transmission).	Tx queue size (transmission).	
27 Tx discarded (transmission).	Tx discarded (transmission).	
28 Rx discarded (receive).	Rx discarded (receive).	
39 Message pool size	Message pool size	
29 Last error.	Last error.	
30 Receive errors.	Receive errors.	
31 Transmit errors.	Transmit errors.	
32 Rx idle time (receive).	Rx idle time (receive).	
33 Tx idle time (transmission).	Tx idle time (transmission).	
38 CAN Rx max Queued	Shows the maximum size that the CAN receive queue has had at any time since booting.	
45 Bus initialisation error, CAN1	It is not possible to communicate on the bus cable connected to CAN1. Could be a cable problem or a defect controller board.	
44 Bus initialisation error, CAN2	It is not possible to communicate on the bus cable connected to CAN2. Could be a cable problem or a defect controller board.	



## Status

### 12 Network

PARAMETER:	DESCRIPTION:	
<b>33 Link</b>	Shows the link status.  <b>Factory default value:</b> 10 0 0 1	
<b>27 Restart to use new ip settings</b> Displayed only if relevant	The system must restart to use the new ip settings. When 'yes' is pressed the system will restart.  <b>Factory default value:</b> 10 0 0 1	
<b>23 DHCP</b>	Select 'Yes' to enable DHCP (automatic IP address) for the Ethernet interface (automatic IP address assignment).  <b>Factory default value:</b> Yes	
<b>16 IP address</b> Displayed only if DHCP disabled	Specify the IP address of the section.  <b>Factory default value:</b> 00 00 00 00	
<b>21 Subnet mask</b> Displayed only if DHCP disabled	Specify the subnet mask of the 20A section.  <b>Factory default value:</b> 255 255 255 0	
<b>22 Default gateway</b> Displayed only if DHCP disabled	Specify the default gateway of the 20A section.  <b>Factory default value:</b> 10 0 0 1	
<b>29 DNS 1</b>	Configures the primary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>30 DNS 2</b>	Configures the secondary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>24 IP address</b>	Shows the IP address of the section.  <b>Factory default value:</b> 00 00 00 00	
<b>25 Subnet mask</b>	Shows the subnet mask of the 20A section.  <b>Factory default value:</b> 255 255 255 0	
<b>26 Default gateway</b>	Shows the default gateway of the 20A section.  <b>Factory default value:</b> 10 0 0 1	
<b>31 DNS 1</b>	Shows the primary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>32 DNS 2</b>	Shows the secondary DNS server.  <b>Factory default value:</b> 10 0 0 1	









<b>18 Power state network</b>	Shows the actual power state of the network interface.	
<b>19 MAC (upper)</b>	Shows the first three bytes of the Ethernet MAC address.	
<b>20 MAC (lower)</b>	Shows the last three bytes of the Ethernet MAC address.	

## Status

### 10 Slots





## Status

### 10 Slots [1..5]

PARAMETER:	DESCRIPTION:	
<b>16 Hardware type</b>	Shows the actual hardware type of the module in the slot.	
<b>19 Firmware version</b> Displayed only for 5MC module (Slot 2)	Shows the software version of the board.	
<b>20 5PS, 5IO, 5SM, 5S5, 5ML Firmware version</b> Only used in Slot 1,3,4 og 5	Shows the firmware version of the module in the Slot. If the firmware is too old this is shown as an error.	
<b>22 Build time</b> Displayed only for 5MC module (Slot 2)	Shows the actual release time and date of the WSA 5MC software.	
<b>36 Get new files from cloud now</b> Displayed only for 5SM module	Triggers download of new files from cloud.	
<b>34 Latest firmware</b> Displayed only for 5SM module	Shows the latest firmware version on USB stick.	
<b>32 Boot to update firmware</b> Displayed only for 5SM module	Boots the controller to update firmware.	
<b>21 Temperature</b> Displayed only for 5IO module	Shows the actual temperature measured on the WSA 5IO board.	





## Status

### 13 Fieldbus [Module]

PARAMETER:	DESCRIPTION:	
<b>16 Module type</b>	Show the connected field bus module type. Some types of modules need bus power to be detected.	
<b>19 ETS application version</b> Displayed only if Power on KNX Power and Application prog.	Shows the version of the ETS application.	
<b>20 Physical address</b> Displayed only if Power on KNX Power and Application prog.	Shows the physical address assigned by ETS.	
<b>28 Modbus RTU status</b> Displayed only if relevant	Shows the status of Modbus RTU.	





## Status

### 13 Fieldbus [1..10]

PARAMETER:	DESCRIPTION:	
<b>16 Value</b>	Shows the status of the fields bus connection.	
<b>20 Target motor group output</b> Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
<b>23 Source smoke zone(s) output</b> Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zones.	
<b>26 Source motor group(s) output</b> Displayed only if the output is linked to one or more motor group(s)	Shows the actual input from the associated motor group(s).	

## Status

### 16 BACnet, object [1..10]





PARAMETER:	DESCRIPTION:	
<b>16 Value</b>	Shows the status of the fields bus connection.	
<b>20 Target motor group output</b> Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
<b>23 Source smoke zone(s) output</b> Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zone(s).	
<b>26 Source motor group(s) output</b> Displayed only if the output is linked to one or more motor group(s)	Shows the actual input from the associated motor group(s).	

## Status

### 18 Modbus TCP [Common]




## Status

### 18 Modbus TCP [1..10]

PARAMETER:	DESCRIPTION:	
16 Value	Shows the status of the fields bus connection.	
20 Target motor group output Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
23 Source smoke zone(s) output Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zone(s).	
26 Source motor group(s) output Displayed only if the output is linked to one or more motor group(s)	Shows the actual input from the associated motor group(s).	









## Status

### 22 AOnet [Common]

PARAMETER:	DESCRIPTION:	
26 TX counter	Shows the number of transmissions to the controller.	
27 TX error counter	Shows the number of errors while connecting to the controller.	
28 TX timeout counter	Shows the number of timeouts while connecting to the controller.	

## Status

### 22 AOnet [1...23]

PARAMETER:	DESCRIPTION:	
16 IP address	Shows the IP address of controller.	
17 Status	Shows the status of the connection to the controller.	
18 TX counter	Shows the number of transmissions to the controller.	
19 RX counter	Shows the number of receptions of the controller.	
20 TX error counter	Shows the number of errors while connecting to the controller.	
21 TX timeout counter	Shows the number of timeouts while connecting to the controller.	
22 Last 'alive message' (UTC)	UTC Time of last 'alive message' from controller.	
23 TX buffer full error counter	Shows the number of times the local TX buffer was full.	

## Status




### 1 Login

## Status

### 1 Login [Inst]

## Status

### 15 Configuration files, USB [All]











PARAMETER:	DESCRIPTION:	
18 Power state USB	Shows the actual power state of the USB interface.	
19 USB License number	Shows the license number of a valid USB key. The license will stay valid 24 hours after the USB license key is removed.	
20 Licensed features	Shows functions enabled by the USB license stick.	

## Status

### 15 Configuration files, USB [1..24]






## Status

### 0 System

PARAMETER:	DESCRIPTION:	
<b>29 Configuration chip (NVM)</b> Displayed only if relevant	This chip contains the saved configuration. In case of a hardware error with this chip, the configuration cannot be saved.	
<b>79 Daylight saving</b>	Shows if day light saving time is active.	
<b>82 Time zone offset</b>	Shows the offset from UTC timer for the current time zone.	
<b>84 Time received from fieldbus</b>	Shows the last time / date received from fieldbus to set the real time clock.	
<b>81 Name</b>	Shows the name of this controller.	
<b>35 Backup time stamp</b>	Shows the time stamp. the time stamp is updated each time the configuration is saved as a backup.	
<b>34 Unsaved changes</b>	Shows if there have been changes to the configuration since the last backup was saved. If so, this value will be 'Yes'.	
<b>57 Service</b>	Shows if it is time for service.	
<b>86 Time for service</b>	Shows if it is time for service.	
<b>85 Time for motor service</b>	Shows if it is time for service on the motors.	






## View all details

### 4 Motor line [ALL]










PARAMETER:	DESCRIPTION:	
<b>18 Output mode</b>	<p>Specify the mode of the all motor outputs. The output modes are: 'Not used': the output is disabled. 'MotorLink®': the output is used for MotorLink® motors. '±24V motor': the output is used for 'standard' ±24V motors.</p> <p>If 'Detect' is selected the output mode will be automatically detected. this is done by trying to communicate with MotorLink® motors. If this is possible the output mode will be set to 'MotorLink®' and all motors will be discovered, i.e. that is not subsequently necessary to press 'Discover on MotorLink®'. If it is not possible to communicate with MotorLink® motors the output mode will be set to '±24V motor'.</p>	
<b>16 Discover on MotorLink®</b>	<p>By pressing 'Discover MotorLink®' all the window motors and locking motors (WMBs) on all MotorLink® outputs are discovered. If no errors are found, this number will be equivalent to the actual number of connected motors and locking motors (WMBs).</p>	
<b>17 Manual hand position</b>	<p>Position with manual priority to an position relative to actual position of the motor (open/stop/close).</p>	
<b>19 PWM time base</b>	<p>Specify the PWM (pulse width modulation) time base for the heating output.</p> <p><b>Factory default value:</b> 15 min.</p>	
<b>20 Service threshold, full strokes</b>	<p>Configures the number of full strokes for the service indication.</p> <p><b>Factory default value:</b> &amp;lt;...&amp;gt;</p>	


















## View all details











### 4 Motor line [1..13]












PARAMETER:	DESCRIPTION:	
<b>16 Motor type</b>	Shows the type of the actual motor output.	
<b>106 Output mode</b>	<p>Specify the mode of the motor output. The output modes are: 'Not used': the output is disabled. 'MotorLink®': the output is used for MotorLink® motors. '±24V motor': the output is used for 'standard' ±24V motors.</p> <p>If 'Detect' is selected the output mode will be automatically detected. this is done by trying to communicate with MotorLink® motors. If this is possible the output mode will be set to 'MotorLink®' and all motors will be discovered, i.e. that is not subsequently necessary to press 'Discover on MotorLink®'.</p> <p>If it is not possible to communicate with MotorLink® motors the output mode will be set to '±24V motor'.</p> <p><b>Factory default value:</b> Not used</p>	
<b>67 Status</b>	Shows the status of the motor line.	
<b>17 Expected no. of motors</b> Displayed if motor type = MotorLink®	<p>Specify the number of motors that are connected on this motorline (except locking motors (WMBs)) or if there are magnetic clamps. Choose between: None = no motors on the motorline, 1 = one motor (1 x -1), 2 = two motors (2 x -2), 3=three motors (3 x -3), 4=four motors (4 x -4). Magnetic clamp = the output has voltage until it is triggered by alarm. Not set = factory setting. 'Discover' (is used in two situations): 1. When the touchscreen informs that there is a discrepancy between the specified number of motors and the detected number of motors. Press 'Discover' to discover the number of connected motors on the line. the number will be displayed and the number can now be compared to the entered number of motors. 2. When the cable connection has been changed, if a motor has been changed or the number of motors has been changed.</p> <p><b>Factory default value:</b> Not set</p>	
<b>60 No. of found motors</b> Displayed only if the motor configuration does not correspond with the discovered motor status.	Shows the number of motors detected on the motor line.	























<p><b>19 Motor configuration</b> Displayed if motor type = ±24V motor</p>	<p>Choose between: None = no motors connected on the motor line. No cable monitoring = the motors on the line has no cable monitoring. 3 wire cable monitoring = with 3 wire cable monitoring (notice: the type is to be set in the next step). Magnetic clamp = the output has voltage until it is triggered by alarm. Magnetic clamp, 3 w. monitoring = magnetic clamp and cable monitoring. Not set = factory setting.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>None</li> <li>No cable monitoring</li> <li>3 wire cable monitoring</li> <li>Magnetic clamp</li> <li>Magnetic clamp, 3 w. surveillance</li> <li>Not set</li> <li>Pyrotechnic gas generator</li> <li>Alarm output</li> <li>Sunscreening, WSA380</li> <li>Heating valve</li> <li>Sunscreening</li> </ul> <p><b>Factory default value:</b> Not set</p>	
<p><b>79 Wire cable check type</b> Displayed if 3 wire cable monitoring</p>	<p>Specify the type (WSA 423 or WSA 510) of the 3-wire cable check end module.</p> <p><b>Factory default value:</b> 10kOhm resistors (WSA 510)</p>	
<p><b>20 Discover motors</b> Displayed if motor type = MotorLink®</p>	<p>Specify if the system shall detect the motors on the motor line. The function is used, if changes has been made in the cable connection, if replacement of a motor has been done or the number of motors has been changed.</p>	
<p><b>66 Stroke time</b> Displayed if motor type = ±24V motor</p>	<p>Specify the time it takes the motor to run from fully closed position to fully open.</p> <p><b>Factory default value:</b> 60 s</p>	
<p><b>131 Louvre time</b></p>	<p>Configures the time for a full louvre movement in milliseconds. This value is used to calculate the actual louvre position.</p> <p><b>Factory default value:</b> 1000 ms</p>	
<p><b>134 Louvre position after manual operation</b></p>	<p>Configures the louvre position after a manual operation.</p>	
<p><b>21 Motor group</b></p>	<p>Specify the number of the motor group to which the motorline is to be associated with. . One or more motor lines can be associated to the same motor group. All the motor lines in the group will be operated at the same time on the break glass unit/keypads of the group.</p> <p><b>Factory default value:</b> None</p>	
<p><b>22 Close from field bus</b></p>	<p>Shows if 'close' is received from the field bus module.</p>	
<p><b>81 Close from BACnet</b></p>	<p>Shows if 'close' is received from BACnet.</p>	


















118	<b>Close from Modbus TCP</b>	Shows if 'close' is received from Modbus TCP.	
33	<b>Comfort min. position</b>	Specify the minimum allowed position with comfort priority.  <u>Factory default value:</u> 0%	
35	<b>Smoke / heat max. pos.</b> Displayed if motor type = MotorLink®	Specify the maximum allowed position with smoke / heat priority.  <u>Factory default value:</u> 100%	
34	<b>Comfort max. position</b>	Specify the maximum allowed position with comfort priority.  <u>Factory default value:</u> 100%	
24	<b>Max. comfort pos. motor gr.</b>	Shows the maximum allowed opening limitation with comfort priority set by the associated motor group.	
23	<b>Max comfort pos. field bus</b>	Shows the maximum allowed opening limitation with comfort priority set by the field bus.	
80	<b>Max comfort pos. BACnet</b>	Shows the maximum allowed opening limitation with comfort priority set by BACnet.	
117	<b>Max comfort pos. Modbus TCP</b>	Shows the maximum allowed opening limitation with comfort priority set by Modbus TCP.	
31	<b>Actual maximum position</b>	Shows the actual resulting maximum opening. This is the lowest value of all limiting inputs.	
25	<b>Manual absolute position</b>	For manual operation of the opening with +1/-1, +10/-10 or max/min.	
26	<b>Manual relative position</b>	For manual operation of the connected actuators on the line with manual priority (open/stop/close).	
27	<b>Automatic position</b>	Position with comfort priority to an absolute position.	
28	<b>Heat / smoke position</b>	Position with heat / smoke priority.	
29	<b>Disable auto. position</b>	Specify if the position is to be disabled with automatic/comfort priority.  <u>Factory default value:</u> No	
30	<b>Disable hand position</b>	Specify if the positions with manual priority is to be disabled.  <u>Factory default value:</u> No	
32	<b>Actual position</b>	Shows the actual opening of the connected motors.	
132	<b>Louvre position</b>	Set the louvre position. After a up / down movment the louvres will be aligned to this position. 50% is horisontal, 0% is closed.  <u>Factory default value:</u> 50%	








<p><b>150 Hand louvre position</b></p>	<p>Set the louvre position with hand priority. 50% is horizontal, 0% is closed.</p> <p><b>Factory default value:</b> 50%</p>	
<p><b>133 Actual louvre position</b></p>	<p>Shows the actual louvre position. 50% is horizontal, 0% is closed.</p>	
<p><b>18 Expected no. of locking motors</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of locking motors (WMBs) that are connected on the motor line. If the number discrepancy the detected number a hardware error is displayed.</p> <p><b>Factory default value:</b> None</p>	
<p><b>61 No. of found locking motors</b> Displayed only if the motor configuration does not correspond with the discovered motor status.</p>	<p>Shows the actual number of locking motors (WMBs) detected on the motor line.</p>	
<p><b>36 Smoke / heat speed</b> Displayed if motor type = MotorLink®</p>	<p>Specify the motor speed during smoke alarm. The speed is relative to the maximum speed of the motor type.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>37 Manual speed</b> Displayed if motor type = MotorLink®</p>	<p>Specify the opening speed that the motor shall run at when operated manually on a keypad. The speed is a percentage of the max speed of the motor.</p> <p><b>Factory default value:</b> 75%</p>	
<p><b>38 Auto. speed</b> Displayed if motor type = MotorLink®</p>	<p>Specify the opening speed that the motor shall run at when automatic comfort ventilation. The speed is a percentage of the max speed of the motor.</p> <p><b>Factory default value:</b> 30%</p>	
<p><b>39 Temp. manual timer</b></p>	<p>Shows the remaining time of the manual priority timer. If the value is '0', the timer is not active.</p>	
<p><b>40 Manual command - default auto. off period</b></p>	<p>Specify for how long the automatic/comfort priority is to be ignored after a manual action has been done e.g. an opening on the keypad.</p> <p><b>Factory default value:</b> 30 min.</p>	
<p><b>41 Manual grace timer</b> Displayed only if relevant</p>	<p>Shows the remaining time of the manual grace timer. This is a safety feature so after a closing command the window can still be manually operated in a short time. If the value is '0', the timer is not active.</p>	
<p><b>42 Man. operation after auto. comm.</b></p>	<p>Specify for how long time it should be possible to operate the motor group (e.g. on a keypad), after the system has given an automatic command (e.g. close). Within this period it is possible to operate manually e.g. to release a stocked person (human safety). If this feature is not needed the value is set to '0'.</p> <p><b>Factory default value:</b> 30 s</p>	

<p><b>43 Retry during alarm</b></p>	<p>Specify if the motors are to be reactivated for 30 minutes during a heat / smoke situation. Function as specified in EN12101-9, 5.2.1.5.</p> <p><b>Factory default value:</b> No</p>	
<p><b>76 Open threshold</b></p>	<p>Threshold used for the 'Open status'. If the actual position is higher than this value, the 'open' status is active.</p> <p><b>Factory default value:</b> 95%</p>	
<p><b>77 Open status</b></p>	<p>Shows the 'Open' status. If the actual opening position is higher than the 'Open threshold' this status is active.</p>	
<p><b>71 Max. unexpected overcurrent</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of times an overcurrent must be detected before the 0%-point of the motor is updated. When the motor position reaches fully open or fully closed the 'unexpected breaks' counter is reset. If the value is set to 0, the 0%-point will never be changed. It is recommended to set the value to 0 after the correct 0% point (closed) is found.</p>	
<p><b>90 Max. unexpected overcurrent (motor)</b> Displayed if motor type = MotorLink®</p>	<p>Specify the number of times an overcurrent must be detected before the 0%-point of the motor is updated. When the motor position reaches fully open or fully closed the 'unexpected breaks' counter is reset. If the value is set to 0, the 0%-point will never be changed. It is recommended to set the value to 0 after the correct 0% point (closed) is found.</p> <p><b>Factory default value:</b> 0</p>	
<p><b>72 Locking motor overcurrent is locked</b> Displayed if motor type = MotorLink®</p>	<p>Only relevant for locking motor type WMB 0xM. Configure, if the locking motor should be concerned as 'locked', if an overcurrent is detected during locking before reaching the end-switch.</p> <p><b>Factory default value:</b> No</p>	
<p><b>68 Error</b></p>	<p>Shows the error status of the motor line.</p>	
<p><b>69 Closed</b></p>	<p>Shows if all motors on the motor line is closed. If locking motors are present, they are also locked.</p>	
<p><b>70 Retransmit time</b></p>	<p>Specify the retransmit interval time for sending unchanged values on the connected field bus module.</p> <p><b>Factory default value:</b> 300 s</p>	
<p><b>89 Direction change delay time.</b> Displayed if motor type = ±24V motor</p>	<p>Direction change delay time.</p> <p><b>Factory default value:</b> 500 ms</p>	
<p><b>91 Pyrotechnic gas generator disabled</b></p>	<p>Set this to test the system without activating the pyrotechnic gas generator on this output. As long as this setting is active an error will be shown on this output.</p>	

<p><b>92 Sequential control type</b></p>	<p>Configure the sequential control type None, open or close. When open or close is selected the sequential control becomes active. the parameters 'Position limitation', 'Invert' and 'Position logic' define the conditions under which the constrained motor line can move beyond the defined limitation.</p> <p><b>Factory default value:</b> None</p>	
<p><b>93 Sequential control position limit</b></p>	<p>Configures the position limitation when sequential control is active.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>102 Sequential control position limit</b></p>	<p>Configures the open / close position limitation when sequential control is active.</p> <p><b>OPTIONS:</b>                  Closed 0%                  Open 100%</p> <p><b>Factory default value:</b> Closed 0%</p>	
<p><b>94 Sequential control with</b></p>	<p>Configures what the Motor line is to control together with. Motor Line, Local input, KNX input, BACnet input or a delay timer.</p> <p><b>Factory default value:</b> Motor line</p>	
<p><b>95 Sequential control with no</b></p>	<p>Configures with which number the sequential control should work.</p> <p><b>Factory default value:</b> -</p>	
<p><b>96 Sequential control position logic</b></p>	<p>Configures if the sequential control is active if position is greater than or equal or less than or equal.</p> <p><b>Factory default value:</b> Greater than or equal</p>	
<p><b>97 Sequential control position</b></p>	<p>Configures the sequential control position threshold to compare the actual position of the controlled motor line with.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>103 Sequential control position</b></p>	<p>Configures the sequential control open / close position threshold with which the actual position of the sequential control motor line is compared with.</p> <p><b>OPTIONS:</b>                  Closed 0%                  Open 100%</p> <p><b>Factory default value:</b> Closed 0%</p>	
<p><b>98 Sequential control invert</b>                  Displayed only if relevant</p>	<p>Configures if the state of the control input should be inverted.</p> <p><b>Factory default value:</b> No</p>	
<p><b>99 Sequential control max. wait time</b></p>	<p>Configures the maximal time a command is pending due to sequential control.                  If the timer runs out the window will continue its movement.</p> <p><b>Factory default value:</b> 0 s</p>	

<p><b>130 Sequential control only continue after wait if fire</b></p>	<p>Configures if a pending command only is executed after the wait timer expires if it is fire priority command.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>104 Reclose</b> Displayed if motor type = ±24V motor</p>	<p>Configures if a motor output that is considered to be closed (actual position 0%) should be reclosed (output activated in closed direction) when a close condition occurs.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>119 Pos. limitation watchdog</b></p>	<p>Configures which position limitation signals that are monitored. Maximum position and close from fieldbus (KNX or Modbus RTU), BACnet and Modbus TCP can be monitored. If a signal is not updated within the specified timeout the windows will be closed to the safety position. Default timeout is 20 minutes.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>None</li> <li>Max FB</li> <li>Close FB</li> <li>Max. BACnet</li> <li>Close BACnet</li> <li>Max Modbus TCP</li> <li>Close Modbus TCP</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>120 Pos. watchdog timeout</b></p>	<p>Configures the position limitation watchdog timeout. If a signal is not updated within the specified timeout the windows will be closed to the safety position.</p> <p><b>Factory default value:</b> 20 min.</p>	
<p><b>127 Pos. limitation watchdog timeout</b></p>	<p>Shows if there is a position watchdog timeout.</p>	
<p><b>121 Fieldbus max. pos. watchdog timer</b></p>	<p>Shows the actual value of the fieldbus (KNX or Modbus RTU) watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.</p>	
<p><b>124 Fieldbus close watchdog timer</b></p>	<p>Shows the actual value of the fieldbus (KNX, BACnet MS/TP or Modbus RTU) watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.</p>	
<p><b>122 BACnet max. pos. watchdog timer</b></p>	<p>Shows the actual value of the BACnet watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.</p>	
<p><b>125 BACnet close watchdog timer</b></p>	<p>Shows the actual value of the BACnet watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.</p>	
<p><b>123 Modbus TCP max. pos. watchdog timer</b></p>	<p>Shows the actual value of the Modbus TCP watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.</p>	

















126 <b>Modbus TCP close watchdog</b>	Shows the actual value of the Modbus TCP watchdog timer. Every time a signal is received the timer is reloaded with the watchdog timeout value.	
109 <b>Maximum current, standard</b>	This limit applies to the average current.  <u>Factory default value:</u> 10A	
149 <b>Maximum current</b>	This limit applies to the average current. If the value is 0 the limit is not in use.  <u>Factory default value:</u> 0 mA	
128 <b>High priority open</b>	Shows that the high priority open is active. This is an open signal with higher priority than Safety and Manual, but lower than Heat & Smoke.	
129 <b>High priority open is 1st comfort priority</b>	Configures that 'high priority open' has the first comfort priority, i.e. higher than any position limitation (maximum positions or close).  <u>Factory default value:</u> Yes	
151 <b>Number of full strokes</b>	Shows the number of full strokes since last reset. Used for the service indication.  <u>Factory default value:</u> 0	
153 <b>Service threshold, full strokes</b>	Configures the number of full strokes for the service indication.  <u>Factory default value:</u> Disabled	
62 <b>Motor hardware version</b> Displayed if motor type = MotorLink®	Shows the hardware versions of the connected motors.	
64 <b>Motor software versions</b> Displayed if motor type = MotorLink®	Shows the firmware versions of the connected motors.	
100 <b>Team size</b>	Shows the team size of the motors.	
54 <b>Motor 1's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
55 <b>Motor 2's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
56 <b>Motor 3's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
57 <b>Motor 4's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
45 <b>Motor max. speed</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
50 <b>Locking motor config. flags</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
51 <b>Chain length</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	













<b>53 Service position</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
<b>63 Locking motor hardware version</b> Displayed if motor type = MotorLink®	Shows the hardware versions of the connected locking motors (WMBs).	
<b>65 Locking motor software versions</b> Displayed if motor type = MotorLink®	Shows the firmware versions of the connected locking motors (WMBs).	
<b>101 Locking motor team size</b> Displayed if motor type = MotorLink®	Shows the team size of the locking motors.	
<b>58 Locking motor 1's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
<b>59 Locking motor 2's serial number</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	
<b>46 Locking motor max. speed</b> Displayed if motor type = MotorLink®	Parameter of the motor (can not be changed).	































## View all details
















### 3 Motor group [1..13]














PARAMETER:	DESCRIPTION:	
81 Name	Shows the assigned name of the motor group.  <u>Factory default value:</u> MG 1x	
16 Controlling smoke zone	Specify the number of the smoke zone that controls the motor group.  <u>Factory default value:</u> 1	
47 Controlling NV controller	Specify the number of the NV Controller that controls the motor group.  <u>Factory default value:</u> -	
86 Sunscreen controller	Specify which sunscreen controller that controls this motor group.  <u>Factory default value:</u> -	
59 Controlling heating zone	Specify the number of the heating zone that controls the motor group.  <u>Factory default value:</u> -	
17 Actual smoke position	Shows the actual position with heat and smoke priority set to the motor group.	
41 Alarm delay timer Displayed only if relevant	Shows the delay of the command to the motor lines after an alarm is triggered. 0s (0 sec.) = the alarm command is forwarded with no delay.	
18 Manual absolute position	Specify the position (+1 -1 +10 -10 min max) with manual priority to an absolute position.	
19 Manual relative position	Specify the relative position with manual priority (open, stop, close).	
20 Automatic opening	Shows the last automatic position command sent to the motor group.	
104 Slat position	Shows the last slat angle command to the motor group.  <u>Factory default value:</u> 0%	
48 NV max. comfort pos.	Shows the maximum allowed position from the NV Controller.	
21 Field bus max. comfort pos. motor gr.	Specify the maximum allowed position with manual or comfort priority.	
39 BACnet max. comfort pos. motor gr.	Specify the maximum allowed position with manual or comfort priority.	
46 Modbus TCP max. comfort pos. motor gr.	Specify the maximum allowed position with manual or comfort priority.	
22 Actual status	Shows the actual status of the motor group.	

<p><b>23 Actual maximum position</b></p>	<p>Shows the actual resulting maximum opening limitation. This is the lowest value of all limiting inputs.</p>	
<p><b>27 Smoke maximum position</b></p>	<p>Specify the maximum allowed position during heat and smoke. This value will limit the position set by the smoke zone. Normally the value is set to 100%. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>28 Comfort maximum position</b></p>	<p>Specify the maximum allowed position during manual or comfort. This value will limit the position set by manual or comfort commands.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>29 Comfort safety maximum position</b></p>	<p>Specify the maximum position during manual or comfort when a safety input associated the motor group is active.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>30 Comfort wind maximum position</b></p>	<p>Specify the maximum position during manual or comfort when the wind speed has exceeded the safety wind speed threshold.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>31 Comfort open position</b></p>	<p>Specify the position that is used in the event, when a 'comfort-open' command is sent to the motor group.</p> <p><b>Factory default value:</b> 15%</p>	
<p><b>43 Comfort open close time</b></p>	<p>Specify an optional time out to close the windows after a comfort open event. If 0 is specified the windows will not be closed automatically.</p> <p><b>Factory default value:</b> 0 s</p>	
<p><b>44 Comfort open remaining time</b> Displayed only if relevant</p>	<p>Shows the remaining time of the comfort open.</p>	
<p><b>32 Comfort maximum wind speed</b></p>	<p>Specify the safety wind speed threshold. If this limit is exceeded the position of the motor group is limited to the 'comfort safety maximum position'. If the value is set to 0 the wind speed safety function is disabled.</p> <p><b>Factory default value:</b> 0.0 m/s</p>	
<p><b>33 Retransmit time</b></p>	<p>Specify the retransmit interval time for sending unchanged values on the connected field bus module.</p> <p><b>Factory default value:</b> 300 s</p>	
<p><b>36 Use 'safety' from smoke zone</b></p>	<p>Specify if the 'safety' signal from the smoke zone should be used in the motor group.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>40 Alarm delay</b></p>	<p>Specify the delay activation of the motor lines after an alarm is received. 0s (0 sec.) = the alarm command is activated with no delay.</p> <p><b>Factory default value:</b> 0 s</p>	

<p><b>42 Close at mains error</b></p>	<p>Specify if the motor group should be closed when a mains error becomes active. This is 30 minutes after missing mains voltage is detected.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>53 Window wind and rain safety limit</b></p>	<p>Window wind and rain safety limit</p> <p><b>Factory default value:</b> 4.0 m/s</p>	
<p><b>54 Window opening gain</b></p>	<p>Window opening gain</p> <p><b>Factory default value:</b> 1.0</p>	
<p><b>55 Window closing gain</b></p>	<p>Window closing gain</p> <p><b>Factory default value:</b> 1.0</p>	
<p><b>37 Wind directions, where to close during alarm</b></p>	<p>Specify the wind directions where the windows in the motor group should close during wind dependant heat &amp; smoke ventilation. The direction interval is <math>\pm 7^\circ</math> around the shown direction.</p> <p><b>Factory default value:</b> None</p>	
<p><b>56 Window maximum position rain</b></p>	<p>Window maximum position rain</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>57 Window maximum position rain and wind</b></p>	<p>Window maximum position rain and wind</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>85 Max. position during Trickle Ventilation</b></p>	<p>Configures the maximum position during Trickle ventilation.</p> <p><b>Factory default value:</b> 20%</p>	
<p><b>58 Window Initial opening</b></p>	<p>Window Initial opening</p> <p><b>Factory default value:</b> 10%</p>	
<p><b>60 Cp values 1 and 2</b></p>	<p>Cp1: <math>0^\circ - 44^\circ</math> Cp2: <math>45^\circ - 89^\circ</math></p> <p><b>Factory default value:</b> 0.01 0.01</p>	
<p><b>61 Cp values 3 and 4</b></p>	<p>Cp3: <math>45^\circ - 134^\circ</math> Cp4: <math>135^\circ - 179^\circ</math></p> <p><b>Factory default value:</b> 0.01 0.01</p>	
<p><b>62 Cp values 5 and 6</b></p>	<p>Cp5: <math>180^\circ - 224^\circ</math> Cp6: <math>225^\circ - 269^\circ</math></p> <p><b>Factory default value:</b> 0.01 0.01</p>	
<p><b>63 Cp values 7 and 8</b></p>	<p>Cp7: <math>270^\circ - 314^\circ</math> Cp8: <math>315^\circ - 359^\circ</math></p> <p><b>Factory default value:</b> 0.01 0.01</p>	












<p><b>70 Local max. opening area</b></p>	<p>Shows the max. opening area of local windows in this motor group.</p> <p><u>Factory default value:</u> 1.000 m<sup>2</sup></p>	
<p><b>83 Slave max. opening area</b></p>	<p>Shows the max. opening area of windows from slave motor group.</p> <p><u>Factory default value:</u> 0.000 m<sup>2</sup></p>	
<p><b>84 Total max. opening area</b></p>	<p>Shows the total max. opening area of windows in this motor group.</p> <p><u>Factory default value:</u> 1.000 m<sup>2</sup></p>	
<p><b>71 Actual Cp</b></p>	<p>Shows the actual wind pressure coefficient.</p> <p><u>Factory default value:</u> 0.00</p>	
<p><b>72 Actual Qv</b></p>	<p>Shows the actual calculated air flow.</p> <p><u>Factory default value:</u> 0.00 m<sup>3</sup>/s</p>	
<p><b>73 Actual AER</b></p>	<p>Shows the actual calculated air exchange rate.</p> <p><u>Factory default value:</u> 0.00</p>	
<p><b>74 Actual auto. pos. max.</b></p>	<p>Shows the actual calculated maximum position for automatic NV control.</p> <p><u>Factory default value:</u> Not received</p>	
<p><b>87 Sunscreen control status</b></p>	<p>Show the sunscreen control status.</p> <p><u>Factory default value:</u> Hand</p>	
<p><b>88 Sunscreen status</b></p>	<p>Show the sunscreen status.</p> <p><u>Factory default value:</u> Uninitialised</p>	
<p><b>102 Sunscreen, illumination level, down</b></p>	<p>Specify the illumination level for running the sunscreening down.</p> <p><u>Factory default value:</u> 30000</p>	
<p><b>103 Sunscreen, illumination level, up</b></p>	<p>Specify the illumination level for running the sunscreening up.</p> <p><u>Factory default value:</u> 10000</p>	
<p><b>99 Sunscreen, level, night, on</b></p>	<p>Specify the night 'on' illumination level.</p> <p><u>Factory default value:</u> 150</p>	
<p><b>100 Sunscreen, level, night, off</b></p>	<p>Specify the night 'off' illumination level.</p> <p><u>Factory default value:</u> 250</p>	
<p><b>101 Sunscreen, illumination up, threshold time</b></p>	<p>Specify the time the illumination must be above the 'up' threshold before the state changes.</p> <p><u>Factory default value:</u> 600 s</p>	
<p><b>105 Sunscreen, illumination down, threshold time</b></p>	<p>Specify the time the illumination must be above the 'down' threshold before the state changes.</p> <p><u>Factory default value:</u> 300 s</p>	

<p><b>91 Sunscreen, shade for privacy</b></p> <p><b>Factory default value:</b> No</p>	<p>Specify if privacy during night is enabled.</p>	
<p><b>92 Sunscreen, slat pos., down, occupied</b></p> <p><b>Factory default value:</b> 50%</p>	<p>Specify the slat position after down due to occupied.</p>	
<p><b>93 Sunscreen, slat pos., down, secure</b></p> <p><b>Factory default value:</b> 0%</p>	<p>Specify the slat position after down due to secure.</p>	
<p><b>94 Sunscreen, slat pos., down, unoccupied</b></p> <p><b>Factory default value:</b> 0%</p>	<p>Specify the slat position after down due to unoccupied.</p>	
<p><b>96 Sunscreen mode, occupied</b></p> <p><b>Factory default value:</b> Automatic</p>	<p>Specify the mode during occupied.</p>	
<p><b>97 Sunscreen mode, secure</b></p> <p><b>Factory default value:</b> Down then hand</p>	<p>Specify the mode during secure.</p>	
<p><b>98 Sunscreen mode, unoccupied</b></p> <p><b>Factory default value:</b> Automatic</p>	<p>Specify the mode during unoccupied.</p>	
<p><b>90 Sunscreen, enable low. temp. safety</b></p> <p><b>Factory default value:</b> No</p>	<p>Specify if low outdoor temperature safety is enabled.</p>	
<p><b>89 Sunscreen, monitor outdoor temp.</b></p> <p><b>Factory default value:</b> No</p>	<p>Specify if the outdoor temperature is to be monitored.</p>	
<p><b>95 Sunscreen, low temp.</b></p> <p><b>Factory default value:</b> -6.0 °C</p>	<p>Specify the low outdoor safety temperature.</p>	
<p><b>64 Link from master address</b></p> <p><b>Factory default value:</b> None</p>	<p>Address of the master for this motor group.</p>	
<p><b>65 Link to slave address</b></p> <p><b>Factory default value:</b> None</p>	<p>Address of the slave of this motor group.</p>	
<p><b>75 Max. position from master</b></p> <p><b>Factory default value:</b> 100%</p>	<p>Shows the maximum position received from the master.</p>	
<p><b>49 Average actual pos.</b></p>	<p>Shows the average actual position of the associated motor lines.</p>	
<p><b>76 Min. position from fieldbus</b></p> <p><b>Factory default value:</b> 0%</p>	<p>Shows the minimum position received from the fieldbus (KNX and Modbus RTU).</p>	

<p><b>77 Min. position from BACnet</b></p>	<p>Shows the minimum position received from BACnet.</p> <p><u>Factory default value:</u> 0%</p>	
<p><b>78 Min. position from Modbus TCP</b></p>	<p>Shows the minimum position received from Modbus TCP.</p> <p><u>Factory default value:</u> 0%</p>	
<p><b>79 Min. position from master</b></p>	<p>Shows the minimum position received from the master.</p> <p><u>Factory default value:</u> 0%</p>	
<p><b>80 Actual min. position</b></p>	<p>Shows the actual minimum position forwarded to the motor lines.</p> <p><u>Factory default value:</u> 0%</p>	
<p><b>24 No. of associated break glass units</b></p>	<p>Shows the number of comfort inputs on break glass units that are associated to the motor group.</p>	
<p><b>25 No. of associated local inputs</b></p>	<p>Shows the number of local inputs that are associated to the motor group.</p>	
<p><b>26 No. of associated motor lines</b></p>	<p>Shows the number of motor lines that is associated to this motor group.</p>	
<p><b>34 No. of associated field bus inputs</b></p>	<p>Shows the number of field bus inputs that are associated to the motor group.</p>	
<p><b>38 No. of associated BACnet inputs</b></p>	<p>Shows the number of field bus inputs that are associated to the motor group.</p>	
<p><b>45 No. of associated Modbus TCP inputs</b></p>	<p>Shows the number of field bus inputs that are associated to the motor group.</p>	
<p><b>106 Send position when entering Auto</b></p>	<p>Specify if the position should be sent when status changes to Auto.</p> <p><u>Factory default value:</u> #N/A</p>	
<p><b>107 Comfort maximum position, summer</b></p>	<p>Specify the maximum allowed position during manual or comfort when the NV Controller is in summer mode. This value will limit the position set by manual or comfort commands.</p> <p><u>Factory default value:</u> #N/A</p>	
<p><b>108 Comfort maximum position, winter</b></p>	<p>Specify the maximum allowed position during manual or comfort when the NV Controller is in winter mode. This value will limit the position set by manual or comfort commands.</p> <p><u>Factory default value:</u> #N/A</p>	














## View all details

### 5 WSK-Link™ [ALL]







PARAMETER:	DESCRIPTION:	
23 Licensed features	Shows functions enabled by the USB license stick.	
17 Bus topology is ring	Specify if the bus topology of the break glass unit bus is closed (Yes) or not closed (No). If the setting is set to 'Yes' an error message will appear if the ring is broken.  <u>Factory default value:</u> No	
18 Ring bus status	Shows the actual status of the break glass unit bus, if it is a closed ring or not.	
19 SHE bus 1 is OK	Shows if bus connection 1 is okay. If there is no break glass units on the connected bus line, or the connection is not used, the status will not be OK.	
20 SHE bus 2 is OK	Shows if bus connection 2 is okay. If there is no break glass units on the connected bus line, or the connection is not used, the status will not be OK.	
21 Bus error	Shows if there is a general error on the break glass unit bus. The is only relevant if the bus topology is set to 'ring'.	
22 Left connector (X6)	Left connector (X6)	
24 Foreign outdoor temperature	Foreign outdoor temperature  <u>Factory default value:</u> 0.0 °C	
25 Foreign outdoor temperature used in zones	Foreign outdoor temperature used in zones  <u>Factory default value:</u> -	
27 Send foreign outdoor temp. to AOnet	Configures which conntrollers on the AOnet to send foreign outdoor temperature to.  <u>Factory default value:</u> None	
26 Send foreign outdoor temp. to foreign AOnet	Configures if the foreign outdoor temperature shold be sent to the foreign AOnet.  <u>Factory default value:</u> None	











## View all details















### 5 WSK-Link™ [1..30]















PARAMETER:	DESCRIPTION:	
35 Device type	<p>Device type</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>WSK 501/2</li> <li>WSK 503/4</li> <li>WSC 3XX</li> <li>Unknown</li> <li>WWS 100</li> </ul>	
16 Serial number	<p>Shows the serial number for the connected break glass unit. The serial number is unique for this break glass unit and the serial number is also stated on the label of the break glass unit.</p>	
17 Associated smoke zone	<p>Specify the smoke zone which the break glass unit shall operate.</p> <p><b>Factory default value:</b> None</p>	
37 Associated NV controller	<p>Specify the number of the NV controller where the sensor values are to be used.</p> <p><b>Factory default value:</b> None</p>	
31 Use comfort inputs in smoke zone	<p>Specify if the comfort inputs should be associated with the smoke zone.</p> <p><b>Factory default value:</b> Yes</p>	
18 Threshold for open-circuit smoke sensor	<p>Threshold for open-circuit smoke sensor</p> <p><b>Factory default value:</b> 4</p>	
20 Threshold for active smoke sensor	<p>Threshold for active smoke sensor</p> <p><b>Factory default value:</b> 23</p>	
19 Threshold for short-circuit smoke sensor	<p>Threshold for short-circuit smoke sensor</p> <p><b>Factory default value:</b> 111</p>	
21 Device status	Device status	
36 Status of slave	Status of slave	
	Displayed only if relevant	
22 Connection	<p>Shows if there is connection to the break glass unit. Yes = there is connection. No = there is no connection.</p>	
89 Touch keys motor group	<p>Specify which motor group/groups that the touch keys shall control.</p> <p><b>Factory default value:</b> None</p>	
43 Touch key status	Shows the actual touch key input status.	
















<p><b>23 Comfort motor group</b></p>	<p>Specify which motor group/groups that comfort keypad/-pads shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>55 Open input smoke zone</b></p>	<p>Specify which smoke zone/zones that comfort Open input shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>56 Open input function in smoke zones</b></p>	<p>Specify the function that the open input applies to the associated smoke zones.</p> <p><b>Factory default value:</b> None</p>	
<p><b>57 Open input target smoke zone output</b></p>	<p>Shows the actual output that the Open input applies to the smoke zones.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Line A</li> <li>Line B</li> <li>Reset</li> <li>Line C</li> <li>Line D</li> <li>Line E</li> <li>Line F</li> <li>Comfort stop</li> <li>Comfort open</li> <li>Comfort close</li> <li>Comfort safety</li> <li>Line A error</li> <li>Line B error</li> <li>Line C error</li> <li>Line D error</li> <li>Line E error</li> <li>Line F error</li> <li>Comfort safety error</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>58 Close input smoke zone</b></p>	<p>Specify which smoke zone / zones that comfort close input shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>59 Close input function in smoke zones</b></p>	<p>Specify the function that the close input applies to the associated smoke zones.</p> <p><b>Factory default value:</b> None</p>	

<p><b>60 Close input target smoke zone output</b></p>	<p>Shows the actual output that the Close input applies to the smoke zones.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Line A</li> <li>Line B</li> <li>Reset</li> <li>Line C</li> <li>Line D</li> <li>Line E</li> <li>Line F</li> <li>Comfort stop</li> <li>Comfort open</li> <li>Comfort close</li> <li>Comfort safety</li> <li>Line A error</li> <li>Line B error</li> <li>Line C error</li> <li>Line D error</li> <li>Line E error</li> <li>Line F error</li> <li>Comfort safety error</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>28 Br.glass unit+sensor one smoke zone</b></p>	<p>Specify if there is connected smoke sensor to the break glass unit and also specify if the smoke detector shall release the same smoke zone or another smoke zone.</p> <p>In case where ex. the break glass unit of the smoke zone shall release the opening of the windows in the facade and the smoke detector shall release the opening of the roof windows, the function is set to 'Other smoke zone' (it/they are selected afterwards).</p> <p><b>Factory default value:</b> Not used</p>	
<p><b>29 Smoke sensor associated with smoke zone</b></p> <p>Displayed only if smoke detector is assigned to specific smoke zone(s)</p>	<p>Specify the smoke zone, that the break glass unit shall control.</p> <p><b>Factory default value:</b> None</p>	
<p><b>30 Status of smoke sensor</b></p> <p>Displayed only if smoke detector is assigned to specific smoke zone(s)</p>	<p>Status of smoke sensor</p>	
<p><b>38 Temperature</b></p>	<p>Shows the actual WSK sensor temperature.</p>	
<p><b>39 CO2</b></p>	<p>Shows the actual WSK sensor CO2 level.</p>	
<p><b>40 Relative humidity</b></p>	<p>Shows the actual WSK sensor relative humidity.</p>	
<p><b>41 Keypad 1 status</b></p>	<p>Shows the actual keypad pair 1 input status.</p>	
<p><b>42 Keypad 2 status</b></p>	<p>Shows the actual key pair 2 input status.</p>	
<p><b>64 Sensor input 1 status</b></p>	<p>Shows the status of WWS 100 Sensor input 1 when configured as 'on/off'.</p> <p><b>Factory default value:</b> None</p>	












<p><b>68 Sensor input 1 function in the NV controller</b></p>	<p>Specify the function the Sensor input 1 has in the NV controller.</p> <p><u>Factory default value:</u> None</p>	
<p><b>72 Sensor input 1 actual NV controller function</b></p>	<p>Shows the active function in the NV controller.</p> <p><u>Factory default value:</u> None</p>	
<p><b>77 Use Sensor input 1 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>81 Sensor input 1 function in NV controller 'all'</b></p>	<p>Configures the function in NV controller 'all'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>85 Sensor input 1, NV controller 'all' actual function</b></p>	<p>Shows the actual status of the function.</p> <p><u>Factory default value:</u> None</p>	
<p><b>65 Sensor input 2 status</b></p>	<p>Shows the status of WWS 100 Sensor input 2 when configured as 'on/off'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>69 Sensor input 2 function in the NV controller</b></p>	<p>Specify the function the Sensor input 2 has in the NV controller.</p> <p><u>Factory default value:</u> None</p>	
<p><b>73 Sensor input 2 actual NV controller function</b></p>	<p>Shows the active function in the NV controller.</p> <p><u>Factory default value:</u> None</p>	
<p><b>78 Use Sensor input 2 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>82 Sensor input 2 function in NV controller 'all'</b></p>	<p>Configures the function in NV controller 'all'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>86 Sensor input 2, NV controller 'all' actual function</b></p>	<p>Shows the actual status of the function.</p> <p><u>Factory default value:</u> None</p>	
<p><b>66 Sensor input 3 status</b></p>	<p>Shows the status of WWS 100 Sensor input 3 when configured as 'on/off'.</p> <p><u>Factory default value:</u> None</p>	
<p><b>70 Sensor input 3 function in the NV controller</b></p>	<p>Specify the function the Sensor input 3 has in the NV controller.</p> <p><u>Factory default value:</u> None</p>	
<p><b>74 Sensor input 3 actual NV controller function</b></p>	<p>Shows the active function in the NV controller.</p> <p><u>Factory default value:</u> None</p>	




<p><b>79 Use Sensor input 3 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>83 Sensor input 3 function in NV controller 'all'</b></p>	<p>Configures the function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>87 Sensor input 3, NV controller 'all' actual function</b></p>	<p>Shows the actual status of the function.</p> <p><b>Factory default value:</b> None</p>	
<p><b>67 Sensor input 4 status</b></p>	<p>Shows the status of WWS 100 Sensor input 4 when configured as 'on/off'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>71 Sensor input 4 function in the NV controller</b></p>	<p>Specify the function the Sensor input 4 has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>75 Sensor input 4 actual NV controller function</b></p>	<p>Shows the active function in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>80 Use Sensor input 4 in NV controller 'all'</b></p>	<p>Configures if the input should be used to activate a function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>84 Sensor input 4 function in NV controller 'all'</b></p>	<p>Configures the function in NV controller 'all'.</p> <p><b>Factory default value:</b> None</p>	
<p><b>88 Sensor input 4, NV controller 'all' actual function</b></p>	<p>Shows the actual status of the function.</p> <p><b>Factory default value:</b> None</p>	
<p><b>49 Outdoor temperature</b></p>	<p>Outdoor temperature</p> <p><b>Factory default value:</b> None</p>	
<p><b>61 Outdoor temperature</b></p>	<p>Shows the outdoor temperature if configured.</p> <p><b>Factory default value:</b> None</p>	
<p><b>50 Outdoor temperature used in zones</b></p>	<p>Outdoor temperature used in zones</p> <p><b>Factory default value:</b> 1 2 3 4 5 6 7 8 9 10</p>	
<p><b>62 Send outdoor temp. to AOnet</b></p>	<p>Configures which controllers on the AOnet to send outdoor temperature to.</p> <p><b>Factory default value:</b> None</p>	
<p><b>76 Send outdoor temp. to foreign AOnet</b></p>	<p>Configures if the outdoor temperature should be sent to the foreign AOnet.</p> <p><b>Factory default value:</b> None</p>	

45	<b>Sensor 1</b>	Shows the value of the WWS 100 'sensor input 1'.	
46	<b>Sensor 2</b>	Shows the value of the WWS 100 'sensor input 2'.	
47	<b>Sensor 3</b>	Shows the value of the WWS 100 'sensor input 3'.	
48	<b>Sensor 4</b>	Shows the value of the WWS 100 'sensor input 4'.	
25	<b>Unit beep / flash 1 min. for locating</b>	Specify if the WSK-Link™ unit shall beep 1 minute (WWS 100 will flash with green LED) to locate unit when configuration. The buzzer will beep for 1 min. or until the reset button on the break glass unit is pressed.	
24	<b>Delete this unit</b>	Specify if the this unit shall be deleted from the overview of units. If the unit is no longer in use or are replaced with a new unit, the unit shall be removed. Also remove cable connection to the unit, otherwise the unit will be redetected and assigned with the first available number on the overview.	
44	<b>Sensors Status</b>	Shows the last WSK sensor status.	
63	<b>WWS 100 Error</b>	Show if there is a WWS 100 sensor error / invalid reading.  <u>Factory default value:</u> None	
27	<b>Firmware version</b>	Shows the firmware version of the break glass unit.	
26	<b>Type</b>	Shows the type of glass break unit.	
90	<b>Outdoor temperature, offset</b>	Specify if the temperature from the sensor should be offset.  <u>Factory default value:</u> None	
91	<b>Temperature, offset</b>	Specify if the temperature from the sensor should be offset.  <u>Factory default value:</u> None	
92	<b>Temperature, sensor</b>	Shows the temperature from the sensor before the offset is applied.  <u>Factory default value:</u> None	

## View all details
















### 2 Smoke zone [ALL]

PARAMETER:	DESCRIPTION:	
<b>16 Slot 1 maximum temperature</b>	Shows the maximum measures temperature since last reset of the value (the value can be reset).	
<b>17 Slot 3 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>18 Slot 4 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>19 Slot 5 maximum temperature</b> Displayed only if a temperature sensor is present in the slot	Shows the maximum measures temperature since last reset of the value.	
<b>20 High temperature threshold</b>	Shows the high temperature threshold for generating error and activate smoke zone(s).	
<b>21 High temperature error</b>	Shows the status of the high temperature error. To reset the error the maximum temperature must be reset.	
<b>22 Target smoke zones</b>	Specify which smoke zone(s) a high temperature error shall control.  <b>Factory default value:</b> 1 2 3 4 5 6 7 8 9 10	
<b>23 Target smoke zone function</b>	Specify which command a high temperature error in the panel should use in the smoke zones. Factory setting = 'Line A'.  <b>OPTIONS:</b> - Line A Line B Line C Line D Line E Line F  <b>Factory default value:</b> Line A	
<b>24 Target smoke zone output</b>	Shows the actual output that is applied to the target smoke zones.  <b>OPTIONS:</b> Line A Line B Line C Line D Line E Line F	
<b>25 Alarm / reset input</b>	Alarm / reset input	
<b>26 Master/slave bus online</b>	Master/slave bus online	









<b>27 Associated WSK bus master smoke zone</b>	This smoke zone is assigned to a master device over the WSK master/slave bus.	
<b>29 WSK bus master outputs</b>	These are the status values from the master/slave bus master device which controls the WSK bus smoke zone.	
<b>30 WSK bus slave serial number</b>	This is serial number shown in the 'Break glass unit' menu of the WSC master where this controller is connected as slave.	














## View all details




### 2 Smoke zone [1..13]

PARAMETER:	DESCRIPTION:	
<b>16 Status (local)</b> Displayed only if the Smoke zone is slave to another smoke zone.	Shows the status of the local smoke zone. Will only be showed if the smoke zone is a slave.	
<b>17 Status</b>	Shows the status of the smoke zone. If the smoke zone is a slave this the status received from the master smoke zone.	
<b>24 Alarm / reset input</b>	In this mode it is possible to manually operate the smoke zone.	
<b>25 Reset higher priority than break glass unit (Line A)</b>	Specify if a reset should have higher priority than a triggered break glass unit (Line A alarm).  <b>Factory default value:</b> No	
<b>26 Buzzer active during alarm</b>	Specify if the break glass unit shall buzz during alarm.  <b>Factory default value:</b> Yes	
<b>27 Actual smoke pos.</b>	Shows the actual position set point during an alarm situation.	
<b>70 Sampled alarm wind direction</b>	Shows the wind direction sampled when the alarm occurred. 0 = the wind dependant opening is not active. 1-24 = the wind dependant opening is active.	
<b>29 Alarm</b>	Shows if there is an active heat & smoke situation in the smoke zone.	
<b>30 Error</b>	Shows is there is an error in the smoke zone.	
<b>35 Controlled smoke zone</b>	Specify which smoke zone / zones that this smoke zone should control.  <b>Factory default value:</b> -	
<b>36 Function in target smoke zone</b> Displayed only if the smoke zone is linked to one or more smoke zones.	Specify which function this smoke zone should apply to the target smoke zone(s). Also specify if the controlling smoke zone are to reset the controlled smoke zone.  <b>Factory default value:</b> -	
<b>81 Use errors from other smoke zone</b>	Configures if smoke zone errors from other smoke zones should be used.	
<b>80 Smoke zone input</b>	Shows the actual input that that is applied to the smoke zone from other smoke zones.	
<b>37 Target smoke zone output</b>	Shows the actual output that the smoke zone applies to the target smoke zones.	
<b>38 Break glass unit output</b>	Shows the actual status sent to the associated break glass unit(s).	





















<p><b>39 Error generates alarm</b></p>	<p>Specify if an error in the smoke zone should trigger a smoke alarm in the smoke zone.</p> <p><b>Factory default value:</b> No</p>	
<p><b>75 Latching</b></p>	<p>Specify, which Lines that have latching function, i.e. requires a Reset function to reset.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Line B</li> <li>Line C</li> <li>Line D</li> <li>Line E</li> <li>Line F</li> </ul> <p><b>Factory default value:</b> Line B</p>	
<p><b>76 Close after Alarm</b></p>	<p>Specify if the windows close automatically after an Alarm. This is done even if there is no mains power.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>18 Line A smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line A (e.g. break glass unit) is triggered.</p> <p>100% = the windows will open fully when triggered.</p> <p>0% = the windows will close completely when triggered. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>19 Line B (smoke detector) smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line B (e.g. smoke detector) is triggered.</p> <p>100% = the windows will open fully when triggered.</p> <p>0%=the windows will close fully when triggered. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>20 Line C smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line C is triggered.</p> <p>100% = the windows will open fully.</p> <p>0%=the windows will close fully. For Standard actuators the position can only be 100% or 0%</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>21 Line D smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line D is triggered.</p> <p>100% = the windows will open fully.</p> <p>0%=the windows will close fully. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>73 Line E highest priority</b></p>	<p>Enable this to configure Line E to have the highest possible priority. Also higher than wind dependant opening position. Only to be used for fireman's override panels, with absolute first priority.</p> <p><b>Factory default value:</b> No</p>	








<p><b>22 Line E smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line E is triggered. 100% = the windows will open fully, 0%=the windows will close fully. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>74 Line F highest priority</b></p>	<p>Enable this to configure Line F to have the highest possible priority, also higher than Line E if this is set to highest priority. Also higher than wind dependant opening position. Only to be used for fireman's override panels, with absolute first priority.</p> <p><b>Factory default value:</b> No</p>	
<p><b>23 Line F smoke opening pos.</b></p>	<p>Specify the opening percentage to which the motors shall open, when line F is triggered. 100% = the windows will open fully, 0%=the windows will close fully. For Standard actuators the position can only be 100% or 0%.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>77 Signal override</b></p>	<p>Use special signal during override (Line E and F). Use flashing red LED and beeping buzzer on WSK 5xx.</p> <p><b>Factory default value:</b> No</p>	
<p><b>78 Enable 'lockout' during alarm</b></p>	<p>When the smoke zone goes into alarm state it will ignore higher priority alarms except Line E and F if configured as 'highest priority'.</p> <p><b>Factory default value:</b> No</p>	
<p><b>79 'Lockout' active</b></p>	<p>Shows the status of the lockout function.</p> <p><b>Factory default value:</b> No</p>	
<p><b>41 No. of smoke detec. before alarm</b></p>	<p>Specify the number of smoke detectors that shall be triggered before an smoke alarm is triggered.</p> <p><b>Factory default value:</b> 1</p>	
<p><b>31 No. of associated break glass units</b></p>	<p>Shows the number of break glass units that are associated to the smoke zone.</p>	
<p><b>40 No. of associated break smoke sensors</b></p>	<p>Shows the number of smoke sensors connected to break glass units that are associated to the smoke zone.</p>	
<p><b>32 No. of associated local inputs</b></p>	<p>Shows the number of local inputs which are associated to the smoke zone.</p>	
<p><b>33 No. of associated motor groups</b></p>	<p>Shows the number of motor groups which have the smoke zone associated.</p>	
<p><b>34 No. of smoke zone sources</b></p>	<p>Shows the number of smoke zones which have this smoke zone associated.</p>	
<p><b>28 Retransmit time</b></p>	<p>Specify the retransmit interval time for sending unchanged values on the connected field bus module.</p> <p><b>Factory default value:</b> 300 s</p>	

<b>68 Use comfort commands</b>	Specify if the comfort commands should control the motor groups of this smoke zone.  <b>Factory default value:</b> Yes	
<b>69 Wind direction speed threshold</b>	Specify the wind speed threshold for wind direction dependant heat & smoke strategy to be used. If the wind speed is lower than this limit when an alarm occurs, the window opening will not be dependant of the wind direction.  <b>Factory default value:</b> 1.0 m/s	
<b>82 Buzzer active during error</b>	Specify if the break glass unit shall buzz during error.  <b>Factory default value:</b> #N/A	

## View all details

















### 19 NV controller [Common]























PARAMETER:	DESCRIPTION:	
17 Retransmit time	Retransmit time  <u>Factory default value:</u> 10 min.	
18 Data OK timeout	If data not received within this time the zone will go into error state. 0 = Disables the surveillance.	
19 Fast wind speed	Fast wind speed	
20 Slow wind speed	Slow wind speed	
21 Raining, local	Raining, local	
22 Building mode, in	Building mode, in	
23 Building secure, in	Building secure, in	
38 Raining, sum	Combination of local and WOW 600	
37 Building night from scheduler	Shows the buidling night from the scheduler.	
37 Raining, from WOW 600		
37 Building night from scheduler	Raining, from WOW 600	
37 Raining, from WOW 600		
24 Building mode, out	Building mode, out	
25 Building error	Building error	
26 Building mech vent	Building mech vent	
27 Building heating demand	Building heating demand	
29 Temperature received from WSK-Link™ via AOnet	Shows the outdoor temperature received from WSK on WSK-Link™ via AOnet.	
30 Use WSK-Link™ AOnet outdoor temp. in zones	Configures in which zones that the outdoor temperature from WSK-Link™ via AOnet should be used.  <u>Factory default value:</u> -	
31 Temp. from AOnet error	Shows an error is the temperature is not received within the last 3 minutes.	
32 Function inputs	Shows the resulting input functions from local input.	
















<b>33 AOnet function inputs</b>	Shows the input functions from AOnet.	
<b>34 Use AOnet function input</b>	Configures if the AOnet function input should be used in the function input calculation.  <u>Factory default value:</u> No	
<b>35 Send function input to AOnet</b>	Configures which controllers on the AOnet to send function input to.	
<b>35 Function inputs sum</b>	<u>Factory default value:</u> -	
<b>35 Send function input to AOnet</b>	Shows the resulting input functions from local input and AOnet.	
<b>35 Function inputs sum</b>	<u>Factory default value:</u> -	
<b>36 Building mode output calculation</b>	Configures how the resulting building mode output is calculated.	
<b>36 Building mode from scheduler</b>	<u>Factory default value:</u> None	
<b>36 Building mode output calculation</b>	Shows the building mode from the scheduler.	
<b>36 Building mode from scheduler</b>	<u>Factory default value:</u> None	
<b>28 Licensed features</b>	Shows functions enabled by the USB license stick.	

## View all details















### 19 NV controller [1..10]













PARAMETER:	DESCRIPTION:	
161 Name	Shows the assigned name of the NV controller.	
157 Building	Building  <u>Factory default value:</u> 1	
158 Part	Part  <u>Factory default value:</u> 1	
159 Zone	Zone  <u>Factory default value:</u> 1	
164 Building, part, zone cloud status	Shows the 'owner' status of 'Building', 'Part', 'Zone' parameters. If these parameters are changed locally the status changes to 'Changed locally'. If the parameters are changed from cloud the status changes to 'Changed cloud', and it is no longer possible to change them locally.	
16 Wind speed, fast	Wind speed, fast	
17 Wind speed, slow	Wind speed, slow	
18 Outdoor temperature	Outdoor temperature	
19 User temperature offset range	User temperature offset range	
46 Room active	Room active  <u>Factory default value:</u> No	
47 Window control	Window control  <u>Factory default value:</u> Yes	
48 Light	Light  <u>Factory default value:</u> No	
49 Sunscreen control	Sunscreen control  <u>Factory default value:</u> No	
55 Temperature sensor	Specify whether a temperature sensor is connected in the room.  <u>Factory default value:</u> Yes	
175 Fieldbus outdoor temperature	Fieldbus outdoor temperature	
128 BACnet outdoor temperature	BACnet outdoor temperature	











129	<b>Modbus outdoor temperature</b>	Modbus outdoor temperature	
20	<b>Temperature, WSK</b>	Temperature, WSK	
21	<b>Temperature, fieldbus</b>	Temperature, fieldbus	
22	<b>Temperature, BACnet</b>	Temperature, BACnet	
23	<b>Temperature, Modbus</b>	Temperature, Modbus	
24	<b>Temperature, input</b>	Temperature, input	
56	<b>CO<sub>2</sub> sensor</b>	Specify whether a CO <sub>2</sub> (carbon dioxide) sensor is connected in the room.  <u>Factory default value:</u> Yes	
25	<b>CO<sub>2</sub>, WSK</b>	CO <sub>2</sub> , WSK	
26	<b>CO<sub>2</sub>, fieldbus</b>	CO <sub>2</sub> , fieldbus	
27	<b>CO<sub>2</sub>, BACnet</b>	CO <sub>2</sub> , BACnet	
28	<b>CO<sub>2</sub>, Modbus</b>	CO <sub>2</sub> , Modbus	
29	<b>CO<sub>2</sub>, input</b>	CO <sub>2</sub> , input	
57	<b>RH sensor</b>	Specify whether a relative humidity (RH) sensor is connected in the room.  <u>Factory default value:</u> Yes	
30	<b>Relative humidity, WSK</b>	Relative humidity, WSK	
31	<b>Relative humidity, fieldbus</b>	Relative humidity, fieldbus	
174	<b>Relative humidity, fieldbus (scaling)</b>	Relative humidity, fieldbus (scaling)	
32	<b>Relative humidity, BACnet</b>	Relative humidity, BACnet	
33	<b>Relative humidity, Modbus</b>	Relative humidity, Modbus	
34	<b>Relative humidity, input</b>	Relative humidity, input	
54	<b>PIR detector</b>	Specify whether a PIR detector (presence detector) is connected in the room.  <u>Factory default value:</u> No	
170	<b>Comfort, Fieldbus</b>	Input from fieldbus for selecting the comfort setpoints	
171	<b>Comfort, Modbus TCP</b>	Input from Modbus TCP for selecting the comfort setpoints	










172	<b>Night, Fieldbus</b>	Input from Fieldbus for selecting the night setpoints	
173	<b>Night, Modbus TCP</b>	Input from Modbus TCP for selecting the night setpoints	
35	<b>Presence detection</b>	Presence detection	
36	<b>Disable automatic, BACnet</b>	Input from BACnet for disabling automatic control.	
166	<b>Disable automatic, Fieldbus</b>	Input from fieldbus for disabling automatic control.	
167	<b>Disable automatic, Modbus TCP</b>	Input from Modbus TCP for disabling automatic control.	
37	<b>Force winter, BACnet</b>	Input from BACnet for forcing winter mode.	
168	<b>Force winter, fieldbus</b>	Input from fieldbus for forcing winter mode.	
169	<b>Force winter, Modbus TCP</b>	Input from Modbus TCP for forcing winter mode.	
38	<b>Ventilate</b>	Ventilate	
39	<b>Comfort level</b>	Comfort level  <b><u>OPTIONS:</u></b> Uknown Eco Normal Plus	
163	<b>Local inputs</b>	Shows the status of functions from local inputs.	
176	<b>Use building 'Function inputs sum'</b>	Configures if the building 'Function inputs sum' should be used in zone.  <b><u>Factory default value:</u></b> Yes	
177	<b>Use building states</b>	Configures if the building states should be used.  <b><u>Factory default value:</u></b> Yes	
185	<b>Use Building night</b>	Specify if Building night should be used.  <b><u>Factory default value:</u></b> Yes	




















<p><b>40 Ventilation status</b></p>	<p>Ventilation status</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Unknown</li> <li>Windows fixed closed</li> <li>Windows closed, all data missing</li> <li>Window opening limited due to bad weather</li> <li>Windows closed, only weather data missing</li> <li>Windows closed due to hot outdoor conditions</li> <li>Windows closed due to low indoor temperature</li> <li>Automatic ventilation off (only hand operation)</li> <li>Only hand operation due to missing room data</li> <li>Only hand operation due to hot outdoor conditions</li> <li>Demand driven pulse ventilation</li> <li>Pulse ventilation due to hot outdoor conditions</li> <li>Ventilation controlled by temperature</li> <li>Ventilation controlled by temperature during night</li> <li>Venting active</li> <li>Trickle ventilation</li> </ul>	
<p><b>41 Occupancy</b></p>	<p>Occupancy</p>	
<p><b>186 Windows comfort status</b></p>	<p>Shows the window comfort status of the zone. This is used to limit the opening of the windows in the motor group.</p>	
<p><b>127 Ventilation temperature setpoint</b></p>	<p>Ventilation temperature setpoint</p>	
<p><b>42 Actual ventilation temperature setpoint</b></p>	<p>Actual ventilation temperature setpoint</p>	
<p><b>43 Actual heating temperature setpoint</b></p>	<p>Actual heating temperature setpoint</p>	
<p><b>44 Actual temperature setpoint</b></p>	<p>Actual temperature setpoint</p>	
<p><b>45 Winter</b></p>	<p>Winter</p>	
<p><b>124 Lighting output</b></p>	<p>Output for controlling lighting.</p>	
<p><b>130 Error out</b></p>	<p>Error out</p>	
<p><b>131 Room volume</b></p>	<p>Specify the room volume.</p> <p><b>Factory default value:</b> 250 m<sup>3</sup></p>	
<p><b>67 Comfort temperature set point</b></p>	<p>Specify the default base comfort temperature set point.</p> <p><b>Factory default value:</b> 24.0 °C</p>	
<p><b>98 Heating temp. setpoint offset, standby</b></p>	<p>Specify the default offset of the heating temperature setpoint during 'standby'.</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>99 Heating temp. setpoint offset, night</b></p>	<p>Specify the default offset of the heating temperature setpoint during 'night'.</p> <p><b>Factory default value:</b> -2.0 °K</p>	












<p><b>81 Ventilation temp. setpoint offset, standby</b></p>	<p>Ventilation temp. setpoint offset, standby</p> <p><b>Factory default value:</b> -1.0 °K</p>	
<p><b>82 Ventilation temp. setpoint offset, night</b></p>	<p>Ventilation temp. setpoint offset, night</p> <p><b>Factory default value:</b> -2.0 °K</p>	
<p><b>97 Min. dead band between heating and ventilation</b></p>	<p>Specify the minimum difference between the ventilation and the heating set point. This ensures that no overlap will occur between the heating and the temperature controlled ventilation.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>132 Max. AER, winter extra</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter extra' for the room.</p> <p><b>Factory default value:</b> 4 1/hour</p>	
<p><b>133 Max. AER, winter</b></p>	<p>Specify the maximum allowed air exchange rate during winter for the room.</p> <p><b>Factory default value:</b> 5 1/hour</p>	
<p><b>134 Max. AER, winter eco.</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter eco.' for the room.</p> <p><b>Factory default value:</b> 6 1/hour</p>	
<p><b>135 Max. AER, summer extra</b></p>	<p>Specify the maximum allowed air exchange rate during 'summer extra' for the room.</p> <p><b>Factory default value:</b> 7 1/hour</p>	
<p><b>136 Max. AER, summer</b></p>	<p>Specify the maximum allowed air exchange rate during summer for the room.</p> <p><b>Factory default value:</b> 8 1/hour</p>	
<p><b>137 Max. AER, summer economy</b></p>	<p>Specify the maximum allowed air exchange rate during 'winter economy' for the room.</p> <p><b>Factory default value:</b> 9 1/hour</p>	
<p><b>138 AER Temperature reduction reference, winter</b></p>	<p>This parameter rules the outdoor temperature where under the air exchange rate is reduced.</p> <p><b>Factory default value:</b> 16.0 °C</p>	
<p><b>139 AER Temperature reduction, winter</b></p>	<p>This parameter rules the reduction-rate in the air exchange rate when the outdoor temperature is below the reduction temperature reference.</p> <p><b>Factory default value:</b> 0.05 1/K</p>	
<p><b>140 Min. AER, winter</b></p>	<p>This parameter rules the minimum allowable air exchange rate.</p> <p><b>Factory default value:</b> 1 1/hour</p>	
















<p><b>141 AER Temperature increase reference, winter</b></p>	<p>This parameter rules the outdoor temperature where over the air exchange rate is increased.</p> <p><b>Factory default value:</b> 18.0 °C</p>	
<p><b>142 AER Temperature increase, winter</b></p>	<p>This parameter rules the increase-rate of the air exchange rate when the outdoor temperature is over the increase temperature reference.</p> <p><b>Factory default value:</b> 0.10 1/K</p>	
<p><b>143 AER Temperature reduction reference, summer</b></p>	<p>This parameter rules the outdoor temperature where under the air exchange rate is reduced.</p> <p><b>Factory default value:</b> 18.0 °C</p>	
<p><b>144 AER Temperature reduction, summer</b></p>	<p>This parameter rules the reduction-rate in the air exchange rate when the outdoor temperature is below the reduction temperature reference.</p> <p><b>Factory default value:</b> 0.10 1/K</p>	
<p><b>145 Min. AER, summer</b></p>	<p>This parameter rules the minimum allowable air exchange rate.</p> <p><b>Factory default value:</b> 2 1/hour</p>	
<p><b>146 AER Temperature increase reference, summer</b></p>	<p>This parameter rules the outdoor temperature where over the air exchange rate is increased.</p> <p><b>Factory default value:</b> 23.0 °C</p>	
<p><b>147 AER Temperature increase, summer</b></p>	<p>This parameter rules the increase-rate of the air exchange rate when the outdoor temperature is over the increase temperature reference.</p> <p><b>Factory default value:</b> 0.20 1/K</p>	
<p><b>50 Threshold for low room temperature</b></p>	<p>Specify the threshold when the windows are to close due to low room temperature. Note, the threshold should be lower than the desired night cooling threshold.If the room teperature is lower than the threshold* during summer mode, heating is activated untill the room temperature again is higher.*if the heating threshold for the room is lower, this will be used as threshold for heating.</p> <p><b>Factory default value:</b> 17.0 °C</p>	
<p><b>51 Threshold for low outdoor temperature</b></p>	<p>Specify the threshold for low outdoor temperature used for determination of summer/winter mode.Summer mode: Summer mode is active if the outdoor temperature is above the limit mentioned above AND the room temperature is higher than the set point for cooling / ventilation.Winter mode: Winter mode is active if heating is needed in the room, ie. room temperature is lower than the heating set point.</p> <p><b>Factory default value:</b> 10.0 °C</p>	
<p><b>52 Close handcontrolled windows at low room temperature</b></p>	<p>Specify whether the windows should close at low ambient temperature at a higher priority than hand operation, i.e. using the max. position output object.</p> <p><b>Factory default value:</b> Yes</p>	

<p><b>53 Occupancy time</b></p>	<p>Specify the expiry time of the occupancy timer. Each time a signal from the PIR sensor (presence/movement sensor) is received, the occupancy timer restarts.</p> <p><b>Factory default value:</b> 10 min.</p>	
<p><b>59 Condition for warm outdoor conditions</b></p>	<p>Specify the condition for changing the status to 'Warm outdoor conditions'</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>None</li> <li>High outdoor temp.</li> <li>High apparent temp.</li> <li>Outdoor higher than indoor temp.</li> </ul> <p><b>Factory default value:</b> None</p>	
<p><b>60 Mode during 'Warm outdoor conditions'</b></p>	<p>Specify the mode during 'Warm outdoor conditions'.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Closed</li> <li>Only hand</li> <li>Pulse ventilation</li> </ul> <p><b>Factory default value:</b> Closed</p>	
<p><b>61 Threshold for high outdoor temp.</b></p>	<p>Specify the outdoor temperature threshold above which the status changes to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 35.0 °C</p>	
<p><b>62 Threshold for high apparent outdoor temperature</b></p>	<p>Specify the felt outdoor temperature threshold above which the status changes to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 30.0 °C</p>	
<p><b>63 Hysteresis</b></p>	<p>Specify the hysteresis for the calculation of 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>64 Temperature difference</b></p>	<p>Specify how much the outdoor temperature are to be higher than the room temperature before changing to 'Warm outdoor conditions'.</p> <p><b>Factory default value:</b> 2.0 °K</p>	
<p><b>65 Close manual controlled windows at mode change</b></p>	<p>Specify if manual controlled windows should be closed when the mode changes to 'Warm outdoor conditions'.The windows can subsequently be controlled manually.</p> <p><b>Factory default value:</b> No</p>	
<p><b>66 Enable temperature controlled ventilation</b></p>	<p>Specify if temperature controlled ventilation is enabled.Disables temperature controlled ventilation, but not night cooling during unoccupied building.If night cooling also needs to be disabled set the temperature offset for unoccupied building to 0.</p> <p><b>Factory default value:</b> Yes</p>	












<p><b>68 Min. ventilation set point</b></p>	<p>Specify the minimum allowable ventilation temperature threshold.Despite high CO<sub>2</sub> and RH effects the temperature threshold never go lower than this limit</p> <p><b>Factory default value:</b> 21.0 °C</p>	
<p><b>69 Max. allowed temperature drop</b></p>	<p>Specify the maximum allowable temperature drop.If the temperature drops more than this value below the current set point the windows are closed completely in one step.</p> <p><b>Factory default value:</b> 1.0 °K</p>	
<p><b>58 Clear 'auto. off' when room unoccupied</b></p>	<p>Specify whether automatic control should be enabled, when the room becomes unoccupied.</p> <p><b>Factory default value:</b> No</p>	
<p><b>160 Close at Auto Off</b></p>	<p>Configures if the windows in the zone should be closed (once) when automatic control is disabled in the zone.</p> <p><b>Factory default value:</b> No</p>	
<p><b>70 CO<sub>2</sub> level</b></p>	<p>Specify the CO<sub>2</sub> level above which the CO<sub>2</sub> level is to affect the natural ventilation.If the set point is exceeded the temperature set point will be lowered.</p> <p><b>Factory default value:</b> 1000 ppm</p>	
<p><b>71 CO<sub>2</sub> influence</b></p>	<p>Specify the CO<sub>2</sub> influence on the temperature set point.The temperature set point is reduced by the parameter value multilied the current CO<sub>2</sub> level, when the level rises above the CO<sub>2</sub> threshold.</p> <p><b>Factory default value:</b> 0.005</p>	
<p><b>72 RH threshold</b></p>	<p>Specify the set point above which the relative humidity is to affect the natural ventilation.If this threshold is exceeded the temperature threshold will be lowered.</p> <p><b>Factory default value:</b> 50%</p>	
<p><b>73 RH influence</b></p>	<p>Specify the relative humidity's influence on the temperature set point.The temperature set point is reduced by the parameter value multiplied with the current relative humidity, when the level rises above the relative humidity threshold.</p> <p><b>Factory default value:</b> 0.020 K/%</p>	
<p><b>74 Ventilation, RH Kd</b></p>	<p>Ventilation, RH Kd</p> <p><b>Factory default value:</b> 0.000</p>	
<p><b>75 Proportional gain</b></p>	<p>Specify the proportional gain, i.e. relationship between temperature error (actual temperature - temperature set point) and how much the windows will open when adjusted. If the proportional gain is 20%/K, the window opening are to increase 20% for each 1 degree temperature error which are adjusted.</p> <p><b>Factory default value:</b> 0.200 1/K</p>	







<p><b>76 Differential gain</b></p>	<p>Specify the differential gain, i.e. how much a temperature increase between two adjustments are to affect on how much the windows open when adjusted.</p> <p><b>Factory default value:</b> 0.050 1/(Kmin.<sup>2</sup>)</p>	
<p><b>77 Wind reduction set point</b></p>	<p>Specify the wind speed set point for when each step of opening the windows is to be reduced due to high wind speed. Below this threshold each opening step is not reduced. Notice that closing steps are not reduced.</p> <p><b>Factory default value:</b> 2.0 m/s</p>	
<p><b>78 Closing gain</b></p>	<p>Specify how much larger the closing steps of the windows are in proportion to the opening steps. By specifying a closing gain that is higher than the opening gain the windows will close in a shorter time than they open. The gain can also be used to prioritise that one group of windows opens faster than another group.</p> <p><b>Factory default value:</b> 2.0</p>	
<p><b>85 Pulse ventilation, enable</b></p>	<p>Specify if the automatic demand-driven pulse ventilation is to be enabled. The ventilation is performed when the CO<sub>2</sub> or RH values exceeds the configured thresholds. The ventilation pulse duration and the interval between the pulses are calculated from the actual measured values and parameter settings. The maximum window opening is limited by the outdoor temperature and the wind speed. It should be considered, if a demand-driven pulse ventilation should be used in combination with ventilation on fixed schedule, as the two ventilation strategies are controlled entirely independant of each other. Demand-driven pulse ventilation is only used during winter mode.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>83 Pulse vent./ventilate, CO<sub>2</sub> threshold</b></p>	<p>Specify the lower CO<sub>2</sub> threshold at which the pulse ventilation or venting is done. When the CO<sub>2</sub> level exceeds this threshold, the demand driven pulse ventilation is performed. Venting at fixed times also use this threshold. If the ventilation is specified to 'Automatic', the ventilation is only performed if the CO<sub>2</sub> level is higher than this threshold.</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>84 Pulse vent./ventilate, RH threshold</b></p>	<p>Specify the lower RH threshold at which the pulse ventilation or venting is done. When the RH level exceeds this threshold the demand driven pulse ventilation is performed. Venting at fixed times also use this threshold. If the ventilation is configured to 'Automatic', the ventilation is only performed if the RH level is higher than this threshold.</p> <p><b>Factory default value:</b> 70%</p>	
<p><b>86 Pulse ventilation, min. duration</b></p>	<p>Specify the shortest duration of a pulse ventilation during the demand-driven pulse ventilation.</p> <p><b>Factory default value:</b> 30 s</p>	

87 Pulse ventilation, max. duration	Specify the longest duration of a pulse ventilation during demand-driven pulse ventilation. Notice, that the actual pulse ventilation duration is calculated from the measured values and thresholds for CO <sub>2</sub> and RH and influential parameters. If the desired CO <sub>2</sub> and RH level is reached before the ending of the max. pulse limit, the windows will close.	
	<u>Factory default value:</u> 180 s	
88 Pulse ventilation, min. Interval between	Specify the shortest interval between two pulse ventilations.	
	<u>Factory default value:</u> 30 min.	
89 Max. interval between two pulses	Specify the longest interval between two pulse ventilations. The actual interval is calculated from measured values and thresholds for CO <sub>2</sub> and RH and influential parameters. Note that although time since last demand-driven pulse ventilation is exceeded, the ventilation is not performed before there is an actual demand.	
	<u>Factory default value:</u> 60 min.	
90 Pulse ventilation, temperature influence	Specify the temperature influence on the pulse ventilation/ventilation. If the temperature exceeds the current threshold for ventilation the amount of ventilation is gradually increased. If the value is eg. 0.2 1/K the ventilation will be at a maximum when the current temperature is 5 degree higher than the set point.	
	<u>Factory default value:</u> 0.2 1/K	
183 Pulse vent., threshold for low room temperature	Specify the threshold when the windows are to close due to low room temperature.	
	<u>Factory default value:</u> 22.0 °C	
182 Trickle vent., number of pulses without reduction	Shows the number of pulses where the CO <sub>2</sub> has not decreased below the CO <sub>2</sub> limit.	
	<u>Factory default value:</u> 0	
178 Trickle ventilation enabled	Configures if Trickle ventilation is enabled.	
	<u>Factory default value:</u> No	
179 Trickle ventilation, number of pulses before	Configures the number of pulses without the CO <sub>2</sub> level is decreased under the limit, before Trickle ventilation is started.	
	<u>Factory default value:</u> 5	
180 Trickle vent., CO <sub>2</sub> for min.	Configures the CO <sub>2</sub> level for min. opening during Trickle ventilation.	
	<u>Factory default value:</u> 800 ppm	
181 Trickle vent., CO <sub>2</sub> for max.	Configures the CO <sub>2</sub> level for max. opening during Trickle ventilation.	
	<u>Factory default value:</u> 2000 ppm	
184 Trickle vent., threshold for low room temperature	Specify the threshold when the windows are to close due to low room temperature.	
	<u>Factory default value:</u> 21.0 °C	

91	<b>Ventilate fixed duration</b>	Ventilate fixed duration  <u>Factory default value:</u> 300 s	
92	<b>Wind maximum opening reduction K</b>	Wind maximum opening reduction K  <u>Factory default value:</u> 1.0	
93	<b>Wind maximum opening reduction Exp</b>	Wind maximum opening reduction Exp  <u>Factory default value:</u> 1	
94	<b>Use wind chill</b>	Use wind chill  <u>Factory default value:</u> No	
95	<b>Wind chill reference temperature</b>	Wind chill reference temperature  <u>Factory default value:</u> 25.0 °C	
101	<b>Winter, Extra, CO2 offset</b>	Winter, Extra, CO2 offset  <u>Factory default value:</u> -200 ppm	
102	<b>Winter, Eco., CO2 offset</b>	Winter, Eco., CO2 offset  <u>Factory default value:</u> 200 ppm	
103	<b>Winter, Extra, Ventilation when unoccupied</b>	Winter, Extra, Ventilation when unoccupied  <u>Factory default value:</u> Yes	
104	<b>Winter, Normal, Ventilation when unoccupied</b>	Winter, Normal, Ventilation when unoccupied  <u>Factory default value:</u> No	
105	<b>Winter, Eco., Heating setpoint offset</b>	Winter, Eco., Heating setpoint offset  <u>Factory default value:</u> -1.0 °K	
106	<b>Winter, Eco., night heating setpoint offset</b>	Winter, Eco., night heating setpoint offset  <u>Factory default value:</u> -1.0 °K	
107	<b>Winter, Normal, Pulse Ventilation</b>	Winter, Normal, Pulse Ventilation  <u>Factory default value:</u> Yes	
108	<b>Summer, Extra, temperature setpoint offset</b>	Summer, Extra, temperature setpoint offset  <u>Factory default value:</u> -1.0 °K	
109	<b>Summer, Eco., temperature setpoint offset</b>	Summer, Eco., temperature setpoint offset  <u>Factory default value:</u> 1.0 °K	
110	<b>Summer, Extra, CO2 offset</b>	Summer, Extra, CO2 offset  <u>Factory default value:</u> -200 ppm	



<p><b>111 Summer, Eco., CO2 offset</b></p>	<p>Summer, Eco., CO2 offset</p> <p><u>Factory default value:</u> 200 ppm</p>	
<p><b>112 Summer, Extra outdoor temp. setpoint offset</b></p>	<p>Summer, Extra outdoor temp. setpoint offset</p> <p><u>Factory default value:</u> 1.0 °K</p>	
<p><b>113 Summer, Eco., outdoor temp. setpoint offset</b></p>	<p>Summer, Eco., outdoor temp. setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>114 Summer, Eco., Night Cooling temp. setpoint offset</b></p>	<p>Summer, Eco., Night Cooling temp. setpoint offset</p> <p><u>Factory default value:</u> -1.0 °K</p>	
<p><b>96 Temperature sensor value calculation method</b></p>	<p>Configure how the resulting value of multiple temperature sensors are calculated.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Average</li> <li>Minimal</li> <li>Maximum</li> </ul> <p><u>Factory default value:</u> Average</p>	
<p><b>115 CO2 sensor value calculation method</b></p>	<p>Configure how the resulting value of multiple CO2 sensors are calculated.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Average</li> <li>Minimal</li> <li>Maximum</li> </ul> <p><u>Factory default value:</u> Average</p>	
<p><b>100 RH sensor value calculation method</b></p>	<p>Configure how the resulting value of multiple relative humidity sensors are calculated.</p> <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Average</li> <li>Minimal</li> <li>Maximum</li> </ul> <p><u>Factory default value:</u> Average</p>	
<p><b>116 WWS 100 LED output</b></p>	<p>Output to the LEDs of the WWS 100 in the NV Controller.</p>	
<p><b>117 Use local wind speed</b></p>	<p>Configures if locally connected weather sensor should be used. Alternatively the data from fieldbus is used.</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>118 Use local outdoor temperature</b></p>	<p>Configures if locally connected outdoor temperature sensor should be used. Alternatively the data from fieldbus is use.</p> <p><u>Factory default value:</u> Yes</p>	
<p><b>119 Use local rain</b></p>	<p>Configures if locally connected rain sensor should be used. Alternatively the data from fieldbus is used.</p> <p><u>Factory default value:</u> Yes</p>	















<b>122 Zone windows status</b>	Shows a consolidated status of all windows in the zone.	
<b>123 Zone average window position</b>	Shows the average position of all windows in the zone.	
<b>162 Air quality</b>	Shows the air quality. 100% is best, 0% is worst.	
<b>165 Local output status</b>	Status used for controlling local outputs.	
<b>125 Data status</b>	Data status	
<b>126 User temperature offset</b>	User temperature offset	











## View all details

**23 Pulse schedule [Common]**

## View all details


### 23 Pulse schedule [1..10]

PARAMETER:	DESCRIPTION:	
16 Pulse 1 time	Pulse 1 time <u>Factory default value:</u> 00:00 A A	
17 Pulse 1 settings	Pulse 1 settings <u>Factory default value:</u> None 5 min.	
18 Pulse 2 time	Pulse 2 time <u>Factory default value:</u> 02:00 A A	
19 Pulse 2 settings	Pulse 2 settings <u>Factory default value:</u> None 5 min.	
20 Pulse 3 time	Pulse 3 time <u>Factory default value:</u> 04:00 A A	
21 Pulse 3 settings	Pulse 3 settings <u>Factory default value:</u> None 5 min.	
22 Pulse 4 time	Pulse 4 time <u>Factory default value:</u> 06:00 A A	
23 Pulse 4 settings	Pulse 4 settings <u>Factory default value:</u> None 5 min.	
24 Pulse 5 time	Pulse 5 time <u>Factory default value:</u> 08:00 A A	
25 Pulse 5 settings	Pulse 5 settings <u>Factory default value:</u> None 5 min.	
26 Pulse 6 time	Pulse 6 time <u>Factory default value:</u> 10:00 A A	
27 Pulse 6 settings	Pulse 6 settings <u>Factory default value:</u> None 5 min.	
28 Pulse 7 time	Pulse 7 time <u>Factory default value:</u> 12:00 A A	
29 Pulse 7 settings	Pulse 7 settings <u>Factory default value:</u> None 5 min.	

<b>30 Pulse 8 time</b>	Pulse 8 time  <b>Factory default value:</b> 14:00 A A	
<b>31 Pulse 8 settings</b>	Pulse 8 settings  <b>Factory default value:</b> None 5 min.	
<b>32 Pulse 9 time</b>	Pulse 9 time  <b>Factory default value:</b> 16:00 A A	
<b>33 Pulse 9 settings</b>	Pulse 9 settings  <b>Factory default value:</b> None 5 min.	
<b>34 Pulse 10 time</b>	Pulse 10 time  <b>Factory default value:</b> 18:00 A A	
<b>35 Pulse 10 settings</b>	Pulse 10 settings  <b>Factory default value:</b> None 5 min.	
<b>36 Pulse 11 time</b>	Pulse 11 time  <b>Factory default value:</b> 20:00 A A	
<b>37 Pulse 11 settings</b>	Pulse 11 settings  <b>Factory default value:</b> None 5 min.	
<b>38 Pulse 12 time</b>	Pulse 12 time  <b>Factory default value:</b> 22:00 A A	
<b>39 Pulse 12 settings</b>	Pulse 12 settings  <b>Factory default value:</b> None 5 min.	

## View all details

### 26 Building schedule [Common]






PARAMETER:	DESCRIPTION:	
<b>17 Feature is licensed</b>	This function is enable by a USB license stick.  <b>Factory default value:</b> Yes	












## View all details











### 20 Mech. vent. controller














## View all details

### 20 Mech. vent. controller, objects [1...10]


PARAMETER:	DESCRIPTION:	
21 Mech. vent. control	Mech. vent. control	
	<u>Factory default value:</u> No	
47 Mech. vent. type	Mech. vent. type	
	<u>OPTIONS:</u> Assisting mech. vent. ZoneVent™ FutureVent™	
	<u>Factory default value:</u> Assisting mech. vent.	
16 Mech. vent. override, BACnet	Mech. vent. override, BACnet	
16 Mech. vent. override, Fieldbus	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override		
16 Mech. vent. override status		
16 Mech. vent. override, BACnet	Show the override input received from fieldbus.	
16 Mech. vent. override, Fieldbus	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override		
16 Mech. vent. override status		
16 Mech. vent. override, BACnet	Show the override input received from Modbus TCP.	
16 Mech. vent. override, Fieldbus	<u>Factory default value:</u> No	
	<u>Factory default value:</u> No	
16 Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16 Mech. vent. override		
16 Mech. vent. override status		




16	Mech. vent. override, BACnet	Show the local override.	
16	Mech. vent. override, Fieldbus	<u>Factory default value:</u> No	
		<u>Factory default value:</u> No	
16	Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16	Mech. vent. override		
16	Mech. vent. override status		
16	Mech. vent. override, BACnet	Show the override status.	
16	Mech. vent. override, Fieldbus	<u>Factory default value:</u> No	
		<u>Factory default value:</u> No	
16	Mech. vent. override, Modbus TCP	<u>Factory default value:</u> No	
16	Mech. vent. override		
16	Mech. vent. override status		
67	BACnet, temp. setpoint offset	Shows the temperature setpoint offset from BACnet.  <u>Factory default value:</u> 0.0 °K	
68	Fieldbus, temp. setpoint offset	Shows the temperature setpoint offset from fieldbus.  <u>Factory default value:</u> 0.0 °K	
69	Modbus TCP, temp. setpoint offset	Shows the temperature setpoint offset from Modbus TCP.  <u>Factory default value:</u> 0.0 °K	
18	Mech. vent. value	Mech. vent. value	
19	Mech. vent.	Mech. vent.	
17	FutureVent	FutureVent	
20	Air supply temperature setpoint	Air supply temperature setpoint	
22	Temperature offset for start	Specify how much the temperature must rise above the current ventilation temperature set point before the mechanical ventilation is activated due to high temperature. The temperature set point is also affected by the current setting of the temperature set point adjustment for the room.  <u>Factory default value:</u> 0.0 °K	
23	Temperature gain	Specify the influence of the temperature on the mechanical ventilation output. If this parameter is set to e.g. 50 %/K, 1 degree temperature difference will influence the mechanical ventilation output with 50 %. The individual contributions to the output from temperature, CO <sub>2</sub> and RH are summed to a total mechanical ventilation output.  <u>Factory default value:</u> 0.5 %/K	

<p><b>24 CO<sub>2</sub> level for start</b></p>	<p>Specify the CO<sub>2</sub> level, where the CO<sub>2</sub> level are to influence the mechanical ventilation output. The contribution of CO<sub>2</sub> increases linearly between the parameter for the 'start' and 'full' level. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventiation output.</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>25 CO<sub>2</sub> level for full output</b></p>	<p>Specify the CO<sub>2</sub> level, where the mechanical ventiation output is 100 % due to CO<sub>2</sub>. The contribution of CO<sub>2</sub> increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventiation output.</p> <p><b>Factory default value:</b> 2000 ppm</p>	
<p><b>26 RH level start</b></p>	<p>Specify the relative humidity level, where the relative humidity levels are to influence the mechanical ventiation output. The contribution of the relative humidity increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventiation output.</p> <p><b>Factory default value:</b> 60%</p>	
<p><b>27 RH level full output</b></p>	<p>Specify the relative humidity level where the mechanical ventiation output is 100 % due to the relative humidity. The contribution of the relative humidity increases linearly between the parameter for the 'start' and 'full' output. The individual contributions to the output from temperature, CO<sub>2</sub> and RH are summed to a total mechanical ventiation output.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>28 Mech. vent. temperature offset, summer</b></p>	<p>Mech. vent. temperature offset, summer</p> <p><b>Factory default value:</b> 2.0 °K</p>	
<p><b>29 Mech. vent. temperature gain, summer</b></p>	<p>Mech. vent. temperature gain, summer</p> <p><b>Factory default value:</b> 0.5 %/K</p>	
<p><b>30 Mech. vent. CO<sub>2</sub> Level without output, summer</b></p>	<p>Mech. vent. CO<sub>2</sub> Level without output, summer</p> <p><b>Factory default value:</b> 1200 ppm</p>	
<p><b>31 Mech. vent. CO<sub>2</sub> Level for full output, summer</b></p>	<p>Mech. vent. CO<sub>2</sub> Level for full output, summer</p> <p><b>Factory default value:</b> 2000 ppm</p>	
<p><b>32 Mech. vent. RH level without output, summer</b></p>	<p>Mech. vent. RH level without output, summer</p> <p><b>Factory default value:</b> 60%</p>	
<p><b>33 Mech. vent. RH level for full output, summer</b></p>	<p>Mech. vent. RH level for full output, summer</p> <p><b>Factory default value:</b> 100%</p>	

<p><b>34 Output threshold for On</b></p>	<p>Specify the threshold of the output, where the binary mechanical ventilation output is activated.</p> <p><b>Factory default value:</b> 0.0</p>	
<p><b>35 Mech. vent. output gain</b></p>	<p>Mech. vent. output gain</p> <p><b>Factory default value:</b> 100.0</p>	
<p><b>36 Mech. vent. output gain unoccupied</b></p>	<p>Mech. vent. output gain unoccupied</p> <p><b>Factory default value:</b> 100.0</p>	
<p><b>37 Mech. vent. output gain FutureVent™</b></p>	<p>Mech. vent. output gain FutureVent™</p> <p><b>Factory default value:</b> 60.0</p>	
<p><b>38 Mech. vent. output gain, High, FutureVent™</b></p>	<p>Mech. vent. output gain, High, FutureVent™</p> <p><b>Factory default value:</b> 80.0</p>	
<p><b>39 Mech. vent. output gain, Empty building, FutureVent™</b></p>	<p>Mech. vent. output gain, Empty building, FutureVent™</p> <p><b>Factory default value:</b> 100.0</p>	
<p><b>40 Mech. vent. output gain, High threshold, FutureVent™</b></p>	<p>Mech. vent. output gain, High threshold, FutureVent™</p> <p><b>Factory default value:</b> 1.2</p>	
<p><b>41 Mech. vent. transmit threshold</b></p>	<p>Mech. vent. transmit threshold</p> <p><b>Factory default value:</b> 2.0</p>	
<p><b>42 Mech. vent., use user temperature offset</b></p>	<p>Mech. vent., use user temperature offset</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>43 Allow mechanical ventilation during winter</b></p>	<p>Specify if the mechanical ventilation may be used during winter. The setting can be used if an air condition unit is used.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>44 Allow the mechanical ventilation to run when the building is unoccupied</b></p>	<p>Specify if the mechanical ventilation may be used when the building is unoccupied. The setting can be used if an air condition unit is used.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>45 Allow mechanical ventilation running when the room is unoccupied</b></p>	<p>Specify if the mechanical ventilation may be used when the room is unoccupied. The setting can be used if an air condition unit is used.</p> <p><b>Factory default value:</b> Yes</p>	
<p><b>46 Only use mechanical ventilation during warm outdoor conditions</b></p>	<p>Specify whether the mechanical ventilation must only be used during warm outdoor conditions, e.g. if an air conditioning unit is being controlled.</p> <p><b>Factory default value:</b> No</p>	
<p><b>48 Mech. vent., FutureVent™ window open threshold</b></p>	<p>Mech. vent., FutureVent™ window open threshold</p> <p><b>Factory default value:</b> 5%</p>	




<p><b>49 Air supply temperature gain</b></p> <p><u>Factory default value:</u> -2.0 %/K</p>	<p>Air supply temperature gain</p>	
<p><b>50 Min. air supply temperature setpoint</b></p> <p><u>Factory default value:</u> 18.0 °C</p>	<p>Min. air supply temperature setpoint</p>	
<p><b>51 Air supply temperature setpoint offset</b></p> <p><u>Factory default value:</u> -1.0 °K</p>	<p>Air supply temperature setpoint offset</p>	
<p><b>52 Winter, Extra, CO2 offset</b></p> <p><u>Factory default value:</u> -200 ppm</p>	<p>Winter, Extra, CO2 offset</p>	
<p><b>53 Winter, Eco., CO2 offset</b></p> <p><u>Factory default value:</u> 200 ppm</p>	<p>Winter, Eco., CO2 offset</p>	
<p><b>54 Winter, Extra, Ventilation when unoccupied</b></p> <p><u>Factory default value:</u> Yes</p>	<p>Winter, Extra, Ventilation when unoccupied</p>	
<p><b>55 Winter, Normal, Ventilation when unoccupied</b></p> <p><u>Factory default value:</u> No</p>	<p>Winter, Normal, Ventilation when unoccupied</p>	
<p><b>56 Winter, Eco., Heating setpoint offset</b></p> <p><u>Factory default value:</u> -1.0 °K</p>	<p>Winter, Eco., Heating setpoint offset</p>	
<p><b>57 Winter, Eco., night heating setpoint offset</b></p> <p><u>Factory default value:</u> -1.0 °K</p>	<p>Winter, Eco., night heating setpoint offset</p>	
<p><b>58 Winter, Normal, Pulse Ventilation</b></p> <p><u>Factory default value:</u> Yes</p>	<p>Winter, Normal, Pulse Ventilation</p>	
<p><b>59 Summer, Extra temperature setpoint offset</b></p> <p><u>Factory default value:</u> -1.0 °K</p>	<p>Summer, Extra temperature setpoint offset</p>	
<p><b>60 Summer, Eco. temperature setpoint offset</b></p> <p><u>Factory default value:</u> 1.0 °K</p>	<p>Summer, Eco. temperature setpoint offset</p>	
<p><b>61 Summer, Extra, CO2 offset</b></p> <p><u>Factory default value:</u> -200 ppm</p>	<p>Summer, Extra, CO2 offset</p>	
<p><b>62 Summer, Eco., CO2 offset</b></p> <p><u>Factory default value:</u> 200 ppm</p>	<p>Summer, Eco., CO2 offset</p>	
<p><b>63 Summer, Extra outdoor temp. setpoint offset</b></p> <p><u>Factory default value:</u> 1.0 °K</p>	<p>Summer, Extra outdoor temp. setpoint offset</p>	

<b>64 Summer, Eco., outdoor temp. setpoint offset</b>	Summer, Eco., outdoor temp. setpoint offset  <u>Factory default value:</u> -1.0 °K	
<b>65 Summer, Eco., Night Cooling temp. setpoint offset</b>	Summer, Eco., Night Cooling temp. setpoint offset  <u>Factory default value:</u> -1.0 °K	
<b>66 Summer, Extra, mech. vent. during unoccupied</b>	Summer, Extra, mech. vent. during unoccupied  <u>Factory default value:</u> Yes	

## View all details

### 21 Heating controller [Common]



PARAMETER:	DESCRIPTION:	
<b>17 Licensed features</b>	Shows functions enabled by the USB license stick.	

## View all details

### 21 Heating controller, objects








## View all details

### 25 Sun [Common]

PARAMETER:	DESCRIPTION:	
<b>16 Debug</b>	Debug  <u>Factory default value:</u> No	
<b>17 Licensed features</b>	Shows functions enabled by the USB license stick.  <u>Factory default value:</u> Yes	














## View all details








25 Sun [1..10]

PARAMETER:	DESCRIPTION:	
17 Enabled	Specify if the controller is enabled.  <b>Factory default value:</b> No	
16 Illumination	Illumination  <b>Factory default value:</b> 0	
18 NV Controller	Specify the associated NV Controller  <b>Factory default value:</b> -	
19 Auto. Off	Specify if the automatic control is turned off.  <b>Factory default value:</b> No	
20 Use zone occupancy	Specify if the NV controllers 'occupancy' is to be used.  <b>Factory default value:</b> No	
21 Temp. hysteresis	Specify the hysteresis used for the outdoor temperature.  <b>Factory default value:</b> 2.0 °K	
22 Reposition time	Specify the repositioning time for unchanged values. 0 means no repositioning.  <b>Factory default value:</b> 10 min.	

## View all details








### 6 Local input [Common]














PARAMETER:	DESCRIPTION:	
16 Local safety active	Indicates that one or more input with 'Safety function' is active.	
17 WSK Link™ master safety active	Indicates that safety is received from master on WSK Link™ (X5 / X6).	
18 WSK Link™ slave input active	Indicates that safety is received from WSK Link™ (X5 / X6).	
19 WSK Link™ slave output active	Indicates that safety is sent to WSK Link™ (X11). Sum of 'Local' and 'Slave input'.	
24 Safety from AOnet	Shows the safety received from AOnet.  <u>Factory default value:</u> No	
20 Safety sum	This is the sum of 'Local', 'WSK Link™ master' and 'WSK Link™ slave input' safety. This is used by this controller.	
21 Control motor groups	Specify which motor group(s) the 'Safety sum' shall control.  <u>Factory default value:</u> -	
22 Control smoke zones	Specify which smoke zone/zones the 'Safety sum' shall control.  <u>Factory default value:</u> -	
23 Send local safety to AOnet	Configures which controllers on the AOnet to send the local safety to.  <u>Factory default value:</u> -	
25 Usage of safety from AOnet	Configure if safety from AOnet is used. If received it will be set to 'present' unless it is set to 'not used'.  <u>Factory default value:</u> Not present	
26 Safety from AOnet, error	Shows an error if the safety is not received from AOnet in 3 minutes.  <u>Factory default value:</u> No	
27 Local rain active	Indicates that one or more input with 'Rain function' is active.	
27 Rain sum	<u>Factory default value:</u> #N/A	
27 Send local rain to AOnet		
27 Local rain active	This is the sum of 'Local' and 'AOnet rain'. This is used by this controller.	
27 Rain sum	<u>Factory default value:</u> #N/A	
27 Send local rain to AOnet		












27	<b>Local rain active</b>	Configures which controllers on the AOnet to send the local rain to.	
27	<b>Rain sum</b>	<u>Factory default value:</u> #N/A	
27	<b>Send local rain to AOnet</b>		
28	<b>Rain from AOnet</b>	Shows the rain received from AOnet.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
		<u>Factory default value:</u> #N/A	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
28	<b>Rain from AOnet</b>	Specify which motor group(s) the 'Rain sum' shall control.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
		<u>Factory default value:</u> #N/A	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
28	<b>Rain from AOnet</b>	Configure if rain from AOnet is used. If received it will be set to 'present' unless it is set to 'not used'.	
28	<b>Control motor groups</b>	<u>Factory default value:</u> #REF!	
28	<b>Usage of rain from AOnet</b>	<u>Factory default value:</u> #N/A	
		<u>Factory default value:</u> #N/A	
29	<b>Rain from AOnet, error</b>	Shows an error if the rain is not received from AOnet in 3 minutes.	
		<u>Factory default value:</u> #REF!	
30	<b>Rain from AOnet, activate if error</b>	Configure if the AOnet Rain error should activate the Rain signal.	
		<u>Factory default value:</u> #REF!	
31	<b>Safety from AOnet, activate if error</b>	Configure if the Aonet Safety error should activate the Safety signal.	
		<u>Factory default value:</u> #REF!	

## View all details






### 6 Local input [1..26]

PARAMETER:	DESCRIPTION:	
<b>16 Input type</b>	Shows the type of the selected input.	
<b>42 Enable input</b>	Enables the input. If not enabled the motor group and smoke zone output are 0.  <b>Factory default value:</b> Yes	
<b>25 Control smoke zones</b>	Specify which smoke zone/zones the input shall control. The input can either control smoke zones or motor groups. When smoke zone is chosen the option for controlling motor groups is lost.  <b>Factory default value:</b> -	
<b>26 Function in controlled smoke zones</b>  Displayed only if the input is linked to one or more smoke zones.	Specify the function that the input applies to the associated smoke zones.  <b>Factory default value:</b> -	
<b>39 Inactive function in controlled smoke zones</b>  Displayed only if the input is linked to one or more smoke zones.	Specify the function that the input applies to the associated smoke zones, when it becomes inactive.  <b>Factory default value:</b> None	
<b>27 Target smoke zone output</b>  Displayed only if the input is linked to one or more smoke zones.	Shows the actual output that the input applies to the smoke zones.  <b>OPTIONS:</b> Line A Line B Reset Line C Line D Line E Line F Comfort stop Comfort open Comfort close Comfort safety Line A error Line B error Line C error Line D error Line E error Line F error Comfort safety error	
<b>46 Control motor lines</b>  Displayed only if the input is binary	Specify which motor line(s) the input shall control. The input can either control smoke zones, motor groups or motor lines. When motor lines is chosen the options for controlling smoke zones and motor groups are lost.  <b>Factory default value:</b> -	

<p><b>28 Control motor groups</b></p> <p>Displayed only if the input is binary</p>	<p>Specify which motor group(s) the input shall control. The input can either control smoke zones, motor groups or motor lines. When motor groups is chosen the option for controlling smoke zones and motor lines are lost.</p> <p><b>Factory default value:</b> -</p>	
<p><b>47 Active function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors when it becomes active.</p> <p><b>Factory default value:</b> -</p>	
<p><b>29 Active function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors when it becomes active.</p> <p><b>Factory default value:</b> -</p>	
<p><b>40 Active position</b></p>	<p>Specify the position that is sent to the motor group with the active function.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>49 Inactive function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors, when it becomes inactive.</p> <p><b>Factory default value:</b> None</p>	
<p><b>38 Inactive function on controlled motors</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors, when it becomes inactive.</p> <p><b>Factory default value:</b> None</p>	
<p><b>41 Inactive position</b></p>	<p>Specify the position that is sent to the motor group with the inactive function.</p> <p><b>Factory default value:</b> 0%</p>	
<p><b>51 Use input in NV controller 'all'</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Configures if the input should be used to activate a function.</p>	
<p><b>52 Function in NV controller 'all'</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Configures the function.</p>	
<p><b>53 Actual function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Show the actual status of the function.</p>	
<p><b>43 Control NV controllers</b></p>	<p>Specify which NV controller the input shall control. The input can either control smoke zones, motor groups or NV controller.</p> <p><b>Factory default value:</b> -</p>	
<p><b>44 Function in the NV controller</b></p>	<p>Specify the function the input has in the NV controller.</p> <p><b>Factory default value:</b> None</p>	
<p><b>45 Actual NV controller function</b></p>	<p>Shows the active function in the NV controller.</p>	











<p><b>30 Short press time</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the time for a short activation of the input. If the activation is shorter than this time the short output function is applied.</p> <p><b>Factory default value:</b> 500</p>	
<p><b>48 Short output function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors after a short activation of the input.</p> <p><b>Factory default value:</b> -</p>	
<p><b>31 Short input function</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated motors after a short activation of the input.</p> <p><b>Factory default value:</b> -</p>	
<p><b>50 Target motor output</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Shows the actual output that the input applies to the motors.</p>	
<p><b>32 Target motor output</b></p> <p>Displayed only if the input is linked to one or more motor group(s)</p>	<p>Shows the actual output that the input applies to the motors.</p>	
<p><b>22 Active state</b></p>	<p>Specify what logical state to use when the input is activated.</p> <p><b>Factory default value:</b> On</p>	
<p><b>36 Thresholds configuration</b></p>	<p>Specify the thresholds for the input. Select between:          Switch = is used for a simple switch with no surveillance.          Type 1 = enables surveillance of broken cable (open circuit).          Type 2 = enables surveillance of broken and short (circuit) cable.          Manual = enables manual setting of thresholds.</p> <p><b>Factory default value:</b> Switch</p>	
<p><b>18 Threshold: open-circuit error</b></p> <p>Displayed only if the input has Surveillance enabled</p>	<p>Specify the threshold level for detecting an open-circuit error. If the input level is higher than this value, the input is considered as interrupted and an error will be indicated. By setting the value to 22000 mV or higher, the open-circuit error detection is disabled.</p> <p><b>Factory default value:</b> 32000 mV</p>	
<p><b>19 Threshold: Active input</b></p>	<p>Specify the threshold level for detecting an active input. If the input level is lower than this value, the input is active.</p> <p><b>Factory default value:</b> 32000 mV</p>	
<p><b>20 Threshold: Short-circuit error</b></p> <p>Displayed only if the input has Surveillance enabled</p>	<p>Specify the threshold level for detecting a wire short-circuit error. If the input level is lower than this value the input is considered as short-circuited and a hardware error is indicated. By setting the value to 0, the short-circuit error detection is disabled.</p> <p><b>Factory default value:</b> 0 mV</p>	
<p><b>24 Terminal voltage</b></p>	<p>Shows the actual voltage reading of the of the input. Only updated when the input changes state.</p>	








<p><b>21 Error state</b> Displayed only if the input has Surveillance enabled</p>	<p>Specify which state the input shall take, when an error is present on the input.  <b>Factory default value:</b> None</p>	
<p><b>23 State</b></p>	<p>Shows the actual state of the input.</p>	
<p><b>33 Press timer</b></p>	<p>Shows the actual press timer value.</p>	
<p><b>54 Short input function</b> Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the function that the input applies to the associated smoke zone after a short activation of the input.  <b>Factory default value:</b> #N/A</p>	
<p><b>55 Idle time out</b> Displayed only if the input is linked to one or more motor group(s)</p>	<p>Specify the time after a short activation of the input where the hand commands to the smoke zone is set to idle.  <b>Factory default value:</b> #N/A</p>	

## View all details














### 7 Local output [1..24]





PARAMETER:	DESCRIPTION:	
<b>16 Output type</b>	Shows the output type of the actual output.	
<b>26 Output mode</b>	Specify the output mode of the output. When 'Siren' is chosen it is assumed that a alarm signalling device is connected to the output. The siren can be stopped under 'Manual operation'.  <b>Factory default value:</b> Binary output	
<b>17 Controlled by smoke zones</b>	Specify which smoke zones that controls the output. One or more smoke zones can be selected. The logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> -	
<b>18 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones that controls the output.  <b>Factory default value:</b> None	
<b>19 Controlled by motor groups</b>	Specify which motor groups that controls the output. One or more motor groups can be selected. The logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>20 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None	
<b>30 Controlled by NV Controller</b>	Specify which NV Controller that controls the output. One or more motor groups can be selected. The logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>31 NV Controller output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated NV Controller that controls the output.  <b>Factory default value:</b> None	
<b>21 Logic function</b> Displayed only if the output is linked to one or more smoke zones or motor group(s)	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	
<b>22 Status when active</b> Displayed only if the output is linked to one or more smoke zones or motor group(s)	Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On	













<p><b>29 Active delay</b></p> <p>Displayed only if the output is linked to one or more smoke zones or motor group(s)</p>	<p>Specify an optional active delay. If the value is higher than 0, the output will be activated after the specified on time. If the value is 0, there is no time delay. The factory settings 0 sec.</p> <p><b>Factory default value:</b> 0 s</p>	
<p><b>23 Inactive delay</b></p> <p>Displayed only if the output is linked to one or more smoke zones or motor group(s)</p>	<p>Specify an optional inactive time out. If the value is higher than 0, the output will be inactive after the specified time. If the value is 0, there is no time out. The factory settings 0 sec.</p> <p><b>Factory default value:</b> 0 s</p>	
<p><b>25 Actual output state</b></p>	<p>Shows the actual state of the output.</p>	
<p><b>28 Smoke zone output functions</b></p>	<p>Specify the functions in the associated smoke zones, that controls the siren output.</p> <p><b>Factory default value:</b> None</p>	
<p><b>27 Stop the active siren</b></p> <p>Displayed only if relevant</p>	<p>Turn off the siren. If a new error occurs, the siren will restart.</p>	






## View all details

### 8 Weather

PARAMETER:	DESCRIPTION:	
<b>16 Sensor type</b>	Specify which type of weather station that is connected to the WSA 5MC (S2X3.2). Choose between: None = no sensor. WOW = WOW 201 wind speed sensor and WOW 202 wind direction sensor. WLA = WLA 340 wind speed sensor. WLA 330 and WLA 331 are not configured as weather stations but as a normal local input.  <b>Factory default value:</b> None	
<b>30 WSK Link™ Master present</b>	The first time a Master is seen on X11 this parameter is automatically set to 'Master present'. If the Master goes offline the 'master safety active' is set to 'Yes'. If the Master no longer is connected to X11 the parameter must be set to 'Master not used'.  <b>Factory default value:</b> Master not present	
<b>17 Status</b>	Shows the status for the weather station.	
<b>18 Wind speed</b>	Shows the actual wind speed. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>19 Filtered wind speed</b>	Shows the actual filtered wind speed. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>20 Wind direction</b> Displayed when weather station type = WOW	Shows the actual wind direction. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>21 Filtered wind direction</b> Displayed when weather station type = WOW	Shows the actual filtered wind direction. Wind speed and direction exist with two different filtrations. the time constant for the two different filtering's can be set individually.	
<b>31 WSK Link™ master safety active</b>	Indicates that safety is received from master on WSK Link™ (X5 / X6).	
<b>33 Temperature</b>	Outputs the Temperature reading.	
<b>34 Rain</b>	Precipitation Status.	
<b>35 Precipitation Intensity</b>	Outputs Precipitation (Rain) Intensity. It is the sum of the last sixty lots of 1 minute accumulated Rain data. A new sum measurement is generated every minute in millimetres. It will be set to zero on power up.	
<b>36 Relative Humidity</b>	Outputs the measured Relative Humidity reading in %.	
<b>37 Absolute Humidity</b>	Outputs the measured absolute Humidity reading in %.	












<p><b>38 Dewpoint</b></p>	<p>Output calculated Dewpoint from Temperature and Humidity readings in %.</p> $Td = Tn / (Y-1)$ <p>Where Td = Dewpoint temperature  <math>Y = \frac{m}{\log_{10}(Pw/A)}</math>              Tn=Triple point temperature (in K)              Pw = Pws . RH / 100 (hPa)              Pws = water vapour saturation pressure (hPa)</p>	
<p><b>41 Time</b></p>	<p>The UTC time and date.</p>	
<p><b>39 Sensor Status</b></p>	<p>Sensor Status Codes</p> <p>0000 OK. No fault conditions detected in measurement period.</p> <p>0001 Wind Measurement Fault. Wind Sensor faulty.</p> <p>0002 GPS Error. E.g. Locating Satellite fix.</p> <p>0004 Source for Corrected Wind Direction is GPS. GPS notification.</p> <p>0006 GPS Location Missing. GPS error.</p> <p>0010 Temperature Measurement Fault. Temperature sensor faulty.</p> <p>0020 Dewpoint fault. If Temperature and Humidity are reporting correctly then this code indicates a main pcb fault.</p> <p>0040 Humidity fault. Humidity Sensor faulty.</p> <p>0080 Pressure Sensor Warning. Pressure sensor reading not available/unit faulty.</p> <p>0100 Compass fault. Invalid heading due to compass fault.</p>	
<p><b>40 Wind Status</b></p>	<p>Wind Status Codes</p> <p>0000 OK No fault conditions detected in measurement period.</p> <p>0001 Wind Sensor Axis failed Wind U Axis blocked or faulty.</p> <p>0002 Wind Sensor Axis failed Wind V Axis blocked or faulty.</p> <p>0004 Wind Sensor both Axis failed Wind U and V Axis blocked or faulty.</p> <p>000B Wind Sensor readings failed Wind Sensor data output fault.</p> <p>0100 Wind Average Building WMO wind average building.</p> <p>0200 Corrected Wind Measurement not available. Compass corrected wind measurement failure.</p> <p>A NMEA Acceptable Data No fault conditions detected in measurement period.</p> <p>V NMEA Void Data Fault condition detected in measurement period.</p>	

<p><b>42 GPS Status</b></p>	<p>Location Fix and Number of Satellites.</p> <p>Result e.g. 010B.</p> <p>Where 0 is padding.</p> <p>1 is GPS SPS mode fix valid (0 is fix not available).</p> <p>0B is a hexadecimal representation of the number of satellites acquired,11 satellites found. 0A would be 10 satellites etc.</p>	
<p><b>22 Pulses/sec. per m/s</b> Displayed when weather station type = WLA 340</p>	<p>Specify the number of pulses per second that corresponds to 1 m/s. If sensor type 'WLA 340' is used the value i 2.</p> <p><b>Factory default value:</b> 2</p>	
<p><b>23 Filter constant</b></p>	<p>Specify the filter constant (tau) for the wind speed / wind direction. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.</p> <p><b>Factory default value:</b> 5 s</p>	
<p><b>24 Slow filter constant</b></p>	<p>Specify the filter constant (tau) for the slow wind speed / slow wind direction. Wind speed and direction exists with two different filtrations. the time constant for the two different filtering's can be set individually.</p> <p><b>Factory default value:</b> 10 min.</p>	
<p><b>25 Use RMS in filter</b></p>	<p>Specify if root-mean-square (RMS) is used in the filter.</p> <p><b>Factory default value:</b> No</p>	
<p><b>26 Retransmit time</b></p>	<p>Specify the retransmit interval time for sending unchanged values on the connected field bus module.</p> <p><b>Factory default value:</b> 300 s</p>	
<p><b>27 Data unchanged timeout</b></p>	<p>Specify number of hours when unchanged data is considered an error. If wind speed or wind direction have not changed for this number of hours and error is generated.</p> <p><b>Factory default value:</b> 48 hours</p>	
<p><b>32 Show offline as error</b></p>	<p>Configures if WOW not online should be indicated as a 'hardware error', that is report with yellow LED and on the error output.</p>	
<p><b>44 Use outdoor temp. as local temp. in zones</b></p>	<p>Configures to use the outdoor temperature as local outdoor temperature in zones.</p>	
<p><b>43 Send data to AOnet</b></p>	<p>Configures which controllers on the AOnet to send weather data to.</p>	
<p><b>45 Adjust clock</b></p>	<p>Synchronise the controllers clock with the time from the weather station.</p>	
<p><b>46 Last sync. time (UTC)</b></p>	<p>Shows the last UTC time this controller's time and date were synchronised with weather station.</p> <p><b>Factory default value:</b> -</p>	

<b>47 AUX power forced on</b>	Shows if the AUX power is forced on.  <u>Factory default value:</u> #N/A	
<b>50 AUX power controlled during mains fail</b>	Configured if AUX power is turned on every 10th minute during mains fail.  <u>Factory default value:</u> #N/A	
<b>51 Activate 'Rain' if offline</b>	Activate 'Rain' if WOW 600 or AOnet is offline.  <u>Factory default value:</u> #N/A	
<b>52 Temperature, sensor</b>	Shows the temperature from the sensor before the offset is applied.  <u>Factory default value:</u> #N/A	
<b>53 Temperature, offset</b>	Specify if the temperature from the sensor should be offset.  <u>Factory default value:</u> #N/A	










## View all details

### 24 Cloud

PARAMETER:	DESCRIPTION:	
<b>22 Licensed features</b>	Shows functions enabled by the USB license stick.	
<b>16 Cloud enabled</b>	Configure if cloud connection is enabled.  <u>Factory default value:</u> No	
<b>21 Device ID</b>	Shows the cloud id.	
<b>18 Connected</b>	Shows if the controller is connected to cloud.	
<b>19 Status</b>	Shows the status of the cloud connection.	
<b>20 Connection status</b>	Shows the detailed status of the cloud connection.	
<b>26 Last UTC time sync. From cloud</b>	Shows the last UTC time set received from the cloud.	
<b>24 'Publish' counter</b>	Incremented for every successful 'publish' to cloud.	
<b>25 Error counter</b>	Incremented everytime an error occurs in the cloud connection.	
<b>27 'Suspended' counter</b>	Incremented everytime the controller is 'suspended' by the cloud.	
<b>23 Activation code</b>	Activation code used for cloud inrollment.	

## View all details


















### 9 Power supply

PARAMETER:	DESCRIPTION:	
17 Mains status	Shows the status of the main power supply.	
36 Battery status	Shows the status of the back-up batteries.	
19 Power supply voltage	Shows the actual power supply voltage.	
16 Detailed status	Shows the detailed power supply status.	
47 PSU voltage	PSU voltage from main board.	
21 Battery temperature	Shows the actual temperature of the back-up batteries.	
22 Maximum temperature	Shows the maximum measured temperature since last reset of the value. the max. value can be reset on acces level 3 and 4.	
37 Cable check interval	Specify the time between cable check. 0 disables cable test.  <b>Factory default value:</b> 0 s	
38 Mains off error time	Specify the time before a mains warning turns into a mains error.  <b>Factory default value:</b> 28 min.	
















## View all details





### 11 CAN

PARAMETER:	DESCRIPTION:	
16 MC ID	Configures the ID on the CAN bus of the local WSA 5MC.  <u>Factory default value:</u> 1	
35 CAN ID conflict, CAN1	The CAN ID of this device appears already to be in use on CAN1. possible reasons: 1: two devices have been configured with the same CAN ID. 2: the two CAN interfaces of the same device have been connected together, which is not allowed.	
21 CAN 1 connected.	CAN 1 connected.	
23 Received frames	Shows the number of received CAN frames.	
24 Transmitted frames	Shows the number of transmitted CAN frames.	
26 Tx queue size (transmission).	Tx queue size (transmission).	
27 Tx discarded (transmission).	Tx discarded (transmission).	
28 Rx discarded (receive).	Rx discarded (receive).	
39 Message pool size	Message pool size	
29 Last error.	Last error.	
30 Receive errors.	Receive errors.	
31 Transmit errors.	Transmit errors.	
32 Rx idle time (receive).	Rx idle time (receive).	
33 Tx idle time (transmission).	Tx idle time (transmission).	
38 CAN Rx max Queued	Shows the maximum size that the CAN receive queue has had at any time since booting.	
45 Bus initialisation error, CAN1	It is not possible to communicate on the bus cable connected to CAN1. Could be a cable problem or a defect controller board.	
44 Bus initialisation error, CAN2	It is not possible to communicate on the bus cable connected to CAN2. Could be a cable problem or a defect controller board.	

## View all details


### 12 Network

PARAMETER:	DESCRIPTION:	
<b>33 Link</b>	Shows the link status.  <b>Factory default value:</b> 10 0 0 1	
<b>27 Restart to use new ip settings</b> Displayed only if relevant	The system must restart to use the new ip settings. When 'yes' is pressed the system will restart.  <b>Factory default value:</b> 10 0 0 1	
<b>23 DHCP</b>	Select 'Yes' to enable DHCP (automatic IP address) for the Ethernet interface (automatic IP address assignment).  <b>Factory default value:</b> Yes	
<b>16 IP address</b> Displayed only if DHCP disabled	Specify the IP address of the section.  <b>Factory default value:</b> 00 00 00 00	
<b>21 Subnet mask</b> Displayed only if DHCP disabled	Specify the subnet mask of the 20A section.  <b>Factory default value:</b> 255 255 255 0	
<b>22 Default gateway</b> Displayed only if DHCP disabled	Specify the default gateway of the 20A section.  <b>Factory default value:</b> 10 0 0 1	
<b>29 DNS 1</b>	Configures the primary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>30 DNS 2</b>	Configures the secondary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>24 IP address</b>	Shows the IP address of the section.  <b>Factory default value:</b> 00 00 00 00	
<b>25 Subnet mask</b>	Shows the subnet mask of the 20A section.  <b>Factory default value:</b> 255 255 255 0	
<b>26 Default gateway</b>	Shows the default gateway of the 20A section.  <b>Factory default value:</b> 10 0 0 1	
<b>31 DNS 1</b>	Shows the primary DNS server.  <b>Factory default value:</b> 10 0 0 1	
<b>32 DNS 2</b>	Shows the secondary DNS server.  <b>Factory default value:</b> 10 0 0 1	

<p><b>17 Power setting</b></p>	<p>Specify the power settings for the network interface.                  Auto. = when 230V mains voltage the gate is automatically on. In battery mode, this is disabled to save power.                  ON = the network connection is always on.                  OFF = network connection deactivated.</p> <p><b>Factory default value:</b> Auto.</p>	
<p><b>18 Power state network</b></p>	<p>Shows the actual power state of the network interface.</p>	
<p><b>19 MAC (upper)</b></p>	<p>Shows the first three bytes of the Ethernet MAC address.</p>	
<p><b>20 MAC (lower)</b></p>	<p>Shows the last three bytes of the Ethernet MAC address.</p>	












## View all details

### 10 Slots

PARAMETER:	DESCRIPTION:	
<p><b>17 Enable internet updates</b></p> <p>Displayed only if module type has changed</p>	<p>Enable updated from internet.</p> <p><b>Factory default value:</b> No</p>	














## View all details












### 10 Slots [1..5]





PARAMETER:	DESCRIPTION:	
<b>16 Hardware type</b>	Shows the actual hardware type of the module in the slot.	
<b>17 New hardware type</b> Displayed only if module type has changed	Shows that a new module has been detected in the slot. This is shown as an error until the new type has been confirmed.	
<b>18 Confirm new hardware type</b> Displayed only if module type has changed	Shows if new module has been detected in the slot. This is shown as an error until the new type has been confirmed.	
<b>19 Firmware version</b> Displayed only for 5MC module (Slot 2)	Shows the software version of the board.	
<b>20 5PS, 5IO, 5SM, 5S5, 5ML Firmware version</b> Only used in Slot 1,3,4 og 5	Shows the firmware version of the module in the Slot. If the firmware is too old this is shown as an error.	
<b>22 Build time</b> Displayed only for 5MC module (Slot 2)	Shows the actual release time and date of the WSA 5MC software.	
<b>36 Get new files from cloud now</b> Displayed only for 5SM module	Triggers download of new files from cloud.	
<b>34 Latest firmware</b> Displayed only for 5SM module	Shows the latest firmware version on USB stick.	
<b>32 Boot to update firmware</b> Displayed only for 5SM module	Boots the controller to update firmware.	
<b>21 Temperature</b> Displayed only for 5IO module	Shows the actual temperature measured on the WSA 5IO board.	
<b>24 Maximum temperature</b> Displayed only for 5IO module	Shows the maximum measures temperature since last reset of the value.	

## View all details

### 13 Fieldbus [Module]













PARAMETER:	DESCRIPTION:	
<b>16 Module type</b>	Show the connected field bus module type. Some types of modules need bus power to be detected.	
<b>19 ETS application version</b> Displayed only if Power on KNX Power and Application prog.	Shows the version of the ETS application.	
<b>20 Physical address</b> Displayed only if Power on KNX Power and Application prog.	Shows the physical address assigned by ETS.	
<b>18 Power setting</b>	Specify the power settings for the field bus interface. 'Auto' means that the module is powered off if there is no mains power. 'On' means that the module is always on. 'Off' means that the module is always off.  <u>Factory default value:</u> Auto.	
<b>21 Fieldbus protocol</b> Displayed only if a RS 485 Fieldbus module is mounted	Specify the fieldbus protocol to use on RS 485.  <u>Factory default value:</u> Disabled	
<b>22 BACnet MS/TP MAC address</b> Displayed only if relevant	Specify the BACnet MS/TP MAC address.  <u>Factory default value:</u> 7	
<b>49 BACnet MS/TP MAC address, pneding</b> Displayed only if relevant	BACnet MS/TP MAC address, pneding  <u>Factory default value:</u> 0	
<b>23 BACnet MS/TP baud rate</b> Displayed only if relevant	Specify the BACnet MS/TP baud rate. Default is 9,600 bps.  <u>Factory default value:</u> 9,600	
<b>38 BACnet MS/TP max. Master</b> Displayed only if relevant	Specify the BACnet MS/TP max. Master parameter.  <u>Factory default value:</u> 127	
<b>46 BACnet MS/TP max. Master, pending</b> Displayed only if relevant	BACnet MS/TP max. Master, pending  <u>Factory default value:</u> 255	
<b>47 BACnet MS/TP Max Info Frames</b> Displayed only if relevant	Specify the BACnet MS/TP max. info frames.  <u>Factory default value:</u> 1	
<b>48 BACnet MS/TP Max Info Frames, pending</b> Displayed only if relevant	BACnet MS/TP Max Info Frames, pending  <u>Factory default value:</u> 0	
<b>50 Changes pending</b> Displayed only if relevant	Changes pending  <u>Factory default value:</u> No	

<p><b>24 Modbus RTU baud rate</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU baud rate. Default is 19,200 bps.</p> <p><b>Factory default value:</b> 19,200</p>	
<p><b>25 Modbus RTU parity</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU parity. Default is 'Even'.</p> <p><b>Factory default value:</b> Even</p>	
<p><b>26 Modbus RTU stop bits</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU stop bits. Default is '1'. the use of no parity requires 2 stop bits.</p> <p><b>Factory default value:</b> 1</p>	
<p><b>27 Modbus RTU slave address</b> Displayed only if relevant</p>	<p>Specify the Modbus RTU slave address. Default is 1.</p> <p><b>Factory default value:</b> 1</p>	
<p><b>29 Bus Message Count</b> Displayed only if relevant</p>	<p>Quantity of messages that the remote device has detected on the communications system since its last restart, clear counters operation, or power-up. Messages with bad CRC are not taken into account.</p>	
<p><b>30 Bus Communication Error Count</b> Displayed only if relevant</p>	<p>Quantity of CRC errors encountered by the remote device since its last restart, clear counters operation, or power-up. In case of an error detected on the character level, (overrun, parity error), or in case of a message length &lt; 3 bytes, the receiving device is not able to calculate the CRC. In such cases, this counter is also incremented.</p>	
<p><b>31 Slave Exception Error Count</b> Displayed only if relevant</p>	<p>Quantity of MODBUS exception error detected by the remote device since its last restart, clear counters operation, or power-up. It comprises also the error detected in broadcast messages even if an exception message is not returned in this case. Exception errors are described and listed in 'MODBUS Application Protocol Specification' document.</p>	
<p><b>32 Slave Message Count</b> Displayed only if relevant</p>	<p>Quantity of messages addressed to the remote device, including broadcast messages, that the remote device has processed since its last restart, clear counters operation, or power-up.</p>	
<p><b>33 Slave No Response Count</b> Displayed only if relevant</p>	<p>Quantity of messages received by the remote device for which it returned no response (neither a normal response nor an exception response), since its last restart, clear counters operation, or power-up. then, this counter counts the number of broadcast messages it has received.</p>	
<p><b>34 Slave NAK Count</b> Displayed only if relevant</p>	<p>Quantity of messages addressed to the remote device for which it returned a Negative Acknowledge (NAK) exception response, since its last restart, clear counters operation, or power-up. Exception responses are described and listed in 'MODBUS Application Protocol Specification' document.</p>	
<p><b>35 Slave Busy Count</b> Displayed only if relevant</p>	<p>Quantity of messages addressed to the remote device for which it returned a Slave Device Busy exception response, since its last restart, clear counters operation, or power-up. Exception responses are described and listed in 'MODBUS Application Protocol Specification' document</p>	






<b>36 Bus Character overrun Count</b> Displayed only if relevant	Quantity of messages addressed to the remote device that it could not handle due to a character overrun condition, since its last restart, clear counters operation, or power-up. A character overrun is caused by data characters arriving at the port faster than they can be stored, or by the loss of a character due to a hardware malfunction.	
<b>37 Clear diagnostics</b> Displayed only if relevant	Sets all diagnostic information to 0.	
<b>39 Temperature unit from KNX</b> Displayed only if relevant	Configures the temperature unit of values received from KNX. The values will be converted if needed.  <b>Factory default value:</b> Celsius	
<b>40 Temperature unit to KNX</b> Displayed only if relevant	Configures the temperature unit of values transmitted to KNX. The values will be converted if needed.  <b>Factory default value:</b> Celsius	

## View all details

### 13 Fieldbus [1..10]














PARAMETER:	DESCRIPTION:	
<b>16 Value</b>	Shows the status of the fields bus connection.	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Controlled motor groups</b> Displayed only if object direction in input	Specify which motor group/groups the input shall control. The input can either control smoke zones oR motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>20 Target motor group output</b> Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. The logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that contols the output.  <b>Factory default value:</b> None	
<b>23 Source smoke zone(s) output</b> Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zones.	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	
<b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)	Specify the function in the associated motor groups that contols the output.  <b>Factory default value:</b> None	
<b>26 Source motor group(s) output</b> Displayed only if the output is linked to one or more motor group(s)	Shows the actual input from the associated motor group(s).	
<b>27 Logic function</b> Displayed only if object direction in output	Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR	









<p><b>28 Status when active</b></p> <p>Displayed only if object direction in output</p>	<p>Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.</p> <p><b>Factory default value:</b> On</p>	
<p><b>29 Retransmit time</b></p>	<p>Specify the retransmit interval time for sending unchanged values on the field bus. 0 = disables retransmission of unchanged values.</p> <p><b>Factory default value:</b> 300 s</p>	
<p><b>30 Inactive function in controlled motor groups</b></p>	<p>Specify the function that the input applies to the associated motor groups, when it becomes inactive.</p> <p><b>Factory default value:</b> -</p>	
<p><b>31 Active position</b></p>	<p>Specify the position that is sent to the motor group with the active function.</p> <p><b>Factory default value:</b> 100%</p>	
<p><b>32 Inactive position</b></p>	<p>Specify the position that is sent to the motor group with the inactive function.</p> <p><b>Factory default value:</b> 0%</p>	

## View all details













### 16 BACnet [Common]





PARAMETER:	DESCRIPTION:	
<b>30 Enabled BACnet</b> Displayed only if registered as 'foreign device'	Configure if BACnet IP and MS/TP is enabled.  <u>Factory default value:</u> Yes	
<b>17 BACnet device instance</b>	Specify the device instance of the BACnet server.  <u>Factory default value:</u> 1	
<b>16 BACnet IP UDP port number</b>	Specify the UDP port for BACnet IP. The standard port is 47808.  <u>Factory default value:</u> 47808	
<b>18 Actual position COV increment</b>	Specify the COV increment for the actual position input objects.  <u>Factory default value:</u> 5%	
<b>19 Actual max. position COV increment</b>	Specify the COV increment for the actual maximum position input objects.  <u>Factory default value:</u> 1%	
<b>20 Wind speed COV increment</b>	Specify the COV increment for the wind speed input objects.  <u>Factory default value:</u> 0.1 m/s	
<b>21 Wind direction COV increment</b>	Specify the COV increment for the wind direction input objects.  <u>Factory default value:</u> 1°	
<b>26 Temperature COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for temperature input objects.  <u>Factory default value:</u> 0.2	
<b>27 Humidity COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for humidity input objects.  <u>Factory default value:</u> 2%	
<b>28 CO2 COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for CO2 input objects.  <u>Factory default value:</u> 50 ppm	
<b>29 Heating valve COV increment</b> Displayed only if registered as 'foreign device'	Specify the COV increment for heating valve input objects.  <u>Factory default value:</u> 5%	
<b>22 Register as 'foreign device'</b>	Specify if the 5MC must register as 'foreign device'. When enabled the 5MC will register as 'foreign device'. The registration interval is 1/3 of the 'time-to-live' time.  <u>Factory default value:</u> No	
<b>23 IP address of 'BBMD'</b> Displayed only if registered as 'foreign device'	Specify the IP address of the 'BBMD'.  <u>Factory default value:</u> 0. 0. 0. 0	

<p><b>31 IP address of 'BBMD' pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>IP address of 'BBMD' pending</p> <p><b>Factory default value:</b> 0. 0. 0. 0</p>	
<p><b>24 BACnet UDP port of BBMD</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Specify the UDP port of the BBMD. The standard port is 47808.</p> <p><b>Factory default value:</b> 47808</p>	
<p><b>33 BACnet UDP port of BBMD, Pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>BACnet UDP port of BBMD, Pending</p> <p><b>Factory default value:</b> 0</p>	
<p><b>25 Register as 'foreign device' 'Time-to-Live' value</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Specify the 'Time-to-Live' value. The 5MC will register with an interval of 1/3 of the 'time-to-live' time. If the value is 0 the 5MC will only register once. the 'time-to-live' will be the 'grace period' of 30 seconds.</p> <p><b>Factory default value:</b> 60 min.</p>	
<p><b>32 Register as 'foreign device' 'Time-to-Live' value, pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Register as 'foreign device' 'Time-to-Live' value, pending</p> <p><b>Factory default value:</b> 0 min.</p>	
<p><b>34 Changes pending</b></p> <p>Displayed only if registered as 'foreign device'</p>	<p>Changes pending</p> <p><b>Factory default value:</b> No</p>	

## View all details



### 16 BACnet, object [1..10]

PARAMETER:	DESCRIPTION:	
<b>16 Value</b>	Shows the status of the fields bus connection.	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Control motor groups</b> Displayed only if object direction in input	Specify which motor group(s) the input shall control. The input can either control smoke zones oR motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>31 Active position</b>	Specify the position that is sent to the motor group with the active function.  <b>Factory default value:</b> 100%	
<b>30 Inactive function in controlled motor groups</b>	Specify the function that the input applies to the associated motor groups, when it becomes inactive.  <b>Factory default value:</b> -	
<b>32 Inactive position</b>	Specify the position that is sent to the motor group with the inactive function.  <b>Factory default value:</b> 0%	
<b>20 Target motor group output</b> Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. the logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that contols the output.  <b>Factory default value:</b> None	
<b>23 Source smoke zone(s) output</b> Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zone(s).	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	

<p><b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)</p>	<p>Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None</p>	
<p><b>26 Source motor group(s) output</b> Displayed only if the output is linked to one or more motor group(s)</p>	<p>Shows the actual input from the associated motor group(s).</p>	
<p><b>27 Logic function</b> Displayed only if object direction in output</p>	<p>Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR</p>	
<p><b>28 Status when active</b> Displayed only if object direction in output</p>	<p>Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On</p>	













## View all details





### 18 Modbus TCP [Common]

PARAMETER:	DESCRIPTION:	
<p><b>16 Enabled</b></p>	<p>Specify if Modbus TCP communication is enabled.  <b>Factory default value:</b> No</p>	
<p><b>17 TCP port number</b></p>	<p>Specify the TCP port for Modbus TCP. The standard port is 502.  <b>Factory default value:</b> 502</p>	

## View all details













### 18 Modbus TCP [1..10]

PARAMETER:	DESCRIPTION:	
<b>16 Value</b>	Shows the status of the fields bus connection.	
<b>17 Direction</b>	Shows the direction of the field bus link.	
<b>18 Control motor groups</b> Displayed only if object direction in input	Specify which motor group(s) the input shall control. The input can either control smoke zones oR motor groups. When motor group is chosen the option for controlling smoke zones is lost.  <b>Factory default value:</b> None	
<b>19 Function in controlled motor groups</b> Displayed only if object direction in input	Specify the function that the input applies to the associated motor groups.  <b>Factory default value:</b> None	
<b>30 Active position</b>	Specify the position that is sent to the motor group with the active function.  <b>Factory default value:</b> 0%	
<b>29 Inactive function in controlled motor groups</b>	Specify the function that the input applies to the associated motor groups, when it becomes inactive.  <b>Factory default value:</b> -	
<b>31 Inactive position</b>	Specify the position that is sent to the motor group with the inactive function.  <b>Factory default value:</b> 0%	
<b>20 Target motor group output</b> Displayed only if object direction in input	Shows the actual output that the input applies to the motor groups.	
<b>21 Controlled by smoke zones</b> Displayed only if object direction in output	Specify which smoke zones that controls the output. One or more smoke zones can be selected. the logic function that is applied between the smoke zones can be configured.  <b>Factory default value:</b> None	
<b>22 Smoke zone output functions</b> Displayed only if the output is linked to one or more smoke zones.	Specify the functions in the smoke zones, that contols the output.  <b>Factory default value:</b> None	
<b>23 Source smoke zone(s) output</b> Displayed only if the output is linked to one or more smoke zones.	Shows the actual input from the associated smoke zone(s).	
<b>24 Controlled by motor groups</b> Displayed only if object direction in output	Specify which motor groups that controls the output. One or more motor groups can be selected. the logic function that is applied between the motor groups can be configured.  <b>Factory default value:</b> None	

<p><b>25 Motor group output function</b> Displayed only if the output is linked to one or more motor group(s)</p>	<p>Specify the function in the associated motor groups that controls the output.  <b>Factory default value:</b> None</p>	
<p><b>26 Source motor group(s) output</b> Displayed only if the output is linked to one or more motor group(s)</p>	<p>Shows the actual input from the associated motor group(s).</p>	
<p><b>27 Logic function</b> Displayed only if object direction in output</p>	<p>Specify the logic function that is applied between the smoke zones or motor groups.  <b>Factory default value:</b> OR</p>	
<p><b>28 Status when active</b> Displayed only if object direction in output</p>	<p>Specify if an active output result should result in the physical output being 'on' or 'off'. this can be used to invert the output result.  <b>Factory default value:</b> On</p>	

## View all details









### 22 AOnet [Common]

PARAMETER:	DESCRIPTION:	
16 Enable AOnet	Specify if AOnet should be enabled.  <u>Factory default value:</u> No	
17 AOnet ID	Specify the ID on the AOnet. The master always has ID 1. If the ID is 0 AOnet is disabled.  <u>Factory default value:</u> 0	
18 Master IP address	Specify the IP address of the master of the address table.  <u>Factory default value:</u> 0. 0. 0. 0	
19 This controller is master	Shows if this controller is master of the AOnet address table.  <u>Factory default value:</u> No	
20 AOnet UDP port number	Specify the UDP port for AOnet. The standard port is 55557.  <u>Factory default value:</u> 55557	
22 Clear table	Clear address table.  <u>Factory default value:</u> No	
23 Sync. time with this controller	Send the time and date of this controller to all other controllers once a day at 04:03.  <u>Factory default value:</u> No	
24 Last sync. time (UTC)	Shows the last UTC time this controller's time and date were synchronised with other controllers.	
25 IP address of foreign AOnet	This address is used for sending weather data, safety, outdoor temperature and time to another AOnet network.  <u>Factory default value:</u> 0. 0. 0. 0	
26 TX counter	Shows the number of transmissions to the controller.	
27 TX error counter	Shows the number of errors while connecting to the controller.	
28 TX timeout counter	Shows the number of timeouts while connecting to the controller.	



## View all details

### 22 AOnet [1...23]

PARAMETER:	DESCRIPTION:	
16 IP address	Shows the IP address of controller.	
17 Status	Shows the status of the connection to the controller.	
18 TX counter	Shows the number of transmissions to the controller.	
19 RX counter	Shows the number of receptions of the controller.	
20 TX error counter	Shows the number of errors while connecting to the controller.	
21 TX timeout counter	Shows the number of timeouts while connecting to the controller.	
22 Last 'alive message' (UTC)	UTC Time of last 'alive message' from controller.	
23 TX buffer full error counter	Shows the number of times the local TX buffer was full.	

## View all details





### 1 Login

## View all details

### 1 Login [Inst]





## View all details

### 15 Configuration files, USB [All]

PARAMETER:	DESCRIPTION:	
17 Power setting	Specify the power settings for the USB interface. Auto. = when 230V mains voltage the gate is automatically on. In battery mode, this is disabled to save power. ON = the USB connection is always on. OFF = USB connection deactivated.  <u>Factory default value:</u> Auto.	
18 Power state USB	Shows the actual power state of the USB interface.	
19 USB License number	Shows the license number of a valid USB key. The license will stay valid 24 hours after the USB license key is removed.	
20 Licensed features	Shows functions enabled by the USB license stick.	















## View all details





### 15 Configuration files, USB [1..24]

PARAMETER:	DESCRIPTION:	
<b>16 Ongoing operation</b> Displayed only if relevant	Appears if the system is in the process of writing / reading the selected configuration file.	
<b>17 Status</b>	Shows status for the chosen configuration file.	
<b>18 Time stamp</b> Displayed only if the file exists	Shows the time for the last change in the configuration file.	
<b>19 Command</b> Displayed only if the file exists	Specify if command are to given to manage configuration files.	

## View all details

### 0 System

PARAMETER:	DESCRIPTION:	
<b>29 Configuration chip (NVM)</b> Displayed only if relevant	This chip contains the saved configuration. In case of a hardware error with this chip, the configuration cannot be saved.	
<b>40 Base configuration error</b> Displayed only if Error in configuration	The base region of the configuration memory has a CRC error. there is a risk that a production parameter is incorrect. there is no recovery from this error. Please contact your supplier.	
<b>41 Configuration error</b> Displayed only if Error in configuration	The configuration memory has a CRC error. The most secure recovery is to restore a backup configuration or reset the configuration to factory defaults using the configuration command and then reconfigure the WSA 5MC from scratch. Alternatively, please check that all configuration values are correct, and clear this message, which will also reset the CRC value of the configuration.	
<b>42 Backup configuration error</b> Displayed only if Error in configuration	The backup configuration memory has a CRC error. The most secure recovery is to make a new backup using the configuration command. Alternatively, clear this message, which will also reset the CRC value of the backup configuration. Some values in the backup configuration may then be incorrect.	
<b>22 Language</b>	Specify the language to be used in the touch screen.  <u>Factory default value:</u> English	
<b>78 Time zone</b>	Sets the time zone for the controller.  <u>Factory default value:</u> UTC, Western European (UTC), No DST	
<b>28 Date</b>	Set the date in the internal clock.	
<b>27 Time</b>	Set the time of the internal clock.	
<b>80 Temperature unit</b>	Select the temperature unit used to display temperature values. Is also used for BACnet temperature values.	
<b>35 Backup time stamp</b>	Shows the time stamp. the time stamp is updated each time the configuration is saved as a backup.	
<b>34 Unsaved changes</b>	Shows if there have been changes to the configuration since the last backup was saved. If so, this value will be 'Yes'.	
<b>23 Configuration command</b>	This option can be used to reset the device to factory default configuration. Save a configuration backup of the actual configuration or restore the configuration backup.	
<b>44 Disk operation</b> Displayed only if relevant	Shows any ongoing operation on the SD card and USB stick.	
<b>45 Copy log</b>	Set this to 'Yes' to copy all log files from the SD card to the USB stick.	

<b>57 Service</b>	Shows if it is time for service.	
<b>86 Time for service</b>	Shows if it is time for service.	
<b>85 Time for motor service</b>	Shows if it is time for service on the motors.	
<b>26 LCD rotate view</b>	Specify if the picture on the touch screen should rotate 180 degrees. This can be used in combination with e.g.. turning the touch screen upside-down to optimise the viewing quality.  <u>Factory default value:</u> No	
<b>46 Enable parameter set from network</b>	Enable writing parameter values from ethernet If 'False' it is only possible to read parameter values from ethernet.  <u>Factory default value:</u> Yes	
<b>30 Show disabled instances</b>	Specify if disabled / non-existing items should be shown in the overview lists.  <u>Factory default value:</u> No	
<b>32 Number of watchdog reboots</b>	Number of watchdog reboots	
<b>36 Program build CRC</b>	Shows the program memory CRC at build time.	
<b>37 Program runtime CRC</b> Displayed only if CRC Error	Shows the program memory CRC at calculated at runtime.	
<b>38 Configuration CRC error</b> Displayed only if CRC Error	Shows if there is an configuration CRC error.	
<b>50 Enable 'no accumulator'</b>	Enable running the system without accumulator.  <u>Factory default value:</u> No	