



Configuration Values


Fume Cupboard Controller iCM500

General Information




Device Type Fume Cupboard Controller iCM500

Firmware Version iCM500 2.16a

Firmware Release Date 2025-03-19

This document lists all configuration and display values that can be read or configured via the service interface of the iCM500. The visibility of values may depend on several factors. In general, entries that are rarely required are hidden by default. These can be identified by the *Expert Setting* symbol . To make them visible, activate Expert Mode in the settings of the PC4500.

The type of each parameter can be identified by the symbol preceding it.

-  Standard. Basic configuration for commissioning.
-  Advanced. Configuration or display values that are less frequently required.
-  Expert. These values normally remain unchanged in all standard applications.

In addition, individual parameters or entire groups may be hidden in the configuration software depending on the state of other values. For example, configuration parameters of analog interfaces only appear if these interfaces are present and active in the respective device variant. If such dependencies exist, they are indicated for the corresponding parameter.

Example:

Availability depends on **Other Parameter**.

1 Present Values

1.0.1 Face Velocity

The current face velocity, measured with the connected airflow sensor.

Resolution 0.01 m/s

1.0.2 Volume Flow

The current volume flow, determined from the current differential pressure.

1.0.3 Pressure

The current differential pressure.

Resolution 0.01 Pa

1.0.4 Damper State

Current Damper State

Availability depends on **Actuator Type**.

| | |
|--|--|
| Disconnected <i>(Default Value)</i> | The damper actuator is not connected. |
| Blocked | The damper is blocked. |
| Steady | The damper position is currently stable. |
| Opening | The damper is currently opening. |
| Closing | The damper is currently closing. |
| Fully Open | The damper is completely opened. |
| Fully Closed | The damper is completely closed. |
| Limit Min | The damper is at the lower limit. |
| Limit Max | The damper is at the upper limit. |

1.0.5 Damper Position

The current damper position.

1.0.6 Fan Speed

Availability depends on **Actuator Type**.

1.0.7 Sash Position

The current sash position, measured with the connected sash position sensor.

1.0.8 Sash State

The current sash state.

| | |
|---------------------------------------|---|
| Unknown <i>(Default Value)</i> | The position sensor is not calibrated or the configuration is incorrect. |
| Not Connected | The position sensor is not connected. |
| Broken | The position sensor is outside the calibrated range, cable may have broken. |
| Closed | The sash is completely closed. |
| Below Working Height | The sash is not closed, but under working height. |
| Working Height | The sash is at working height. |
| Above Working Height | The sash is above working height. |

1.0.9 DIN 1 Value

The current status of the digital input.

LOW *(Default Value)*
HIGH

1.0.10 DIN 2 Value

The current status of the digital input.

LOW *(Default Value)*
HIGH

1.0.11 DOUT 1 Value

The current status of the digital output.

LOW *(Default Value)*
HIGH

1.0.12 DOUT 2 Value

The current status of the digital output.

LOW *(Default Value)*

HIGH

1.0.13 Analog Out Value

The current voltage on the analog output.

Resolution 0.001 V

1.0.14 Light

The current status of the fume hood cupboard light relay (on or off).

Off *(Default Value)*

On

1.0.15 Alarm

Current alarm state of the Device (active or inactive)

Inactiv *(Default Value)*

Activ

1.0.16 Operating Mode

Displays the current operating mode (Day, Night, Override, Off).

Day *(Default Value)*

Night

Override

Off

1.0.17 Pressure Sensor Family

Specifies the pressure sensor family of the installed pressure sensor.

| | |
|------------------------------------|------|
| None <i>(Default Value)</i> | None |
| LDE | LDE |
| HV | HV |

2 Operating Mode

2.1 Day

2.1.1 Actuator Mode Day

Determines the function of the actuator in the operating mode day.

| | |
|---------------------------------------|--|
| Stop (Freeze) | The current actuator position is retained. No control takes place! |
| Control <i>(Default Value)</i> | The actuator is controlled by the control system. Depending on the configured control type, the setpoint volume flow or face velocity is controlled. |
| Close Completely | The actuator is closed completely (without consideration of actuator limits). |
| Open Completely | The actuator is opened completely (without consideration of actuator limits). |
| Upper Limit | The upper actuator limit is the highest actuator position which may be approached during the control process. |
| Lower Limit | The lower actuator limit is the lowest actuator position which may be approached during the control process. |
| Modbus | The actuator position is determined by the Modbus data point. |

2.1.2 Light Behavior

Determines the influence of the change to day operating mode on the fume hood cupboard light.

| | |
|---|--|
| No Change <i>(Default Value)</i> | The previous status of the fume hood cupboard light is retained. |
| Switch On | When switching to this operating mode, the fume hood cupboard light is switched on. |
| Switch Off | When switching to this operating mode, the fume hood cupboard light is switched off. |
| Always On | In this operating mode, the fume hood cupboard light is always switched on. |

Always Off

In this operating mode, the fume hood cupboard light is always switched off.

2.2 Night

2.2.1 Actuator Mode Night

Determines the function of the actuator in the operating mode night.

| | |
|--------------------------------|--|
| Stop (Freeze) | The current actuator position is retained. No control takes place! |
| Control (Default Value) | The actuator is controlled by the control system. Depending on the configured control type, the setpoint volume flow or face velocity is controlled. |
| Close Completely | The actuator is closed completely (without consideration of actuator limits). |
| Open Completely | The actuator is opened completely (without consideration of actuator limits). |
| Upper Limit | The upper actuator limit is the highest actuator position which may be approached during the control process. |
| Lower Limit | The lower actuator limit is the lowest actuator position which may be approached during the control process. |
| Modbus | The actuator position is determined by the Modbus data point. |

2.2.2 Light Behavior

Determines the influence of the change to night operating mode on the fume hood cupboard light.

| | |
|----------------------------------|--|
| No Change (Default Value) | The previous status of the fume hood cupboard light is retained. |
| Switch On | When switching to this operating mode, the fume hood cupboard light is switched on. |
| Switch Off | When switching to this operating mode, the fume hood cupboard light is switched off. |
| Always On | In this operating mode, the fume hood cupboard light is always switched on. |
| Always Off | In this operating mode, the fume hood cupboard light is always switched off. |

2.2.3 Endless Night Mode Duration

Determines whether the night operating mode can be active endlessly (adjustable duration or endless).

Adjustable Duration

Endless (Default Value)

2.2.4 Night Mode Duration

Night operating mode is deactivated after the night mode duration has elapsed. Only if night operating mode endless is configured to 'Adjustable duration'.

Availability depends on **Endless Night Mode Duration**.

Minimum 0 min

Maximum 5999 min

Default Value 480 min

2.2.5 Night Cancellation Occupancy

Determines whether the occupancy detector should automatically switch from night mode to day mode when it detects occupancy.

No

Yes (Default Value)

2.3 Override

2.3.1 Actuator Mode Override

Determines the function of the actuator in the operating mode override.

| | |
|--------------------------------|--|
| Stop (Freeze) | The current actuator position is retained. No control takes place! |
| Control (Default Value) | The actuator is controlled by the control system. Depending on the configured control type, the setpoint volume flow or face velocity is controlled. |
| Close Completely | The actuator is closed completely (without consideration of actuator limits). |
| Open Completely | The actuator is opened completely (without consideration of actuator limits). |
| Upper Limit | The upper actuator limit is the highest actuator position which may be approached during the control process. |

Lower Limit The lower actuator limit is the lowest actuator position which may be approached during the control process.

Modbus The actuator position is determined by the Modbus data point.

2.3.2 Light Behavior

Determines the influence of the change to override operating mode on the fume hood cupboard light.

No Change (Default Value) The previous status of the fume hood cupboard light is retained.

Switch On When switching to this operating mode, the fume hood cupboard light is switched on.

Switch Off When switching to this operating mode, the fume hood cupboard light is switched off.

Always On In this operating mode, the fume hood cupboard light is always switched on.

Always Off In this operating mode, the fume hood cupboard light is always switched off.

2.3.3 Endless Override Mode Duration

Determines whether the override operating mode can be active endlessly (adjustable duration or endless).

Adjustable Duration (Default Value)

Endless

2.3.4 Override Mode Duration

Once the maximum override duration has elapsed, the override operating mode is deactivated. Only if operating mode Override endless is configured to Adjustable duration.

Minimum 0 min

Maximum 5999 min

Default Value 60 min

2.3.5 Override Priority

Determines the priority of the override operating mode in comparison to the night operating mode.

Above 'Night' (Default Value)

Below 'Night'

2.4 Off

2.4.1 Actuator Mode Off

Determines the function of the actuator in the operating mode off.

| | |
|---|--|
| Stop (Freeze) | The current actuator position is retained. No control takes place! |
| Control | The actuator is controlled by the control system. Depending on the configured control type, the setpoint volume flow or face velocity is controlled. |
| Close Completely (Default Value) | The actuator is closed completely (without consideration of actuator limits). |
| Open Completely | The actuator is opened completely (without consideration of actuator limits). |
| Upper Limit | The upper actuator limit is the highest actuator position which may be approached during the control process. |
| Lower Limit | The lower actuator limit is the lowest actuator position which may be approached during the control process. |
| Modbus | The actuator position is determined by the Modbus data point. |

2.4.2 Light Change Off

Determines the influence of the change to off operating mode on the fume hood cupboard light.

| | |
|----------------------------------|--|
| No Change (Default Value) | The previous status of the fume hood cupboard light is retained. |
| Switch On | When switching to this operating mode, the fume hood cupboard light is switched on. |
| Switch Off | When switching to this operating mode, the fume hood cupboard light is switched off. |
| Always On | In this operating mode, the fume hood cupboard light is always switched on. |
| Always Off | In this operating mode, the fume hood cupboard light is always switched off. |

3 Control

3.1 General

3.1.1 Control Type

It is essential to ensure that all components and sensors required for the selected control type are connected and that the corresponding setpoints have been programmed.

| | |
|---|--|
| Face Velocity (Default Value) | Control of the constant face velocity. With: Air flow sensor AFS100. |
| Face Velocity With Limit | Control of the constant face velocity with volume flow rate limitation to V_{min} and V_{max} . With: Air flow sensor AFS100 and differential pressure sensor. |
| Face Velocity From Sash Position | Control of the constant face velocity by calculating the opening area as a function of the sash position, the horizontal window position is not detected, volume flow limitation to V_{min} and V_{max} possible. With: Position sensor SPS100 and differential pressure sensor. |
| Position Sensor | Variable volume flow control depending on the sash position, the horizontal window position is not detected. With: Position sensor SPS100 and differential pressure sensor. |
| Variable | Variable volume flow control depending on the front sash and horizontal window position. With: Air flow sensor AFS100, position sensor SPS100 and differential pressure sensor. |
| Variable With Switches | Variable volume flow control depending on the front sash and horizontal window position. With: SPS100 position sensor, differential pressure sensor and on-site contacts for detecting the horizontal window opening. |
| Constant | Constant volume flow control (1-, 2- or 3-point via on-site contacts) depending on the sash position, the horizontal window position is not detected. With: Differential pressure sensor and on-site contacts for detecting the sash opening. |
| Constant With Position Sensor | Constant volume flow control via position sensor SPS100 depending on the sash position, the horizontal window position is not detected. With: Position sensor SPS100 and differential pressure sensor. |
| \$PressureControl | \$PressureControlDescription |

3.1.2 Control Algorithm

Determines the control algorithm used. If the control algorithm is changed, the controller parameters may need to be re-determined.

| | |
|---------------------------|----|
| V1 | V1 |
| V2 (Default Value) | V2 |

3.2 Air Flow Calculation

3.2.1 Airflow Sensor Type

Selection of the sensor type used.

| | |
|-------------------------------|----------------------------------|
| None | No airflow sensor connected. |
| AFS100 (Default Value) | Airflow sensor AFS100 connected. |
| AFS200 | Airflow sensor AFS200 connected. |

3.2.2 Airflow Adjustment Factor

The factor corrects the measured value of the air flow sensor in the event of an unfavorable installation position. The measured value can be adjusted as a percentage. Example: 95 % corresponds to a value reduced by 5 %, 110 % corresponds to a value increased by 10 %.

Availability depends on **Control Type**.

| | |
|----------------------|-------|
| Minimum | 50 % |
| Maximum | 150 % |
| Default Value | 100 % |

3.2.3 Face Velocity

The current face velocity, measured with the connected airflow sensor.

| | |
|-------------------|----------|
| Resolution | 0.01 m/s |
|-------------------|----------|

3.2.4 Airflow Display Accuracy

Determines the airflow display accuracy. The displayed airflow is rounded to multiples of the display accuracy.

| | |
|----------------------|----------|
| Minimum | 0.01 m/s |
| Maximum | 0.10 m/s |
| Default Value | 0.05 m/s |
| Resolution | 0.01 m/s |

3.2.5 Airflow Display Filter Factor

Determines the filter time constant for the airflow. Higher values filter the airflow value more strongly, but real changes are also delayed more significantly.

Minimum 0.1 s
Maximum 10.0 s
Default Value 0.5 s
Resolution 0.1 s

3.2.6 Airflow Round to setpoint

Determines whether the displayed airflow present value should be rounded to the setpoint if this present value is within the alarm limits.

No
Yes (Default Value)

3.3 Volume Flow Calculation

3.3.1 Constant of measuring unit (C-Value)

The C-Value is used when calculating the volume flow from a differential pressure, with the formula below.

$$\dot{V} = c \sqrt{\frac{\Delta p}{\rho}}$$

Minimum 0.1
Maximum 4999.9
Default Value 101.5
Resolution 0.1

3.3.2 Air Density

The air density Rho is required to calculate the volume flow, see Constant of measuring unit (C-Value).

Minimum 0.50 kg/m³
Maximum 2.00 kg/m³
Default Value 1.20 kg/m³
Resolution 0.01 kg/m³

3.3.3 Pressure

The current differential pressure.

Resolution 0.01 Pa

3.3.4 Volume Flow

The current volume flow, determined from the current differential pressure.

3.3.5 Volume Flow Display Accuracy Auto

Determines whether the volume flow display accuracy should be determined automatically by the device.

No

Yes (Default Value)

3.3.6 Volume Flow Display Accuracy

Determines the volume flow display accuracy. The displayed volume flow is rounded to multiples of the display accuracy.

Availability depends on **Volume Flow Display Accuracy Auto**.

Minimum 1 m³/h

Maximum 100 m³/h

Default Value 10 m³/h

3.3.7 Volume Flow Round to setpoint

No

Yes (Default Value)

3.4 Actuator

3.4.1 Actuator Type

Determines the actuator type (damper, fan or no actuator).

| | |
|------------------------|--------|
| Damper (Default Value) | Damper |
| Fan | Fan |

None

None

3.4.2 Slope Time Upwards

The ramp-up time determines the minimum time the high speed actuator needs to open the control damper from 0 % to 100 %. The ramp time does not determine the control speed but limits the maximum speed of the control damper movement.

Minimum 0 s

Maximum 99 s

Default Value 3 s

3.4.3 Slope Time Downwards

The ramp-down time determines the minimum time the high speed actuator needs to close the control damper from 100 % to 0 %. The ramp time does not determine the control speed but limits the maximum speed of the control damper movement.

Minimum 0 s

Maximum 99 s

Default Value 5 s

3.4.4 Upper Limit

The upper actuator limit is the highest actuator position which may be approached during the control process.

Minimum 0 %

Maximum 100 %

Default Value 100 %

3.4.5 Lower Limit

The lower actuator limit is the lowest actuator position which may be approached during the control process.

Minimum 0 %

Maximum 100 %

Default Value 0 %

3.4.6 Damper State

Current Damper State

Availability depends on **Actuator Type**.

| | |
|--|--|
| Disconnected <i>(Default Value)</i> | The damper actuator is not connected. |
| Blocked | The damper is blocked. |
| Steady | The damper position is currently stable. |
| Opening | The damper is currently opening. |
| Closing | The damper is currently closing. |
| Fully Open | The damper is completely opened. |
| Fully Closed | The damper is completely closed. |
| Limit Min | The damper is at the lower limit. |
| Limit Max | The damper is at the upper limit. |

3.4.7 Damper Position

The current damper position.

Availability depends on **Actuator Type** .

3.4.8 Fan Speed

Current fan speed.

Availability depends on **Actuator Type** .

3.5 Alarm

3.5.1 Alarm State

Current alarm state of the Device (inactive, pending, active or silenced)

| | |
|------------------------------------|--|
| None <i>(Default Value)</i> | The alarm is inactive. |
| Pending | An alarm source reports an alarm, the alarm delay has not yet expired. |
| Active | The alarm is active. |
| Silenced | The alarm is active, but silenced. |

3.5.2 Alarm Delay Air

An alarm is triggered as soon as the actual value of the controlled variable has been outside the alarm limits for the time set here.

Minimum 1 s
Maximum 60 s
Default Value 10 s

3.5.3 Start Alarm Delay

After switching on the iCM500 laboratory fume hood cupboard controller, only visual but no acoustic alarms are triggered within the time configured here.

Minimum 5 s
Maximum 900 s
Default Value 30 s

3.5.4 Start Alarm External

An alarm is triggered as soon as a digital input with the external alarm function is active for the time set here.

Minimum 0 s
Maximum 60 s
Default Value 10 s

3.5.5 Alarm Delay Temperature

An alarm is triggered as soon as a digital input with the temperature alarm function is active or the temperature has exceeded the alarm value for the time set here.

Minimum 0 s
Maximum 60 s
Default Value 10 s

3.5.6 Sash Alarm Delay

An alarm is triggered as soon as the sash is open for longer then for the time set here and closing is required.

Minimum 0 s
Maximum 60 s
Default Value 10 s

3.5.7 Control Frezed Alarm Delay

Determines the time that the pressure controller must be stopped in order for a control freezed alarm to be triggered.

Minimum 0 s
Maximum 900 s
Default Value 60 s

3.5.8 Endless Buzzer Duration

Determines whether the buzzer duration can be endless.

Adjustable Duration (Default Value)
Endless

3.5.9 Max Buzzer Duration

The maximum time after which the acoustic alarm is deactivated. Only if buzzer duration endless is configured to 'Adjustable duration'.

Availability depends on **Endless Buzzer Duration**.

Minimum 0 s
Maximum 900 s
Default Value 60 s

3.5.10 "Sash Closing Required" is alarm

No (Default Value)
Yes

3.5.11 Control Freezed Alarm Enable

Disabled (Default Value)
Enabled

3.6 Airflow

3.6.1 Airflow Control Factor

Determines the control speed of the face velocity controller. Higher values accelerate the control function, but also increase the risk of overshoot. Lower values lead to slower control, which is more stable in return.

Minimum 0.0001
Maximum 0.9999
Default Value 0.0800
Resolution 0.0001

3.6.2 Airflow Bias

The control bias of the face velocity controller determines how strongly the controller is slowed down within a close range of the setpoint. Small values lead to increased deceleration. A bias of 0.5 corresponds to a uniform speed independent of the control deviation.

Minimum 0.0001
Maximum 0.6000
Default Value 0.2000
Resolution 0.0001

3.6.3 Airflow Deadband

The actual value of the controller must move away from the setpoint by at least this value to move the actuator of a stationary controller. Should be at least as large as the smallest possible value change of the actuator.

Minimum 0.00 m/s
Maximum 0.50 m/s
Default Value 0.05 m/s
Resolution 0.01 m/s

3.6.4 Airflow Deadband Hysteresis

Hysteresis of the face velocity controller. Within this range the actuator is always kept unchanged. The value is given as a percentage of the deadband, so it must be between 0 % and 100 %.

Minimum 0 %
Maximum 100 %
Default Value 50 %

3.7 Volume Flow

3.7.1 Volume Flow Control Factor

Determines the control speed of the volume flow controller. Higher values accelerate the control function, but also increase the risk of overshoot. Lower values lead to slower control, which is more stable in return.

Minimum 0.0001
Maximum 0.9999
Default Value 0.0060
Resolution 0.0001

3.7.2 Volume Flow Bias

The control bias of the volume flow controller determines how strongly the controller is slowed down within a close range of the setpoint. Small values lead to increased deceleration. A bias of 0.5 corresponds to a uniform speed independent of the control deviation.

Minimum 0.0001
Maximum 0.6000
Default Value 0.2000
Resolution 0.0001

3.7.3 Volume Flow Deadband Auto

Determines whether the deadband should be determined automatically.

Manual
Automatic (Default Value)

3.7.4 Volume Flow Deadband

The actual value of the controller must move away from the setpoint by at least this value to move the actuator of a stationary controller. Should be at least as large as the smallest possible value change of the actuator.

Availability depends on **Volume Flow Deadband Auto** .

Minimum 0 m³/h
Maximum 100 m³/h
Default Value 20 m³/h

3.7.5 Volume Flow Deadband Hysteresis

Hysteresis of the volume flow controller. Within this range the actuator is always kept unchanged. The value is given as a percentage of the deadband, so it must be between 0 % and 100 %.

Availability depends on **Volume Flow Deadband Auto** .

Minimum 0 %
Maximum 100 %
Default Value 50 %

3.7.6 Volume Flow Sash Influence

Determines the influence of the sash on the volumetric flow setpoint. Values greater than zero cause the setpoint value to increase disproportionately quickly when the sash is opened. Values less than zero cause the setpoint value to increase less rapidly when the sash is opened.

Minimum -0.50
Maximum 1.00
Default Value 0.50
Resolution 0.01

3.8 Pressure

3.8.1 Pressure Control Factor

Determines the control speed of the pressure controller. Higher values accelerate the control function, but also increase the risk of overshoot. Lower values lead to slower control, which is more stable in return.

Minimum 0.0001
Maximum 0.9000
Default Value 0.0020
Resolution 0.0001

3.8.2 Pressure Bias

The control bias of the pressure controller determines how strongly the controller is slowed down within a close range of the setpoint. Small values lead to increased deceleration. A bias of 0.5 corresponds to a uniform speed independent of the control deviation.

Minimum 0.0001
Maximum 0.9000
Default Value 0.2000
Resolution 0.0001

3.8.3 Pressure Deadband

The actual value of the controller must move away from the setpoint by at least this value to move the actuator of a stationary controller. Should be at least as large as the smallest possible value change of the actuator.

Minimum 0.0 Pa
Maximum 20.0 Pa
Default Value 1.5 Pa
Resolution 0.1 Pa

3.8.4 Pressure Filter Time

Determines the filter time for the pressure during pressure control. A higher filter time filters the pressure more strongly, but changes are also delayed.

Minimum 0.02 sec
Maximum 9.00 sec
Default Value 0.20 sec
Resolution 0.01 sec

4 Setpoints

4.1 Face Velocity

4.1.1 Face Velocity

The current face velocity, measured with the connected airflow sensor.

Availability depends on **Control Type**.

Resolution 0.01 m/s

4.1.2 Airflow Unit

Determines the unit in which the face velocity is displayed.

Availability depends on **Control Type**.

m/s (Default Value)

ft/min

4.1.3 Face Velocity Day

Setpoint value of the face velocity control in day operating mode.

Availability depends on **Control Type** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 0.50 m/s
Resolution 0.01 m/s

4.1.4 Face Velocity Night

Setpoint value of the face velocity control in night operating mode.

Availability depends on **Control Type** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 0.30 m/s
Resolution 0.01 m/s

4.1.5 Face Velocity Override

Setpoint value of the face velocity control in override operating mode.

Availability depends on **Control Type** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 0.80 m/s
Resolution 0.01 m/s

4.1.6 Face Velocity Off

Setpoint value of the face velocity control in off operating mode.

Availability depends on **Control Type** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 0.00 m/s
Resolution 0.01 m/s

4.1.7 Face Velocity Alarm Quota

Percentage deviation from the setpoint of the face velocity control above which an alarm is triggered.

Availability depends on **Control Type**.

Minimum 0 %

Maximum 50 %

Default Value 5 %

4.2 Volume Flow

4.2.1 Volume Flow

The current volume flow, determined from the current differential pressure.

Availability depends on **Control Type**.

4.2.2 Volume Flow Unit

Determines the unit in which the volume flow value is displayed.

Availability depends on **Control Type**.

m³/h (Default Value)

l/s

4.2.3 Volume Flow Maximum

Setpoint value for volume flow control in day operating mode with front sash completely open.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 600 m³/h

4.2.4 Volume Flow Working Height

Setpoint value for volume flow control in day operating mode with front sash at working level.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 600 m³/h

4.2.5 Volume Flow Minimum

Setpoint value for volume flow control in day operating mode with front sash closed.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 200 m³/h

4.2.6 Volume Flow Night

Setpoint value for volume flow control in night operating mode.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 200 m³/h

4.2.7 Volume Flow Override

Setpoint value for volume flow control in override operating mode.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 800 m³/h

4.2.8 Volume Flow Off

Setpoint value for volume flow control in off operating mode.

Availability depends on **Control Type**.

Minimum 0 m³/h

Maximum 49999 m³/h

Default Value 0 m³/h

4.2.9 Volume Flow Alarm Quota

Percentage deviation from the setpoint value of the volume flow control from which an alarm is triggered.

Availability depends on **Control Type**.

Minimum 0 %

Maximum 50 %

Default Value 3 %

4.3 Pressure

4.3.1 Pressure

The current differential pressure.

Availability depends on **Control Type**.

Resolution 0.01 Pa

4.3.2 Unit

Determines the unit in which the pressure value is displayed.

Availability depends on **Control Type**.

Pa (Default Value)

mbar

4.3.3 Pressure Day

Setpoint value for pressure control in day operating mode.

Availability depends on **Control Type**.

Minimum -1000 Pa

Maximum 1000 Pa

Default Value 30 Pa

4.3.4 Pressure Night

Setpoint value for pressure control in night operating mode.

Availability depends on **Control Type**.

Minimum -1000 Pa

Maximum 1000 Pa

Default Value 10 Pa

4.3.5 Pressure Override

Setpoint value for pressure control in override operating mode.

Availability depends on **Control Type**.

Minimum -1000 Pa

Maximum 1000 Pa

Default Value 50 Pa

4.3.6 Pressure Off

Setpoint value for pressure control in off operating mode.

Availability depends on **Control Type**.

Minimum -1000 Pa

Maximum 1000 Pa

Default Value 0 Pa

4.3.7 Pressure Alarm Quota

Percentage deviation from the setpoint value of the pressure control from which an alarm is triggered.

Availability depends on **Control Type**.

Minimum 0 %

Maximum 50 %

Default Value 10 %

4.3.8 Air Duct Type

Specifies whether the controller is installed in a supply air or exhaust air duct. This information is required for both control purposes and for transmission to the balancing device.

Availability depends on **Control Type**.

| | |
|--------------------------------------|--|
| Supply <i>(Default Value)</i> | The device is mounted on an air supply duct |
| Exhaust | The device is mounted on an air exhaust duct |

5 Sash

5.0.1 Sash Calibration

Starts the sash calibration.

5.0.2 Sash Calibration

Confirms the current step in the sash calibration.

5.0.3 Sash Calibration State

The current status of the sash calibration.

| | |
|--|----------------------------------|
| Inactive <i>(Default Value)</i> | Sash calibration inactive |
| Close Sash | Close the sash completely. |
| Open to Working Height | Open the sash to working height. |
| Open Sash completely | Open the sash completely. |
| Finished | Sash calibration completed. |

5.0.4 Sash State

The current sash state.

| | |
|---------------------------------------|---|
| Unknown <i>(Default Value)</i> | The position sensor is not calibrated or the configuration is incorrect. |
| Not Connected | The position sensor is not connected. |
| Broken | The position sensor is outside the calibrated range, cable may have broken. |
| Closed | The sash is completely closed. |
| Below Working Height | The sash is not closed, but under working height. |
| Working Height | The sash is at working height. |
| Above Working Height | The sash is above working height. |

5.0.5 Sash Position

The current sash position, measured with the connected sash position sensor.

5.0.6 Endless Sash Open Buzzer Delay

Determines the behavior of the buzzer when the sash is open.

Adjustable Duration
Endless *(Default Value)*

5.0.7 Sash Open Buzzer Delay

Delay of the acoustic alarm when opening the sash above the working height.

Availability depends on **Endless Sash Open Buzzer Delay**.

Minimum 0 s
Maximum 900 s
Default Value 10 s

5.0.8 Sash Tolerance

Maximum deviation of the current value from the positions recorded during calibration. Is required to derive the front sash state from the front sash position.

Minimum 1 %
Maximum 10 %
Default Value 2 %

5.0.9 Sash Width

The width of the front sash window is required to calculate the opening area in the face velocity with sash position sensor operating mode (FW).

Minimum 1 cm
Maximum 200 cm
Default Value 120 cm

5.0.10 Sash Closed Height

Gap height of the front sash when closed.

Minimum 1 cm
Maximum 200 cm
Default Value 4 cm

5.0.11 Sash Working Height

Window height of the front sash in the working height state.

Minimum 1 cm
Maximum 200 cm
Default Value 50 cm

5.0.12 Sash Voltage Min

Displays the sash voltage when closed

Minimum 0.000 V
Maximum 10.000 V
Default Value 0.000 V
Resolution 0.001 V

5.0.13 Sash Voltage Max

Displays the sash voltage when fully open.

Minimum 0.000 V
Maximum 10.000 V
Default Value 0.000 V
Resolution 0.001 V

5.0.14 Sash Voltage Working Height

Displays the sash voltage when on working hight.

Minimum 0.000 V
Maximum 10.000 V
Default Value 0.000 V
Resolution 0.001 V

6 Input/Output

6.0.1 Relay 1 Function

Determines the function of the relay.

| | |
|------------------------------|--|
| Inactive | The relay is not active. |
| Mode Day | The relay is active when the device is in operating mode Day. |
| Mode Night | The relay is active when the device is in operating mode Night. |
| Mode Override | The relay is active when the device is in operating mode Override. |
| Mode Off | The relay is active when the device is in operating mode Off. |
| Alarm Pending | The relay is active if the control value is outside the permissible alarm limit. |
| Alarm (Default Value) | The relay is active when the alarm is active. |
| Light | The relay is active when the light is on. |
| Buzzer | The relay is active when the buzzer is active. |
| Window closed | The relay is active when the sash is completely closed. |
| Window Working Height | The relay is active when the sash is above working height. |
| Open Sash | The relay is active when the Open function button is pressed. |
| Close Sash | The relay is active when the Close function button is pressed. |

| | |
|--------------------------------|--|
| Damper Actuator Active | The relay is active when the actuator is active and therefore the setpoint has not yet been reached. |
| Damper Actuator Blocked | The relay is active if an actuator blockage has been detected. |
| Modbus | The relay is active if the associated Modbus data point is active. |
| Simultaneity Alarm | The relay is active when the balancing simultaneity alarm is active. |
| Fumehood Alarm | The relay is active when the fumehood alarm is active. |
| Sash Alarm | The relay is active when the sash alarm is active. |
| Temperature Alarm | The relay is active when the temerpature alarm is active. |
| External Alarm | The relay is active when the external alarm is active. |

6.0.2 Relay 2 Function

Determines the function of the relay.

| | |
|-----------------------------------|--|
| Inactive | The relay is not active. |
| Mode Day | The relay is active when the device is in operating mode Day. |
| Mode Night (Default Value) | The relay is active when the device is in operating mode Night. |
| Mode Override | The relay is active when the device is in operating mode Override. |
| Mode Off | The relay is active when the device is in operating mode Off. |
| Alarm Pending | The relay is active if the control value is outside the permissible alarm limit. |
| Alarm | The relay is active when the alarm is active. |
| Light | The relay is active when the light is on. |
| Buzzer | The relay is active when the buzzer is active. |
| Window closed | The relay is active when the sash is completely closed. |
| Window Working Height | The relay is active when the sash is above working height. |
| Open Sash | The relay is active when the Open function button is pressed. |
| Close Sash | The relay is active when the Close function button is pressed. |
| Damper Actuator Active | The relay is active when the actuator is active and therefore the setpoint has not yet been reached. |
| Damper Actuator Blocked | The relay is active if an actuator blockage has been detected. |
| Modbus | The relay is active if the associated Modbus data point is active. |

| | |
|---------------------------|--|
| Simultaneity Alarm | The relay is active when the balancing simultaneity alarm is active. |
| Fumehood Alarm | The relay is active when the fumehood alarm is active. |
| Sash Alarm | The relay is active when the sash alarm is active. |
| Temperature Alarm | The relay is active when the temerpature alarm is active. |
| External Alarm | The relay is active when the external alarm is active. |

6.0.3 Relay 1 Polarity

Determines the polarity of the relay.

- Normal** *(Default Value)*
- Inverted**

6.0.4 Relay 2 Polarity

Determines the polarity of the relay.

- Normal** *(Default Value)*
- Inverted**

6.0.5 DIN 1 Function

Determines the function of the digital input.

| | |
|--|---|
| None | No function selected. |
| Mode Off <i>(Default Value)</i> | Digital input active means that request operating mode off. |
| Mode Night | Digital input active means that request operating mode night. |
| Mode Override | Digital input active means that request operating mode override. |
| Sash Closed | Digital input active means that the sash is completely closed. |
| Sash Above Working Height | Digital input active means that the sash is under working height. |
| Horizontal Window closed | Digital input active means that the horizontal window is completely closed. |
| PIR | Digital input active means that a person is in front of the fume hood. |
| External Alarm | Digital input active means that an external alarm is present. |
| Temperature Alarm | Digital input active means that a temperature alarm is present. |

| | |
|---------------------|---|
| Door Contact | Digital input active means that the door is open. |
|---------------------|---|

6.0.6 DIN 2 Function

Determines the function of the digital input.

| | |
|--|---|
| None | No function selected. |
| Mode Off | Digital input active means that request operating mode off. |
| Mode Night <i>(Default Value)</i> | Digital input active means that request operating mode night. |
| Mode Override | Digital input active means that request operating mode override. |
| Sash Closed | Digital input active means that the sash is completely closed. |
| Sash Above Working Height | Digital input active means that the sash is under working height. |
| Horizontal Window closed | Digital input active means that the horizontal window is completely closed. |
| PIR | Digital input active means that a person is in front of the fume hood. |
| External Alarm | Digital input active means that an external alarm is present. |
| Temperature Alarm | Digital input active means that a temperature alarm is present. |
| Door Contact | Digital input active means that the door is open. |

6.0.7 DIN 1 Polarity

Determines the polarity of the digital input.

| |
|--------------------------------------|
| Normal <i>(Default Value)</i> |
| Inverted |

6.0.8 DIN 2 Polarity

Determines the polarity of the digital input.

| |
|--------------------------------------|
| Normal <i>(Default Value)</i> |
| Inverted |

6.0.9 Occup. Sensor Delay

Determines the follow-up time of the digital input occupancy sensor. Absence is only detected after no more movement has been detected for the time configured here.

Minimum 0 s
Maximum 900 s
Default Value 10 s

6.0.10 Door Contact Prolongation

Determines the follow-up time of the digital input door contact sensor. The Control only starts again after the time configured here.

Minimum 0 s
Maximum 900 s
Default Value 4 s

7 Analog Output

7.0.1 Output Function

Determines the analog output function.

| | |
|---|---|
| Disabled | No function selected. |
| Face Velocity (<i>Default Value</i>) | The analog output scales depending on the current face velocity. |
| Volume Flow Present Value | The analog output scales depending on the current volume flow. |
| Volume Flow Setpoint | The analog output scales depending on the current volume flow setpoint. |
| Pressure | The analog output scales depending on the current pressure. |
| Sash Position | The analog output scales depending on the sash position. |
| Damper Position | The analog output scales depending on the current damper position. |
| Modbus | The analog output outputs the value set via Modbus. |

7.0.2 Analog Voltage Minimum

Determines the minimum voltage of the analog output.

Minimum 0.000 V
Maximum 10.000 V
Default Value 2.000 V
Resolution 0.001 V

7.0.3 Analog Voltage Maximum

Determines the maximum voltage of the analog output.

Minimum 0.000 V
Maximum 10.000 V
Default Value 10.000 V
Resolution 0.001 V

7.0.4 Analog Airflow Minimum

Availability depends on **Output Function** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 0.00 m/s
Resolution 0.01 m/s

7.0.5 Analog Airflow Maximum

Availability depends on **Output Function** .

Minimum 0.00 m/s
Maximum 2.00 m/s
Default Value 1.00 m/s
Resolution 0.01 m/s

7.0.6 Analog Volume Flow Minimum

Availability depends on **Output Function** .

Minimum 0 m³/h
Maximum 49995 m³/h
Default Value 0 m³/h

7.0.7 Analog Volume Flow Maximum

Availability depends on **Output Function** .

Minimum 0 m³/h
Maximum 49995 m³/h
Default Value 1000 m³/h

7.0.8 Analog Pressure Minimum

Availability depends on **Output Function** .

Minimum 0 Pa
Maximum 1000 Pa
Default Value 0 Pa

7.0.9 Analog Pressure Maximum

Availability depends on **Output Function** .

Minimum 0 Pa
Maximum 1000 Pa
Default Value 300 Pa

7.0.10 Analog Percent Minimum

Availability depends on **Output Function** .

Minimum 0 %
Maximum 100 %
Default Value 0 %

7.0.11 Analog Percent Maximum

Availability depends on **Output Function** .

Minimum 0 %
Maximum 100 %
Default Value 100 %

8 User Interface

8.0.1 Button 1 Function

| | |
|--|---|
| Function Inactive | Pressing the button has no effect. |
| Menu | Pressing the button opens the menu on the function display. |
| Day | Pressing the button switches to day mode. |
| Night | Pressing the button switches to night mode. |
| Override | Pressing the button switches to override mode. |
| Toggle Night <i>(Default Value)</i> | Pressing the button switches between night and day mode. |
| Toggle Override | Pressing the button switches between override and day mode. |
| Open Sash | Pressing the button opens the sash window. |
| Close Sash | Pressing the button closes the sash window. |

8.0.2 Button 2 Function

| | |
|---|---|
| Function Inactive | Pressing the button has no effect. |
| Menu | Pressing the button opens the menu on the function display. |
| Day | Pressing the button switches to day mode. |
| Night | Pressing the button switches to night mode. |
| Override | Pressing the button switches to override mode. |
| Toggle Night | Pressing the button switches between night and day mode. |
| Toggle Override <i>(Default Value)</i> | Pressing the button switches between override and day mode. |
| Open Sash | Pressing the button opens the sash window. |
| Close Sash | Pressing the button closes the sash window. |

8.0.3 Button 3 Function

| | |
|---|---|
| Function Inactive <i>(Default Value)</i> | Pressing the button has no effect. |
| Menu | Pressing the button opens the menu on the function display. |
| Day | Pressing the button switches to day mode. |
| Night | Pressing the button switches to night mode. |
| Override | Pressing the button switches to override mode. |
| Toggle Night | Pressing the button switches between night and day mode. |

| | |
|------------------------|---|
| Toggle Override | Pressing the button switches between override and day mode. |
| Open Sash | Pressing the button opens the sash window. |
| Close Sash | Pressing the button closes the sash window. |

8.0.4 Button 4 Function

| | |
|------------------------------------|---|
| Function Inactive | Pressing the button has no effect. |
| Menu <i>(Default Value)</i> | Pressing the button opens the menu on the function display. |
| Day | Pressing the button switches to day mode. |
| Night | Pressing the button switches to night mode. |
| Override | Pressing the button switches to override mode. |
| Toggle Night | Pressing the button switches between night and day mode. |
| Toggle Override | Pressing the button switches between override and day mode. |
| Open Sash | Pressing the button opens the sash window. |
| Close Sash | Pressing the button closes the sash window. |

8.0.5 Button On/Off

Determines whether the ON / OFF button can be used.

| |
|---------------------------------------|
| Disabled |
| Enabled <i>(Default Value)</i> |

8.0.6 Button Night

Determines whether the Night button can be used.

| |
|---------------------------------------|
| Disabled |
| Enabled <i>(Default Value)</i> |

8.0.7 Button Override

Determines whether the Override button can be used.

| |
|-----------------|
| Disabled |
|-----------------|

Enabled *(Default Value)*

8.0.8 Status Icon 1

Determines which information will be display at the status icon 1 at the function display.

| | |
|--|---|
| None | The status icon is deactivated. |
| Operating Mode <i>(Default Value)</i> | The status icon indicates the current operating status. |
| Mode Day | The status icon indicates whether the device is in operating mode day. |
| Mode Night | The status icon indicates whether the device is in operating mode night. |
| Mode Override | The status icon indicates whether the device is in operating mode override. |
| Alarm Pending | The status icon indicates wheter an alarm is pending. |
| Alarm | The status icon indicates wheter an alarm is active. |
| Light | The status icon indicates wheter the light is on. |
| Occupancy | The status icon indicates whether a person is detected in front of the fume-hood. |
| DIN 1 Zustand | |
| DIN 2 Zustand | |
| Relay 1 | |
| Relay 2 | |
| Modbus | |
| Damper Position | |
| Sash State | The status icon indicates the current sash state. |
| Sash Position | The status icon indicates the current sash position in percent. |
| Sash Above Working Height | The status icon indicates whether the front sash is above working height. |
| Sash Closed | The status icon indicates whether the front sash is closed. |
| Horizontal Window Open | The status icon indicates whether the horizontal window is opened. |
| Service Required | The status icon indicates whether service is required. |
| Airflow (m/s) | |
| Airflow (ft/min) | |

Airflow (m³/h)

Volflow (l/s)

Pressure (Pa)

Pressure (mBar)

Sash Closing Required

The status icon indicates whether closing of the front sash is required.

8.0.9 Status Icon 2

Determines which information will be display at the status icon 2 at the function display.

None

The status icon is deactivated.

Operating Mode

The status icon indicates the current operating status.

Mode Day

The status icon indicates whether the device is in operating mode day.

Mode Night

The status icon indicates whether the device is in operating mode night.

Mode Override

The status icon indicates whether the device is in operating mode override.

Alarm Pending

The status icon indicates wheter an alarm is pending.

Alarm

The status icon indicates wheter an alarm is active.

Light (Default Value)

The status icon indicates wheter the light is on.

Occupancy

The status icon indicates whether a person is detected in front of the fume-hood.

DIN 1 Zustand

DIN 2 Zustand

Relay 1

Relay 2

Modbus

Damper Position

Sash State

The status icon indicates the current sash state.

Sash Position

The status icon indicates the current sash position in percent.

Sash Above Working Height

The status icon indicates whether the front sash is above working height.

Sash Closed

The status icon indicates whether the front sash is closed.

| | |
|-------------------------------|--|
| Horizontal Window Open | The status icon indicates whether the horizontal window is opened. |
| Service Required | The status icon indicates whether service is required. |
| Airflow (m/s) | |
| Airflow (ft/min) | |
| Airflow (m³/h) | |
| Volflow (l/s) | |
| Pressure (Pa) | |
| Pressure (mBar) | |
| Sash Closing Required | The status icon indicates whether closing of the front sash is required. |

8.0.10 Status Icon 3

Determines which information will be display at the status icon 3 at the function display.

| | |
|------------------------|---|
| None | The status icon is deactivated. |
| Operating Mode | The status icon indicates the current operating status. |
| Mode Day | The status icon indicates whether the device is in operating mode day. |
| Mode Night | The status icon indicates whether the device is in operating mode night. |
| Mode Override | The status icon indicates whether the device is in operating mode override. |
| Alarm Pending | The status icon indicates wheter an alarm is pending. |
| Alarm | The status icon indicates wheter an alarm is active. |
| Light | The status icon indicates wheter the light is on. |
| Occupancy | The status icon indicates whether a person is detected in front of the fume-hood. |
| DIN 1 Zustand | |
| DIN 2 Zustand | |
| Relay 1 | |
| Relay 2 | |
| Modbus | |
| Damper Position | |

| | |
|--|---|
| Sash State <i>(Default Value)</i> | The status icon indicates the current sash state. |
| Sash Position | The status icon indicates the current sash position in percent. |
| Sash Above Working Height | The status icon indicates whether the front sash is above working height. |
| Sash Closed | The status icon indicates whether the front sash is closed. |
| Horizontal Window Open | The status icon indicates whether the horizontal window is opened. |
| Service Required | The status icon indicates whether service is required. |
| Airflow (m/s) | |
| Airflow (ft/min) | |
| Airflow (m³/h) | |
| Volflow (l/s) | |
| Pressure (Pa) | |
| Pressure (mBar) | |
| Sash Closing Required | The status icon indicates whether closing of the front sash is required. |

9 Display

9.0.1 Language

Determines the display language of the device.

| | |
|---------------------------------------|---------|
| English <i>(Default Value)</i> | English |
| German | German |
| Spanish | Spanish |
| French | French |
| Turkish | Turkish |
| Polish | Polish |

9.0.2 Display Unit

Determines the unit of the function display in the main view. With AUTO, the value and unit are automatically determined from the control type and setpoint units.

| | |
|-----------------------------|--|
| Auto (Default Value) | The display value and display unit on the function display are selected automatically. |
| Airflow (m/s) | The display value on the function display is face velocity and the display unit is m/s. |
| Airflow (ft/min) | The display value on the function display is face velocity and the display unit is ft/min. |
| Volume Flow m³/h | The display value on the function display is volume flow and the display unit is m³/h. |
| Volume Flow l/s | The display value on the function display is volume flow and the display unit is l/s. |
| Pressure (Pa) | The display value on the function display is pressure and the display unit is Pa. |
| Pressure (mBar) | The display value on the function display is pressure and the display unit is mBar. |

9.0.3 Home Screen Animation

Determines the background animation in the home screen.

| | |
|-----------------------------|-----------|
| None (Default Value) | None |
| Bubbles | Bubbles |
| Clouds | Clouds |
| Fireflies | Fireflies |
| Rain | Rain |

9.0.4 Brightness Day

Brightness of the connected display in day mode (maximum brightness).

| | |
|----------------------|-------|
| Minimum | 50 % |
| Maximum | 100 % |
| Default Value | 100 % |

9.0.5 Brightness Night

Brightness of the connected display in night mode (reduced brightness).

Minimum 25 %
Maximum 100 %
Default Value 80 %

9.0.6 **Brightness Time to Dim**

Specifies the time after which the display is dimmed back to the reduced brightness in day mode after a change.

Minimum 5 s
Maximum 300 s
Default Value 60 s

10 Modbus

10.1 General

10.1.1 **Function**

Determines the function of the Modbus interface (deactivated or server)

| | |
|-------------------------------|---|
| Disabled | The Modbus interface is disabled. |
| Server (Default Value) | The Modbus interface is configured as a server. |
| Client | The Modbus interface is configured as a client. |

10.1.2 **Use Automatic Device ID**

Determines whether the device automatically gets to the Modbus device ID via Modbus.

Availability depends on **Function** .

Static Device ID (Default Value)
Automatic Device ID

10.1.3 **Device ID**

The device ID or device address must be unique within the Modbus network. Values from 1 - 247 are available.

Availability depends on **Function** **Use Automatic Device ID** .

Minimum 1

Maximum 247

Default Value 1

10.1.4 Automatic Device ID

The device ID obtained automatically via Modbus.

Availability depends on **Function** **Use Automatic Device ID**.

10.1.5 Baud Rate

The baud rate (transmission speed) of the Modbus interface. This must be uniform in the Modbus network.

1200

2400

4800

9600

19200 (*Default Value*)

38400

57600

115200

10.1.6 Parity

Determines the presence and function of the parity bit during transmission. This bit helps detecting faulty transmissions.

| | |
|--------------------------------------|------------------------------|
| None | No Parity and two Stopbits |
| Even (<i>Default Value</i>) | Parity Even and one Stopbit. |
| Odd | Parity Odd and one Stopbit. |

10.1.7 Broadcast

Modbus allows communication via broadcasts. This is useful e.g. to switch the operating mode of all devices in the network with a single transmission. If this feature is not desired or leads to any incompatibility with devices of other manufacturers, it can be deactivated.

Availability depends on **Function** .

No

Yes (Default Value)

10.1.8 Device Config over Modbus

It is possible to change all configuration parameters of the device via Modbus. This is useful e.g. if the serial configuration interface is no longer physically accessible or if parameters are to be changed globally across many devices. If this feature is not desired, it can be deactivated.

Availability depends on **Function** .

No

Yes (Default Value)

10.1.9 Update Interval

The interval at which the Modbus client queries the data points of the individual connected servers. If the polling takes longer than the time set here, the next cycle starts later.

Availability depends on **Function** .

Minimum 100 ms

Maximum 9999 ms

Default Value 500 ms

10.1.10 Client Load

The percentage utilization of the Modbus client. Not only the actual bus load is taken into account, but also the internal processing times and any timeouts.

Availability depends on **Function** .

Resolution 0.1 %

10.2 Device Search

10.2.1 Clear and Search Devices

The list of Modbus servers found is deleted, the automatically assigned IDs are reset and a new search is started. Both servers with a static ID and servers with an automatic ID are searched for.

Availability depends on **Function** .

10.2.2 Search Devices

A new search is started, the devices already found remain saved, the automatically assigned IDs are not reset. Both servers with a static ID and servers with an automatic ID are searched for.

Availability depends on **Function** .

10.2.3 Device Search State

Status of the Modbus device search and the automatic address assignment process.

Availability depends on **Function** .

Unknown (*Default Value*)

Scanning

Searching new Devices

Assigning Addresses

Identify Devices

Done

10.2.4 Number of connected Devices

Number of Modbus devices in the network that were found during a search. Regardless of whether they are currently accessible.

Availability depends on **Function** .

11 Balancing

11.0.1 Sum Minimal Exhaust

Availability depends on **Function** .

Minimum 0 m³/h

Maximum 50000 m³/h

Default Value 600 m³/h

11.0.2 Simultaneity Limit

Availability depends on **Function** .

Minimum 0 m³/h

Maximum 50000 m³/h

Default Value 600 m³/h

11.0.3 Volume Flow Offset

The analog input specifies the volume flow offset in day mode.

Availability depends on **Function** .

Minimum -5000 m³/h

Maximum 5000 m³/h

Default Value 100 m³/h

11.0.4 Balancing Exhaust Minimum

Minimum 0 m³/h

Maximum 50000 m³/h

Default Value 600 m³/h

11.0.5 Balancing Exhaust Maximum

Minimum 0 m³/h

Maximum 50000 m³/h

Default Value 600 m³/h

11.0.6 Balancing Exhaust Offset

Determines the volume flow that the supply should be greater than the exhaust.

Minimum -5000 m³/h
Maximum 5000 m³/h
Default Value 100 m³/h

11.0.7 Present Value Sum Exhaust

The current sum of the balanced exhaust volume flow.

11.0.8 Present Value Exhaust Offset

The current difference between the sum exhaust and sum supply.

12 Service

12.1 General

12.1.1 User Password

Sets a new user password

Minimum 0
Maximum 9999
Default Value 0

12.1.2 Lock Password

Minimum 0
Maximum 9999
Default Value 1234

12.1.3 Demo Mode

Determines whether the device is in demo mode. In demo mode, the volume flow and airflow values are simulated and the real values are not monitored.

Off (Default Value)
On

12.1.4 Firmware Version

The currently installed firmware version.

12.1.5 Serial Number Device

The unique serial number of the device set at the factory.

12.1.6 Build Nr

The Build Nr of the current Firmware Version

12.1.7 Endless Service Interval

Determines whether the service interval can be endless and therefore no service reminder and warning is generated.

Adjustable Duration (*Default Value*)

Endless

12.1.8 Service Interval

Determines the runtime of the device after which a service should take place.

Availability depends on **Endless Service Interval**.

Minimum 0 days

Maximum 9999 days

Default Value 365 days

12.1.9 System Lock Interval

Determines the time after which the device locks and can only be unlocked with the lock password.

Minimum 0 days

Maximum 9999 days

Default Value 0 days

12.1.10 Service Reminder

Defines the time from which a reminder is to be sent before the service interval expires that a service will soon be required.

Minimum 0 days

Maximum 9999 days

Default Value 30 days

12.1.11 Factory Reset

Resets the device to factory settings. All settings will be lost and the device must be recommissioned.

12.1.12 Reboot

Triggers a restart of the device.

12.1.13 Reset Service Timer

Resets the time until the next service.

12.2 Pressure Zero Offset Calculation

12.2.1 Pressure Zero Offset Calibration

Starts the pressure sensor zero offset calibration.

Availability depends on **Pressure Sensor Family**.

12.2.2 Clear Pressure Zero Offset Calibration

Availability depends on **Pressure Sensor Family**.

12.2.3 Pressure Zero Offset Calibration Status

The current status of the zero offset calibration.

Availability depends on **Pressure Sensor Family**.

| | |
|--|-----------|
| Inactive (<i>Default Value</i>) | Inactive |
| Running | Running |
| Failed | Failed |
| Succeeded | Succeeded |

12.2.4 Pressure Zero Offset

The current zero point offset of the pressure sensor.

Availability depends on **Pressure Sensor Family**.

Resolution 0.01 Pa

13 Runtime

13.0.1 Current Runtime

Current uptime since last restart.

13.0.2 Total Runtime

Total operating hours of the device.

13.0.3 Time in Day Mode

Number of operating hours in day operating mode.

13.0.4 Time in Night Mode

Number of operating hours in night operating mode.

13.0.5 Time in Override Mode

Number of operating hours in override operating mode.

13.0.6 Time in Off Mode

Number of operating hours in off operating mode.

13.0.7 Time since last Change

Number of operating hours that have elapsed since the last configuration change.

13.0.8 Runtime Damper Actuator

Total actuator activity time (no standstill).

13.0.9 Time until Service

Number of operating hours until the next service is due.

Resolution 0.000694444444444444 days

13.0.10 Time since Service

Number of operating hours that have elapsed since last service.

Resolution 0.000694444444444444 days

13.0.11 Time Service is overdue

Number of operating hours that have elapsed since service is required.

Resolution 0.000694444444444444 days

13.0.12 Time until Locked

Number of operating hours until the device locks itself.

Resolution 0.000694444444444444 days



The information and data contained in this documentation have been compiled to the best of our knowledge and in accordance with the current state of the art (subject to technical changes). The currently valid version applies. The proven properties of SCHNEIDER products are based on the use of the products recommended in this documentation. Diverging situations and individual cases are not taken into account, so that we cannot assume any warranty and liability.

As of Oktober 2025

Version: 10/2025

Do you have any questions? We look forward to your message:

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