lindab I for a better climate

Lindab **Fire System Pro**

Commissioning instructions

FireSystemPro

Content

Caution!

Read and understand the instruction before using the Lindab Fire System Pro and ensure that the installation complies with local safety regulations. Installation and maintenance of the system should only be carried out by qualified personnel. The manufacturer is not responsible for any eventual damage or injury caused by inadequate skills during installation, or through removal or deactivation of any security devices.

2024-12-02

FireSystemPro

1.0 Overview

1.1 Introduction

Lindab Fire System Pro is a complete fire protection steering system that allows to feed, monitor and test up to 60 fire and/or smoke control dampers. Smoke detectors, temperature sensors, thermostat and fault panel can also be connected and monitored in the system.

The system is designed to only feed 24V actuators.

The commissioning instructions for the Fire System Pro should be used as a guide to the main features of the system and a basis for interface menu and configurations.

For more detailed information and help with costumized system setups, please contact Lindab's technical support.

1.2 System features

The system consists of three main products

- PRO-M master unit
- PRO-S damper unit
- ProLink™ application

Figure 1: Lindab Fire System Pro

1.2.1 PRO-M

The PRO-M master unit accepts up to three fire dampers, two smoke detectors and one temperature sensor, which can be locally connected without any further component required.

The PRO-M can also manage a smoke evacuation system with smoke control dampers connected via damper units (PRO-S) and control a variable speed on the smoke evacuation fan with a duct pressure differential transmitter (PRO-PDT).

The main function of the PRO-M is to continuously check all damper position switches and all other components, and to close fire dampers and open or close the smoke control dampers depending on the scenario.

Fire alarm signals for external systems can be read and possibly acknowledged by the PRO-M. An external alarm signal is sent to be read by external systems (e.g. to stop an AHU).

A supervisory BMS system can be connected to the PRO-M through Modbus and BACnet protocol.

All components connected to PRO-M are always in sector 0.

1.2.2 PRO-S

The PRO-S is used as a damper unit in the Fire System Pro. It works together with the PRO-M master unit, where most of the setup for PRO-S is made.

The damper unit has two analogue inputs, two digital inputs, one analogue output and two digital outputs. The in- and outputs are used for e.g damper control, smoke detector, temperature sensors and VAV.

PRO-S communicates via Modbus. One terminal is used as +19 V DC supply voltage for a smoke detector.

1.2.3 ProLink™ application

The damper unit PRO-S is Bluetooth compatible.
The ProLink™ application is available on Android and iOS and can be used to find and change name of the PRO-S damper units, change ModBus address and update the PRO-S software.

Lindab

GET IT ON Google Play

Download on the App Store

Press HERE to read the wiring instructions for Fire System Pro

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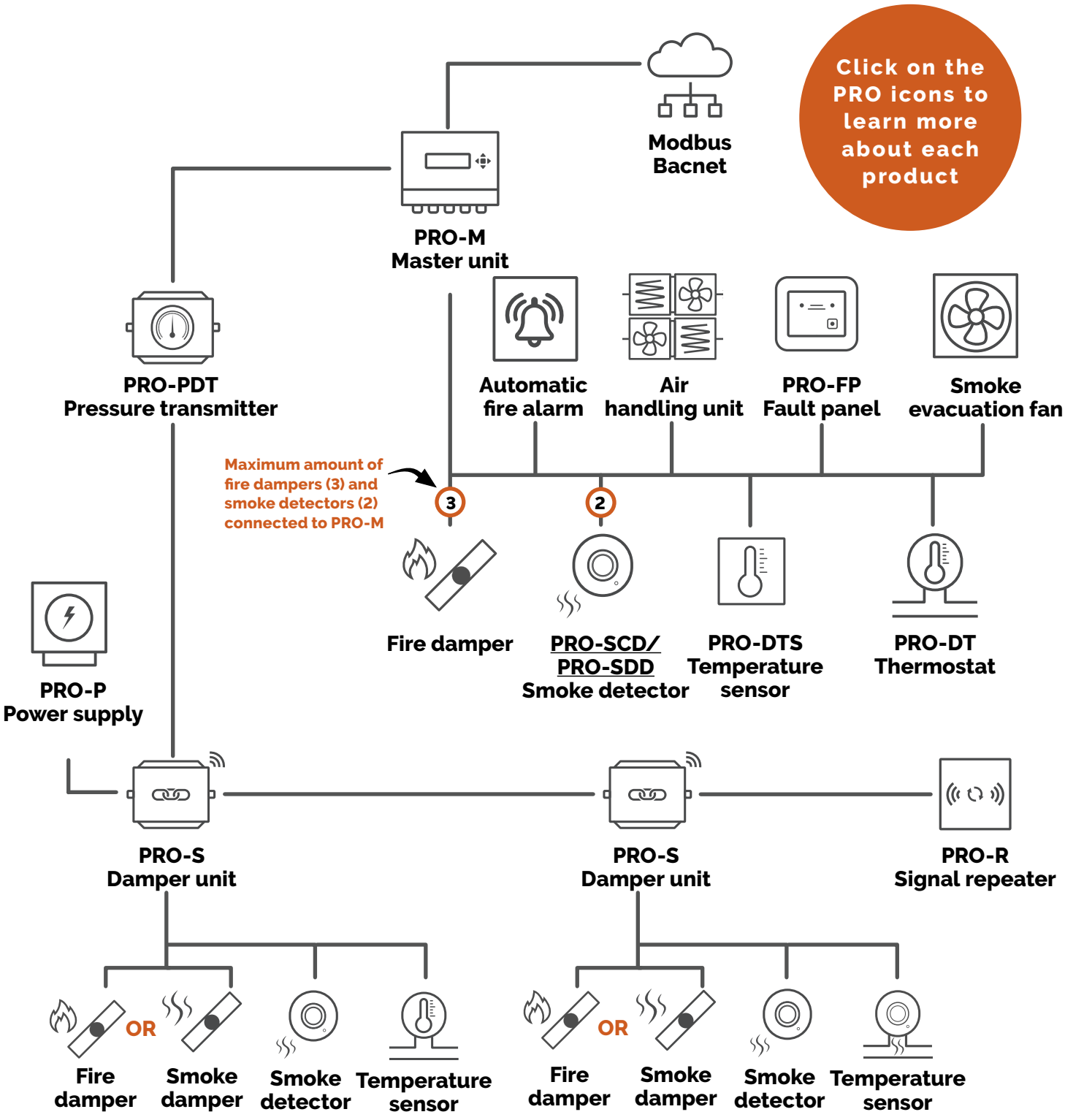
1.3 System setup

Fire System Pro is a flexible steering system that gives full automatic fire and smoke protection, and can be customized and designed to handle various buildings and different scenarios.
Note! Locally connected products are always Section 0. This means if error, the whole system shuts down.



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1.4 PRO-M push buttons

The Pro-M master unit has a pre-programmed controller with a backlit internal display. The different menus and settings are easily accessible and controlled by push buttons on the front of the unit.

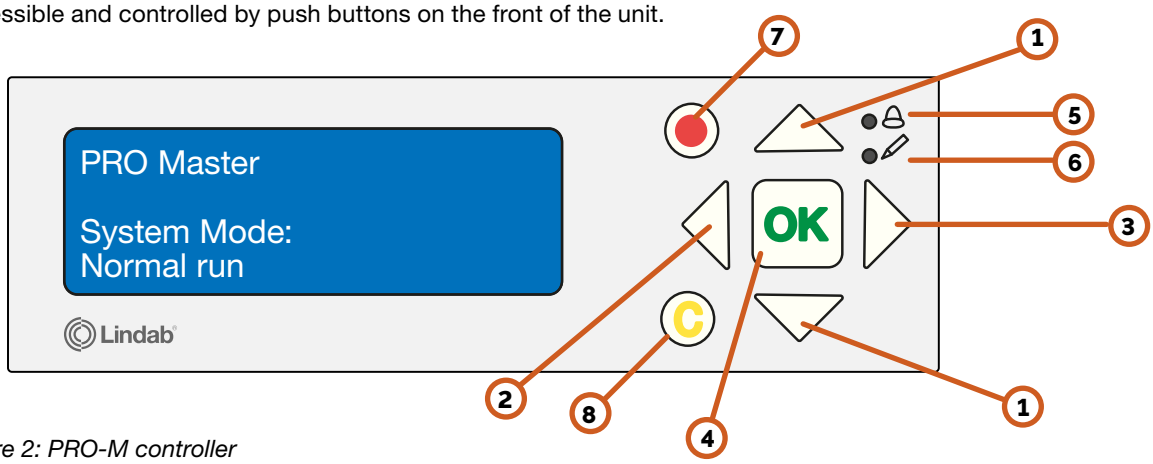

Figure 2: PRO-M controller

1. "Up/Down" buttons: Used to navigate through menus and change values
2. "Back" button: Used to go back to the previous page
3. "Forward" button: Used to enter menu pages
4. "OK" button: Used to edit and confirm changed values
5. "Alarm": LED light blinks in case of alarm
6. "Write": LED light blinks when values can be changed on current page
7. Red button: Used to go directly to alarm acknowledgment page
8. C button: Used to exit value editing

1.5 PRO-M access codes

In order to access and enable particular operations and settings in the PRO-M master unit, a valid access code is required to be entered.

Admin - access code: 1111

- Status overview
- System Setup
- Settings
- Manual/Auto

Service - access code 2222

- Service
- System Setup
- Manual/Auto

Operator - access code 3333

- Status overview
- Settings

Attention!
Change password after the first admin login

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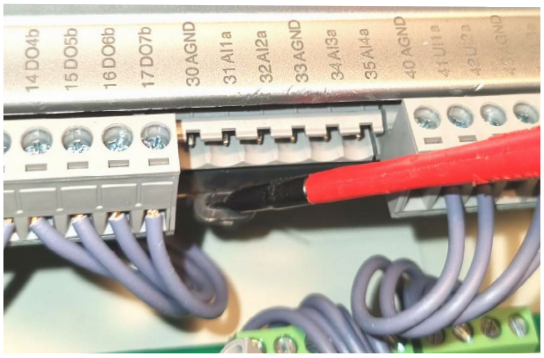
1.6 Reset PRO-M

In order to do a factory reset on the Pro-M follow these steps:

- Remove the front of the Pro-M.

- Release the third connector from the left.

- Carefully push down on the sprint underneath the connector to release the unit.



- Insert a paperclip or a needle in the hole and push to do the factory reset.

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1.6 PRO-S light indications

The PRO-S damper unit has two different LED lights to indicate status for communication and identification, see table 1.1. below

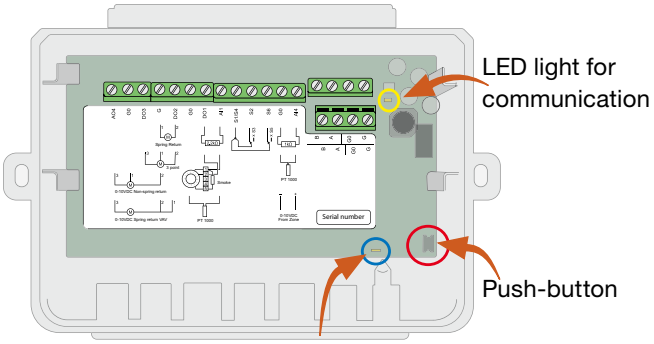

Figure 3: Inside PRO-S

Table 1.1: PRO-S led light indications

LED light	Colour	Pattern	Description
Identification	Blue	Steady	Bluetooth connection active
	Yellow	Steady	Service alarm
		Blinking	Unit identified
	Red	Steady	Alarm
		Blinking	Factory reset
	Green	Steady	Everything ok
	Magenta	Steady	Unit offline
	White	Steady	Unit has address 1 and is ready to be addressed in the system
		Blinking	The button has been pressed on the unit and it's waiting to be addressed
Communication	Yellow	Fast blinking	Communication in process

1.7 Reset PRO-S

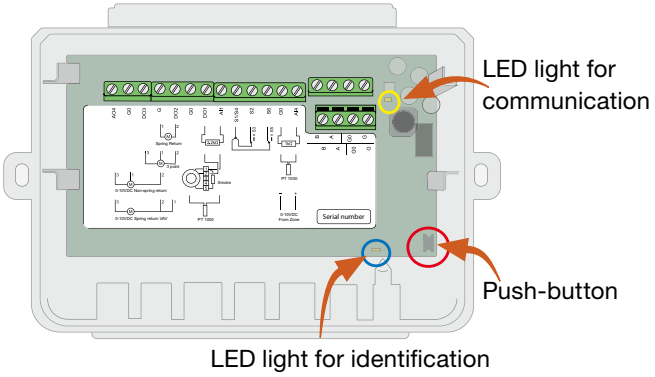

Figure 3: Inside PRO-S

In order to reset the Pro-S on the unit follow these steps:

- Push the "Push-button" for 10 seconds.
- Lights will shift colors.
- Push the "Push-button" three times
- PRO-S LED is white (Reseted)

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1.7 ProLink™ application

The ProLink™ application is available on Android and iOS and can be used to find a PRO-S unit, to change ModBus address and name of a unit, and update the PRO-S software. In order to access and enable particular operations and settings in the ProLink™ application, a valid password is required to be entered.

Administrator - password: Admin

- Update firmware
- Reset to default values
- Save and import local configuration
- Change password on all users
- Read values decided by application

Service - password: Service

- Reset to default values accepted by application
- Save and import local configuration
- Change password on this user level
- Read values decided by application

Operator - password: Operator

- Reset to default values accepted by application
- Save and import local configuration
- Change password on this user level
- Read values decided by application

Guest - password: N/A

- Read values decided by application

Attention!
Change password after the first admin login

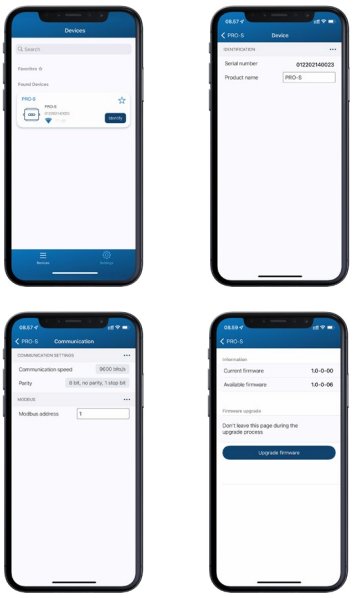

Figure 4: Screenshots from Lindab ProLink™ application

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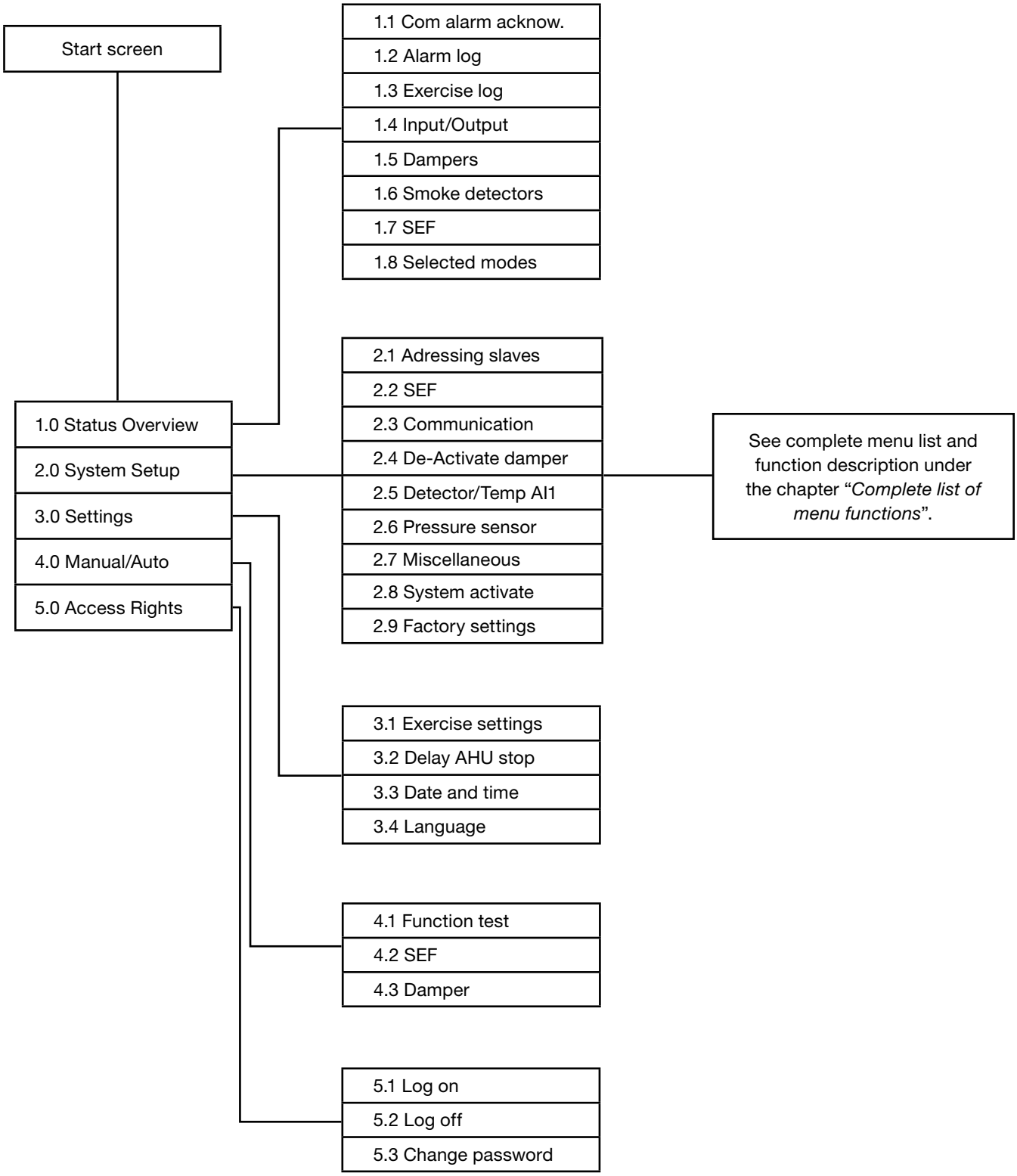
1.8 Menu structure

The programming functions and configurations of the Fire System Pro are made in the Pro-M controller. The interface menu is structured as followed:



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2.0 Quick start guide

This section provides you with guidlines to common settings and configurations to get the Fire System Pro running.
Note! Each guide starts from the main menu. To go back, press “back” button until you reach the main menu.

2.1 Choose language

1. Press “forward” button to find ”Language

2. Press “OK” to edit language value

3. Press ”down” to change language

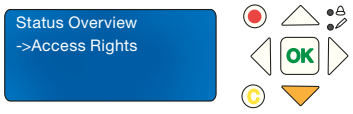
4. Press “OK” to confirm

Language is now changed.

Note! Choose between English and Danish.
Standard language is English.

2.2 Log in

1. Press “down” to find ”Acccess rights”

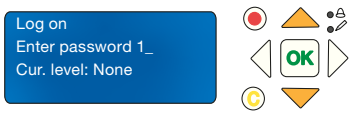


2. Press “foward” to enter access rights

3. Press ”forward” again to select log on

4. Press “OK” to start entering password

5. Use ”up” and ”down” arrows to set number



6. When first number is set, press ”forward” to set next number (and so on).

7. Press ”OK” when password is set.

You are now loged in.
Note! Cur. level on display changes according to user login and access right.

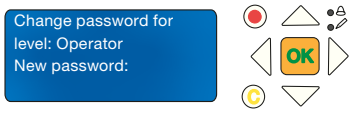
2.3 Change password

1. Press “down” to find ”Access rights”

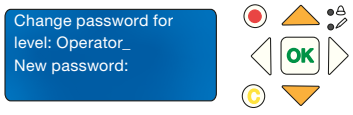
2. Press “foward” to enter access rights

3. Press ”down” to find ”Change password”

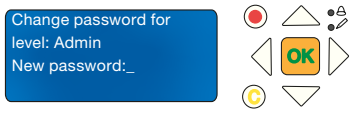
4. Press ”OK” to start editing



5. Use ”up” and ”down” arrows to set level for password changes

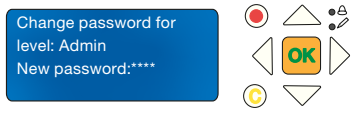


6. “OK” to start entering New password



7. Enter password (step 5-6 in 2.2 log in section)

8. Press “OK” when new password is set



Password is now changed.

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2.4 Activate local fire dampers

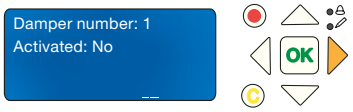
1. Press ”down” to find ”System Setup”

2. Press ”forward” to access ”System Setup”

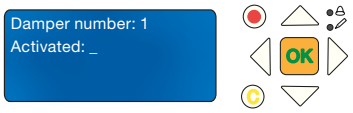
3. Press ”down” to find “De-/Activate Damper”

4. Press ”forward” to access ”De-/Activate Damper”

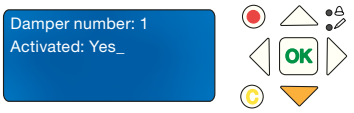
5. Press ”forward” to access ”Damper numbers”



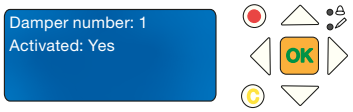
6. ”OK” to edit activated status (Yes/No)



7. Press ”down” to change activated status to YES



8. “OK” to confirm



Damper 1 is now activated

Note! Local dampers (connected to PRO-M) can only have adress one (1), two (2) or three (3).

To activate damper number two (2) and three (3), follow step 5-8 above. Press “up” button to change damper numbers.

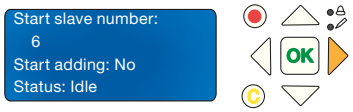
2.5 Add PRO-S damper units to PRO-M

1. Press ”down” to find ”System Setup”

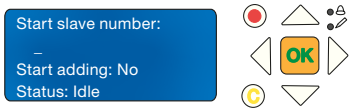
2. Press ”forward” to access ”Addressing Slaves”

3. Press ”forward” again to access ”Add slaves”

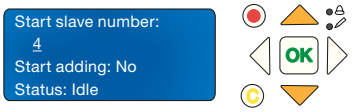
4. Press forward again to access ”Start slave number”



5. Press ”OK” to edit ”Start slave number”

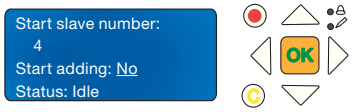


6. Use ”up” and ”down” arrows to change ”Start slave number”

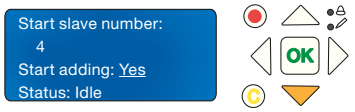


Note! Lowest number for damper unit (“start slave number”) is four (4).

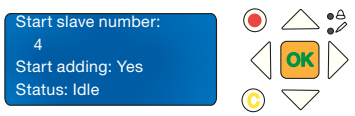
7. ”OK” to confirm slave number and edit ”Start adding”



8. Press ”down” to change start adding value to YES



9. ”OK” to confirm ”start adding”



Continue with next step on following page

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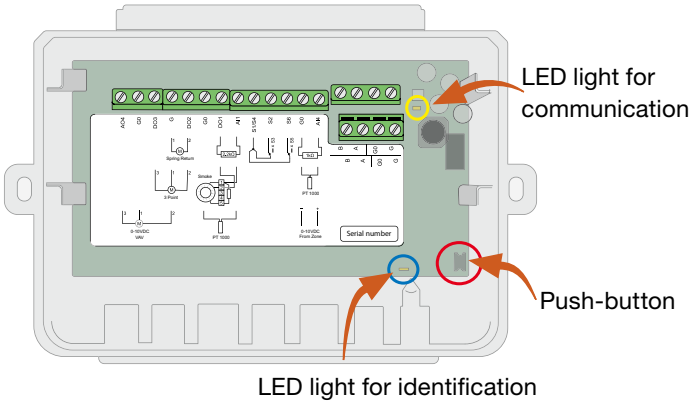
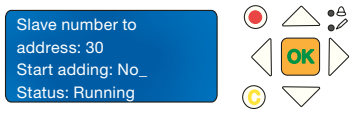
Add PRO-S damper units (cont.)

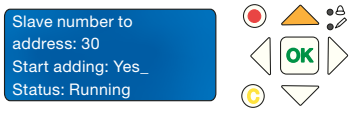
10. Start running by pressing the "push-button" on all suitable damper units (PRO-S). LED lights up in color "Magenta" meaning that the unit is still offline.



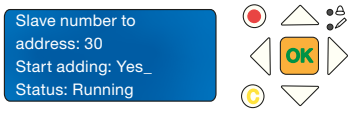
11. After running damper units, press "OK" to edit "Start adding"



12. Press "up" to change value to Yes

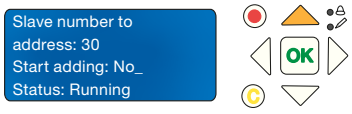


13. Press "OK" to confirm.

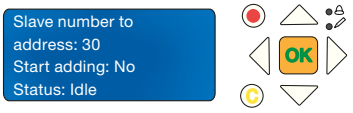


Note! PRO-S LED light should light up in color green to identify that that the damper unit is connected.

14. When all damper units are connected, press "up" to change start adding value to NO



15. Press "OK" to confirm status



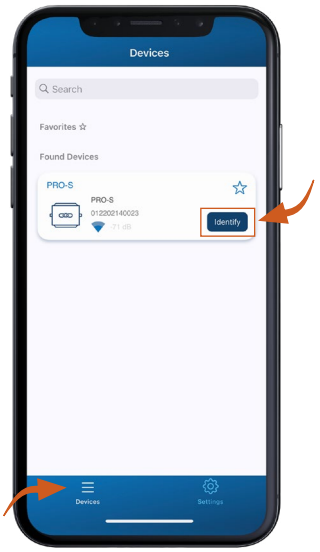
All PRO-S damper units should now be added

Note! The "Start slave number" on the screen should have increased accordingly with the number of PRO-S that have been added. In the example above, we have added 26 damper units (up to address 29) meaning that the next available adress is number 30.

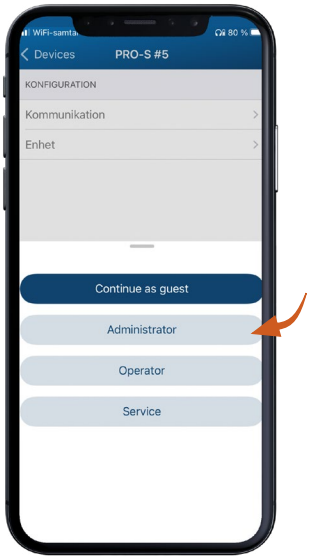
2.6 Add PRO-S damper units via ProLink™ app

1. Open Lindab ProLink™ application

2. Click "devices" and identify one of the PRO-S damper units



3. Log in with the given credentials



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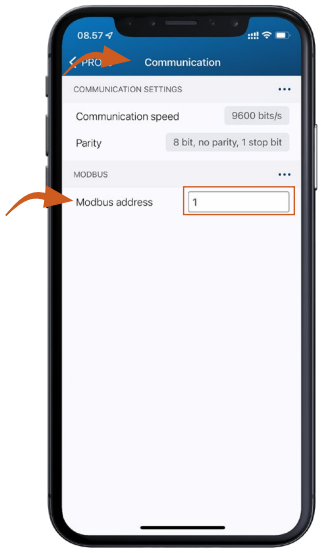
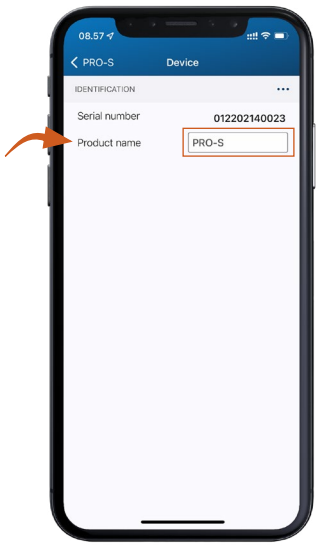
4. Access ”communication” and set modbus address according to requirements.

Note! Lowest modbus address for PRO-S is four (4)

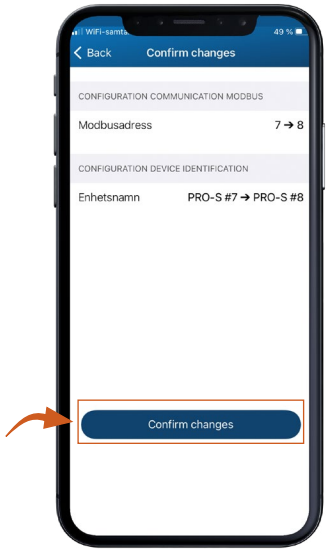


Note! If you want to add damper units in different sections in the system, it is important that they are in line in the modbus address, i.e. address 1-10 = section 1, address 11-20 = section 2 and so on.

5. **Optional:** It is also possible to change the name of the unit, for example to specify where it is located.



6. Confirm changes



Attention! Repeat the steps for other PRO-S damper unit. When all units are identified and addressed, go to the next step.

7. In the PRO-M master unit, press ”down” to find ”System Setup”

8. Press ”forward” to access ”System Setup”

9. Press ”forward” to access ”Addressing slaves”

10. Press ”down” to ”Find Addressed slaves”

11. Press ”forward” to access ”Find Addressed slaves”

Continue with next step on following page

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12. Press ”OK” to edit ”Start” status (Yes/No)

13. Press ”up” to change status to YES

14. “OK” to confirm status

15. Wait until running status is 100%

16. Press OK to confirm and stop running.

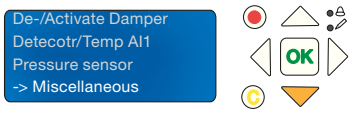
PRO-S damper units should now be identified and addressed in the system

2.7 Set section funcionality in PRO-M

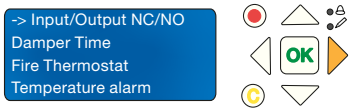
1. Press ”down” to find ”System Setup”

2. Press ”forward” to access ”System setup”

3. Press ”down” to find ”Miscellaneous”



4. Press forward to enter ”Miscellaneous”



5. Press ”down” to find ”Section containment”

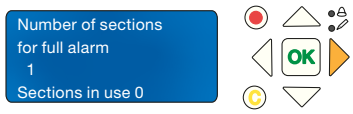
6. Press ”forward” to enter ”Section containment”

7. ”OK” to start edit value for ”Section containment”

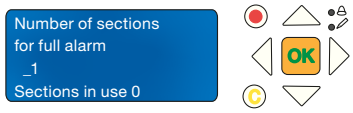
8. Press ”up” to change value to YES

9. Press ”OK” to confirm value for ”Section containment”

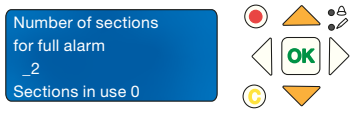
10. Press ”forward” to set ”Number of sections for full alarm”



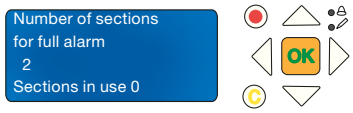
11. Press ”OK” to edit ”Number of sections for full alarm”



12. Use ”up” and down” arrows to change ”Number of sections for full alarm”



13. Press ”OK” to confirm



Sections are now added and function set for the system

Note! ”Number of section for full alarm” indicates the number of sections in alarm mode, in order to close the whole system. For example, if you choose two (2) as number of section for full alarm, and you have four (4) sections in the system, all four sections wil close if two sections are in alarm mode.

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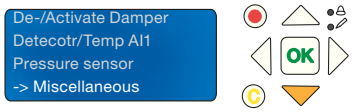
2.8 Section setup in PRO-M

1. Press ”down” to find ”System Setup”

2. Press ”forward” to access ”System setup”

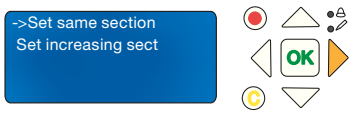
3. Press ”down” to find ”Miscellaneous”



4. Press ”forward” to access ”Miscellaneous”

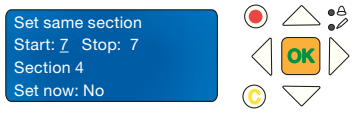
5. Press ”down” to find ”Section tools”

6. Press ”forward” to access ”Section tools”



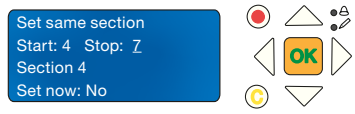
7. Press ”forward” again to access ”Set same section”

8. Press ”OK” to start editing modbus adress for ”Start”



9. Use ”up” and ”down” arrows to change ”Start” number of modbus adress

10. Press ”OK” to confirm ”Start” number



11. Use ”up” and ”down” arrows to change ”Stop” number of modbus address

12. Press ”OK” to confirm ”Stop” number

13. Use ”up” and ”down” arrows to change number of ”Sections”

14. Press ”OK” to confirm ”Section”

15. Press ”down” to changes status of ”Set now” to Yes

16. Press ”OK” to confirm ”Set now” status

Setup for section 1 are now done

Note! Repeat the steps above to set more sections for other PRO-S damper units (modbus addresses) in the system.

2.9 Change damper setup via PRO-M

1. Press ”down” to find ”System Setup”

2. Press ”forward” to access ”System Setup”

3. Press ”down” to find “De-/Activate Damper”

4. Press ”forward” to access ”De-/Activate Damper”

Continue with next step on following page

FireSystemPro

Section setup in PRO-M (cont.)

5. Press ”OK” to start edit ”Select slave number”

6. Use ”up” and ”down” arrows to change ”slave number” to edit

Tips! Use the ProLink™ application to see modbus address applied for a specific PRO-S unit. To know which PRO-S to choose, checkup the serial number for the unit in the ProLink™ app and control it with the identification number inside the PRO-S unit.

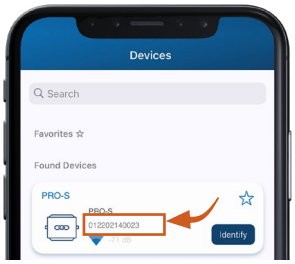


Figure 5: ID number for PRO-S in ProLink™ app

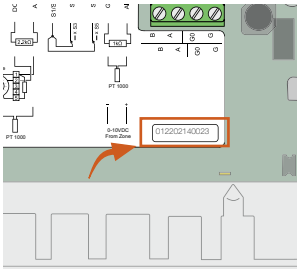


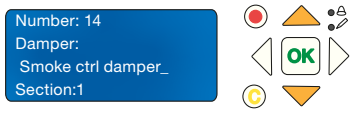
Figure 6: ID-number for PRO-S inside the unit

7. Press ”OK” to confirm ”slave number”

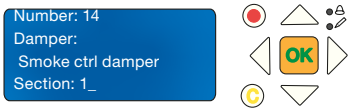
8. Press ”forward” to edit ”De-/Activate Damper”

9. Press ”OK” to start edit status for ”Damper”

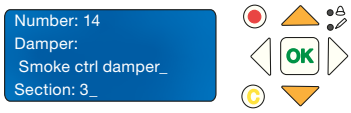
10. Use ”up” and down” arrows to change ”Damper” to desired setup



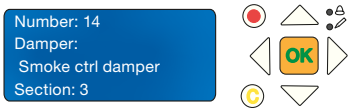
11. Press ”OK” to confirm setup for damper and set section for damper



12. Use ”up” and down” arrows to change ”section” number if needed



13. Press ”OK” to confirm or change section for the damper



Damper setup and section is now changed for selected damper unit

2.10 Activate SEF mode

1. Press ”down” to find ”System Setup”

2. Press ”forward” to enter ”System Setup”

3. Press ”down” to find ”SEF”

4. Press forward to enter ”SEF” mode

5. Press ”OK” to edit ”SEF” mode

6. Use ”up” and down” arrows to change to desired SEF mode.

Continue with next step on following page

FireSystemPro

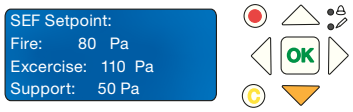
SEF mode (cont.)

7. Press ”OK” to confirm SEF mode.

8. Press ”up” to activate AFA in system (fire panel).

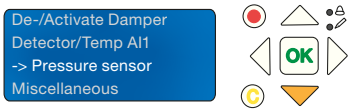
9. Press ”OK” to confirm AFA system activation

10. Press ”down” to set points and setups for SEF



11. Press ”back” to go back to ”System Setup”

12. Press ”down” to find Pressure sensor”



13. Press ”forward” to enter ”Pressure sensor”

14. Press ”OK” to edit ”Pressure sensor enabled”

15. Press ”up” to change status for ”Pressure sensor enabled” to YES

16. Press ”OK” to confirm AFA system activation

SEF mode is now setup

2.11 Activate the Fire System Pro

1. Press ”down” to find ”System Setup”

2. Press ”forward” to enter ”System Setup”

3. Press ”down” to find ”System activate”

4. Press ”forward” to enter ”System activate”

5. Press ”OK” to edit ”Activate System”

6. Press ”up” to change status to RUN

5. Press ”OK” to confirm status for ”Activate System”

The Fire System Pro is now activated and running

FireSystemPro

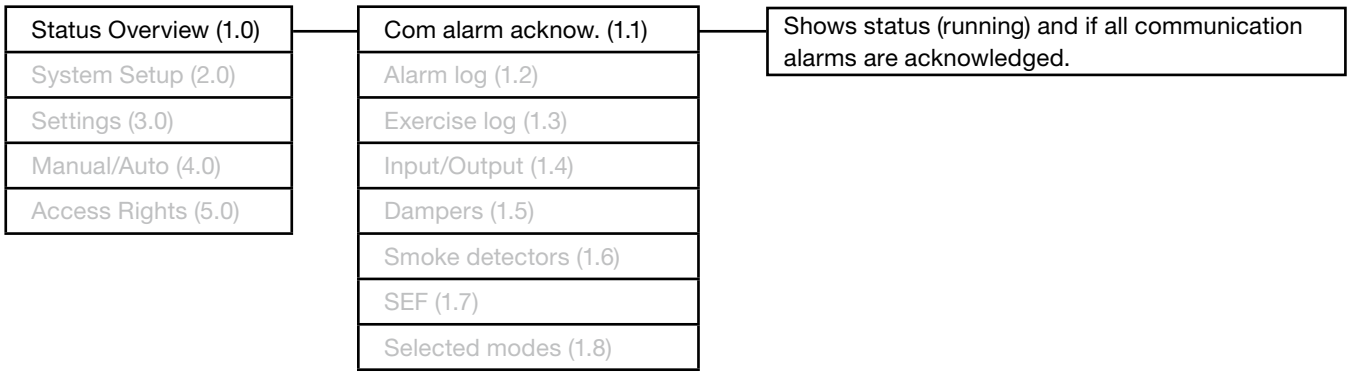
3.0 Complete list of menu functions

Following is a complete list of menu options, including a function description

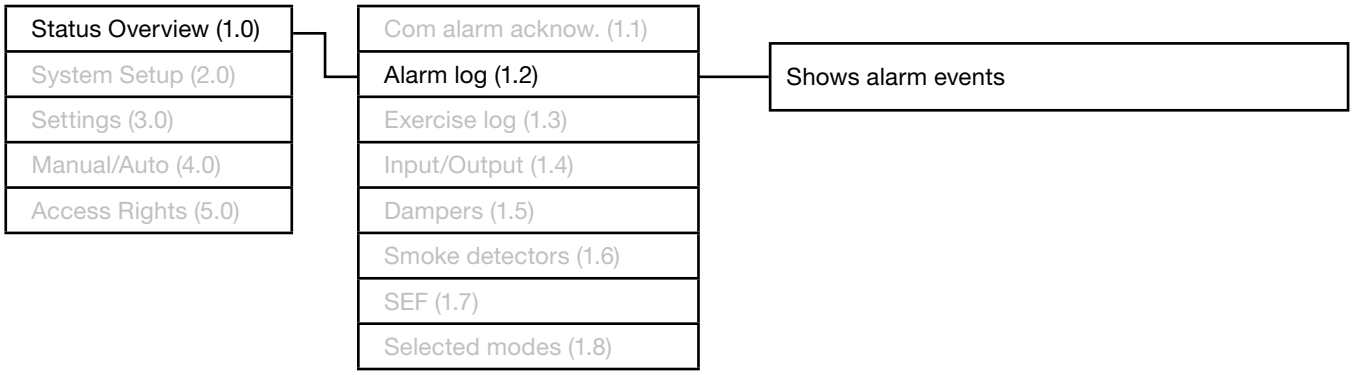
3.1 Status Overview

The status overview menu (1.0) shows status for different components of the system

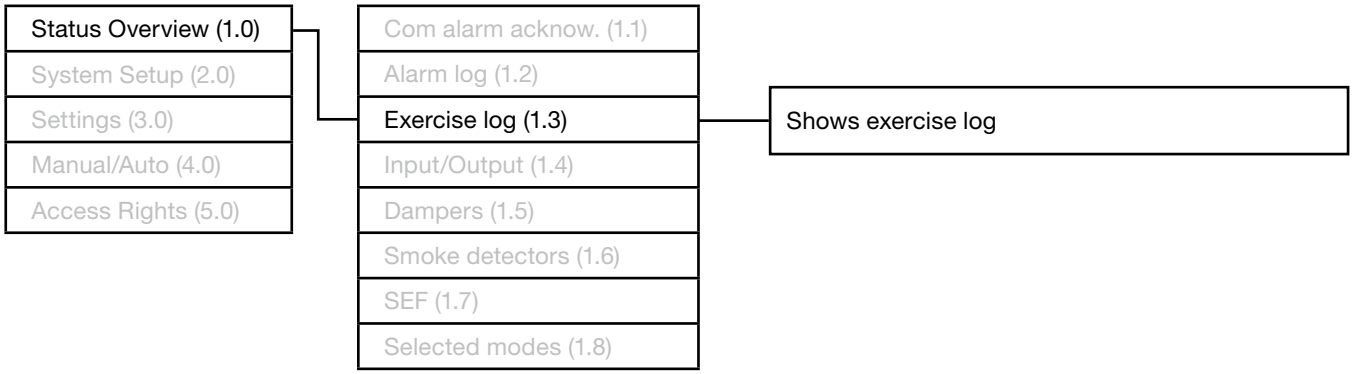
3.1.1 Communication alarm acknowledge



3.1.2 Alarm log



3.1.3 Exercise log



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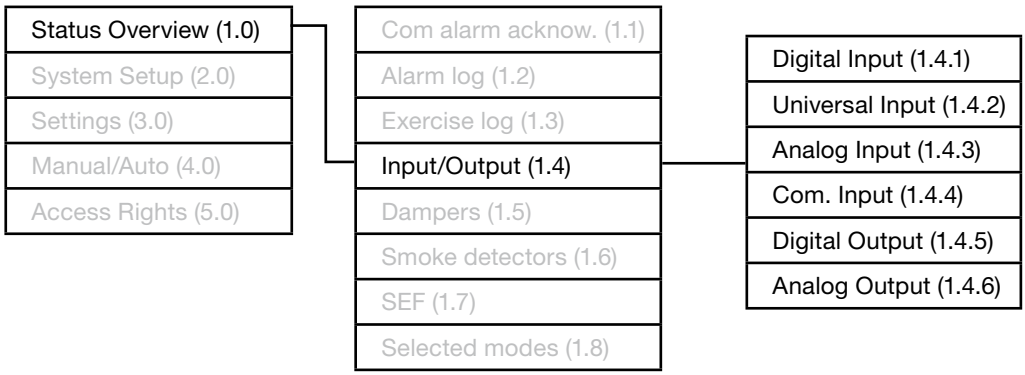
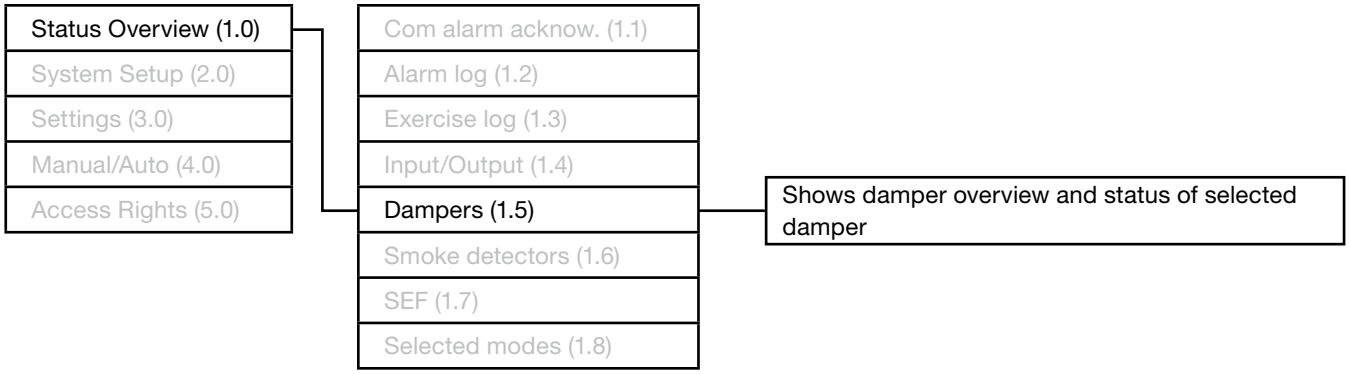
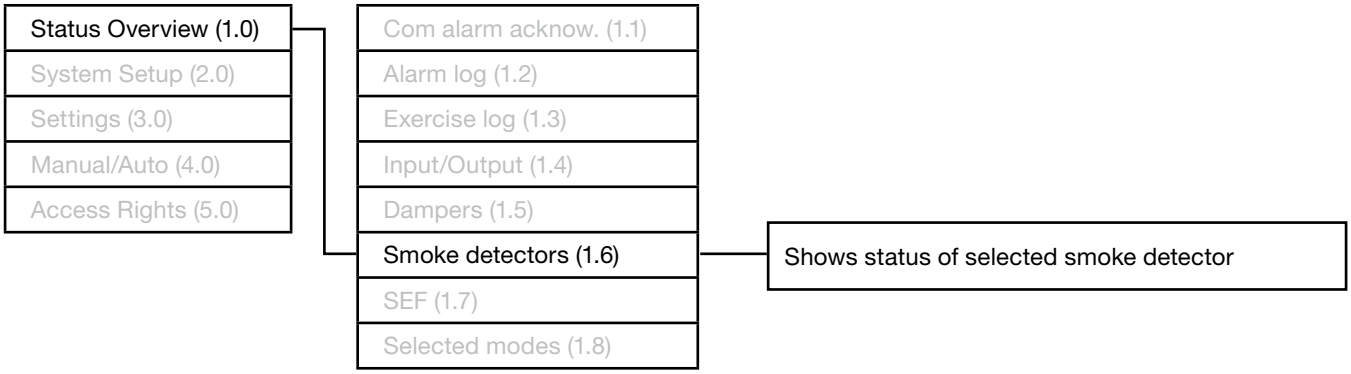
3.1.4 Input/Output



3.1.5 Dampers



3.1.6 Smoke detectors



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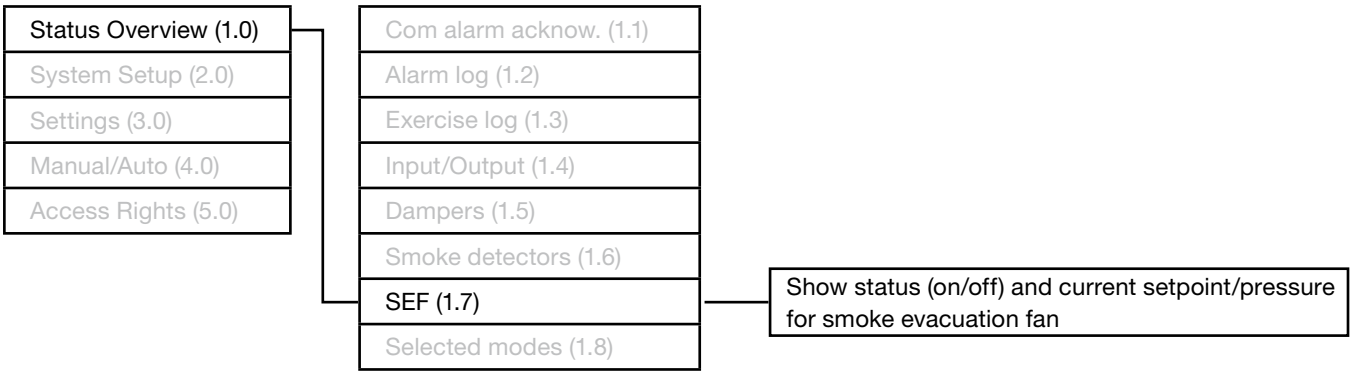
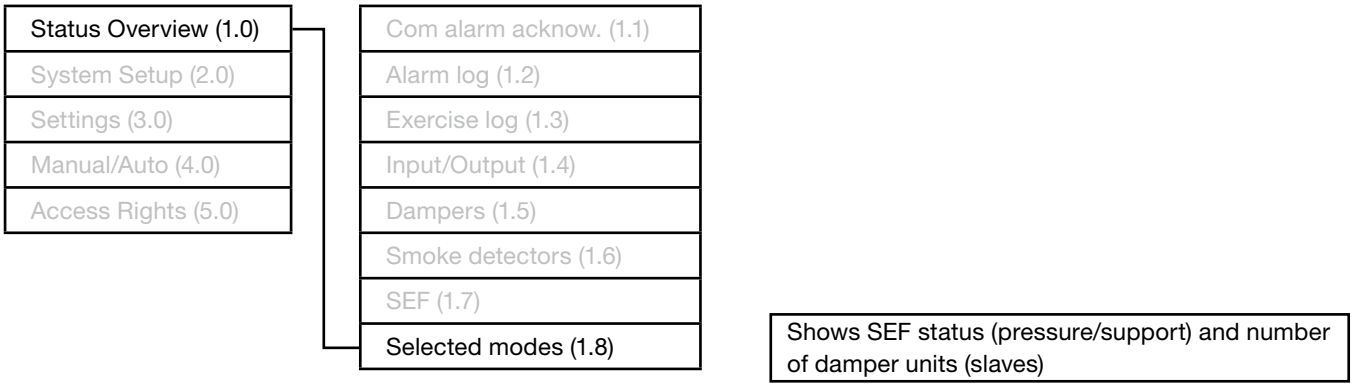
3.1.7 SEF



3.1.8 Selected modes



FireSystemPro

3.2 System Setup

Configurations and custom compostitions are made in system setups

3.2.1 Adressing slaves

Status Overview (1.0)	Adressing slaves (2.1)	Add slave (2.1.1)	if using PRO-M
System Setup (2.0)	SEF (2.2)	Replace slave (2.1.2)	
Settings (3.0)	Communication (2.3)	Remove slave (2.1.3)	
Manual/Auto (4.0)	De-Activate damper (2.4)	Reset all slaves (2.1.4)	
Access Rights (5.0)	Detector/Temp AI1 (2.5)	Find addressed slaves (2.1.5)	if using ProLink™ app
	Pressure sensor (2.6)	Slave serials (2.1.6)	See id-serial number for damper units
	Miscellaneous (2.7)	Slave names (2.1.7)	See all slave names
	System activate (2.8)	Set names (2.1.8)	recommended to set new names via ProLink™ app
	Factory settings (2.9)		

3.2.2 SEF

Status Overview (1.0)	Adressing slaves (2.1)	Setups for: SEF mode (Pressure/Support) AFA in system (Yes/No) SEF setpoint for fire / excercise / support SEF alarm limit for exercise / AHU suvay / pressure gain and time interval.
System Setup (2.0)	SEF (2.2)	
Settings (3.0)	Communication (2.3)	
Manual/Auto (4.0)	De-Activate damper (2.4)	
Access Rights (5.0)	Detector/Temp AI1 (2.5)	
	Pressure sensor (2.6)	
	Miscellaneous (2.7)	
	System activate (2.8)	
	Factory settings (2.9)	

3.2.3 Communication

Status Overview (1.0)	Adressing slaves (2.1)	TCP / IP (2.3.1)
System Setup (2.0)	SEF (2.2)	Port (2.3.2)
Settings (3.0)	Communication (2.3)	Modbus (2.3.3)
Manual/Auto (4.0)	De-Activate damper (2.4)	BACnet (2.3.4)
Access Rights (5.0)	Detector/Temp AI1 (2.5)	
	Pressure sensor (2.6)	
	Miscellaneous (2.7)	
	System activate (2.8)	
	Factory settings (2.9)	

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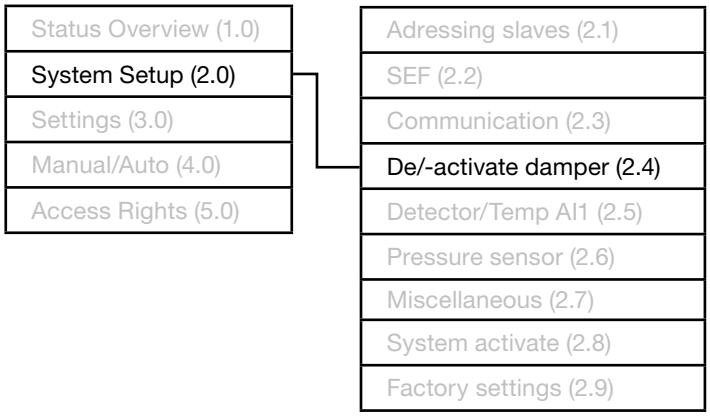
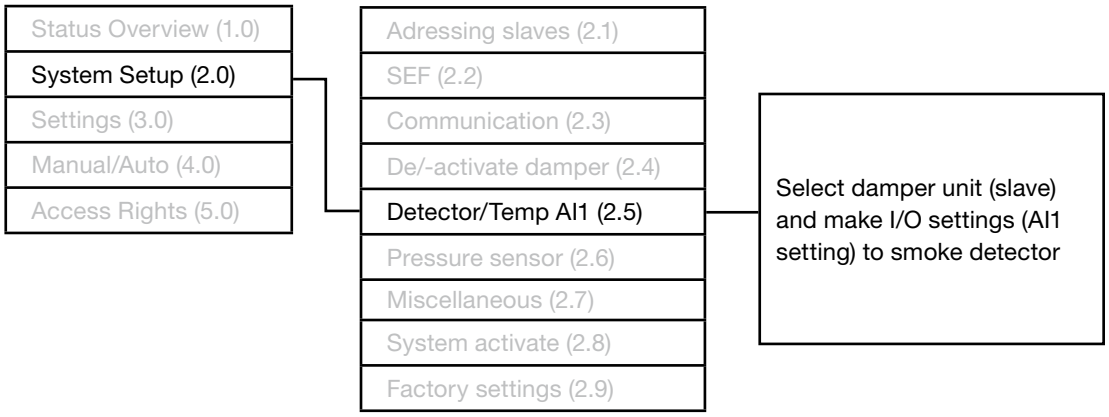
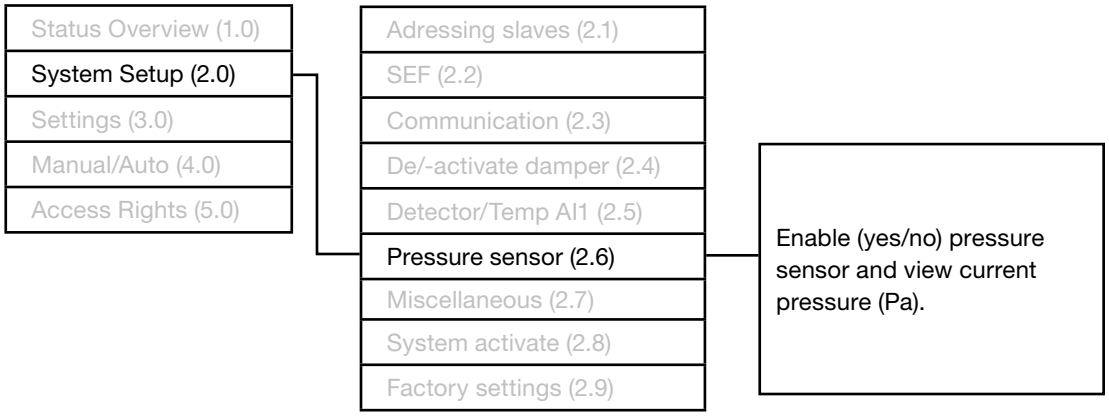
3.2.4 De-/activate damper



3.2.5 Detector / Temp AI1



3.2.6 Pressure sensor



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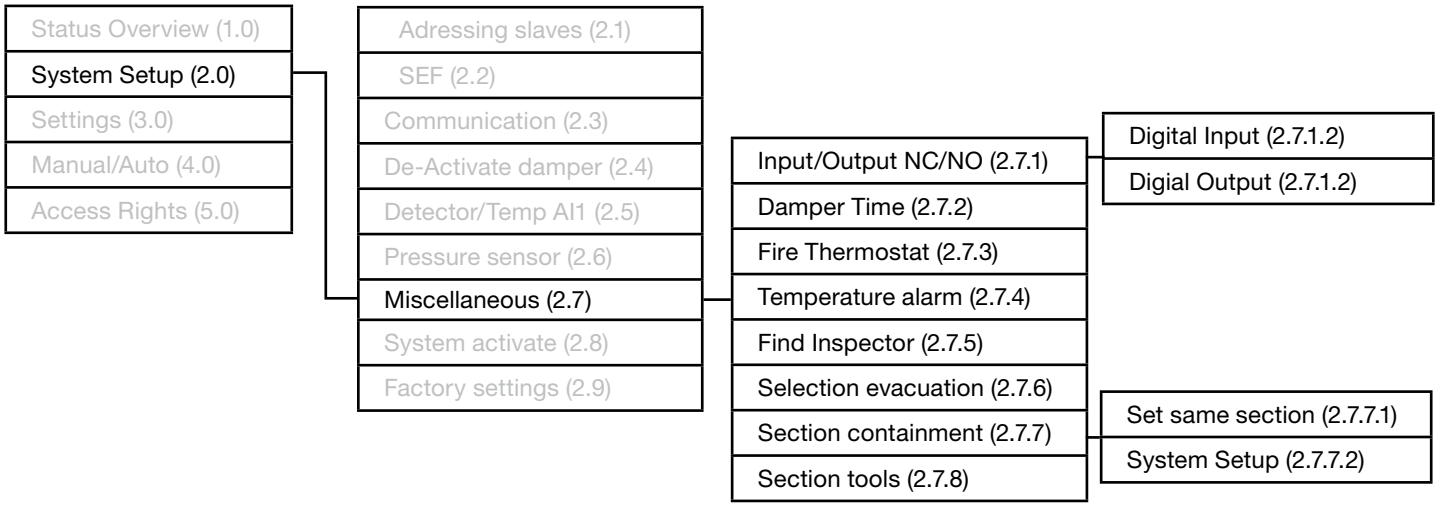
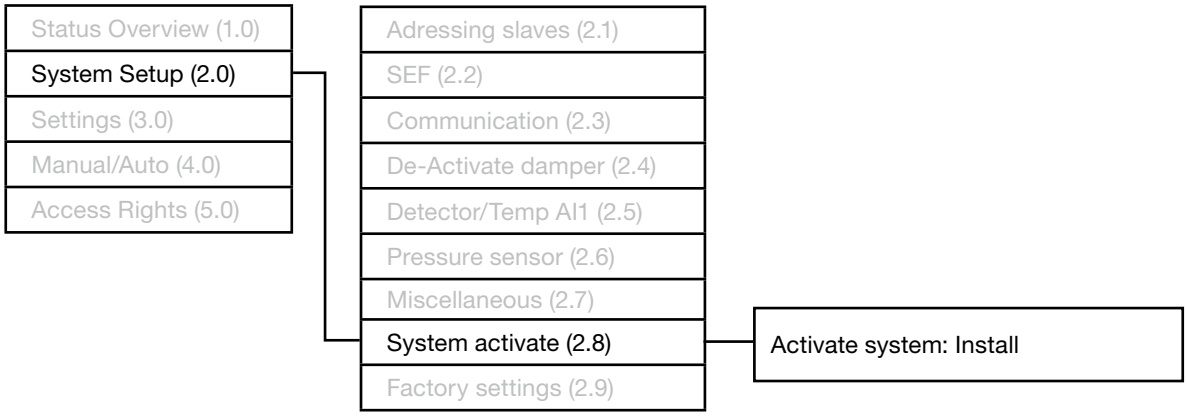
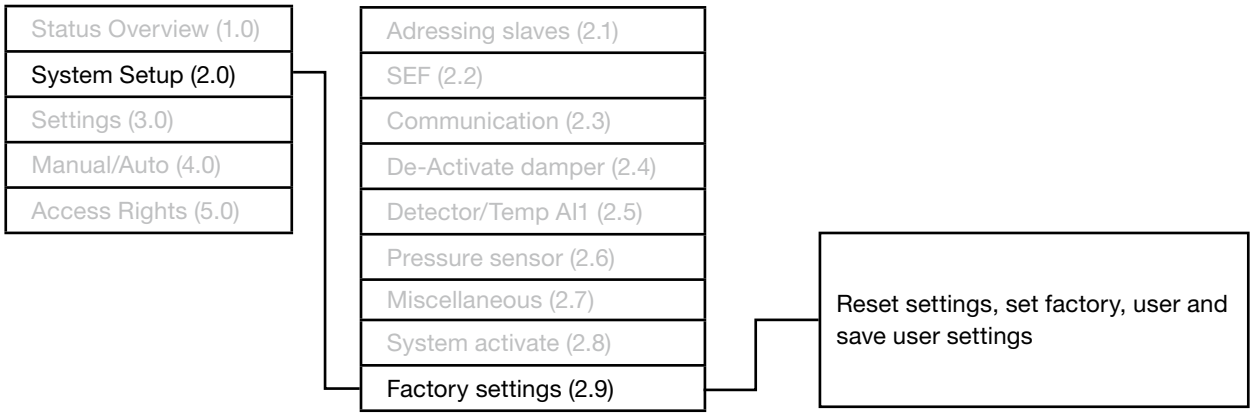
3.2.7 Miscellaneous



3.2.8 System active



3.2.9 Factory settings

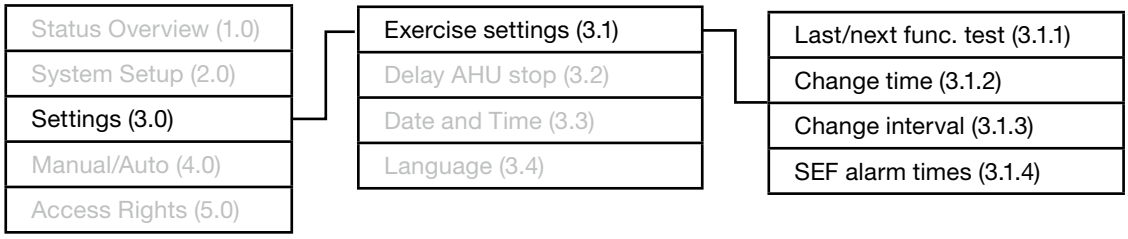


FireSystemPro

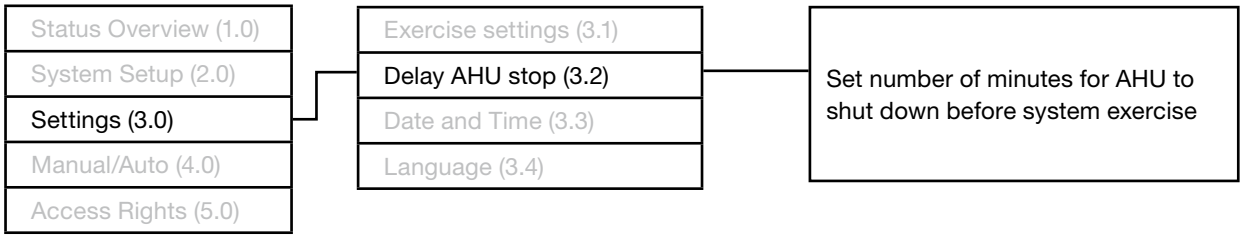
3.3 Settings

Exercise settings, delay AHU stop, date, time and language.

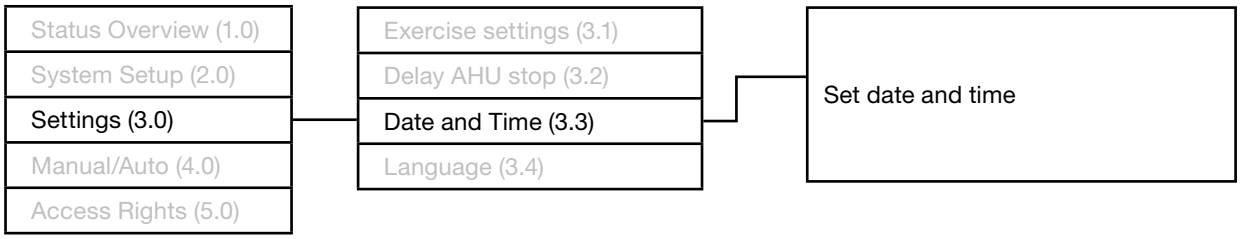
3.3.1 Exercise settings



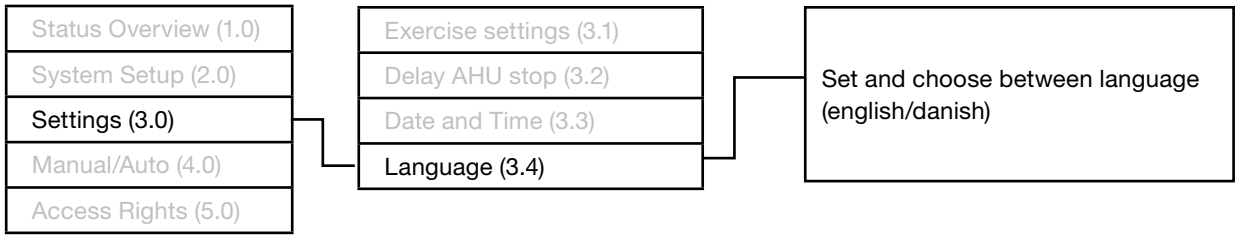
3.3.2 Delay AHU stop



3.3.3 Date and Time



3.3.4 Language

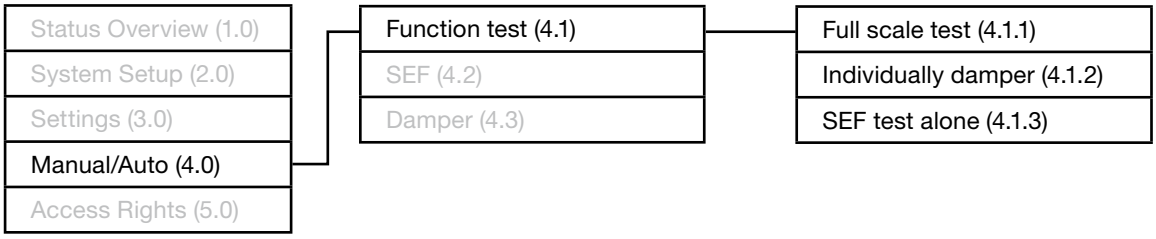


FireSystemPro

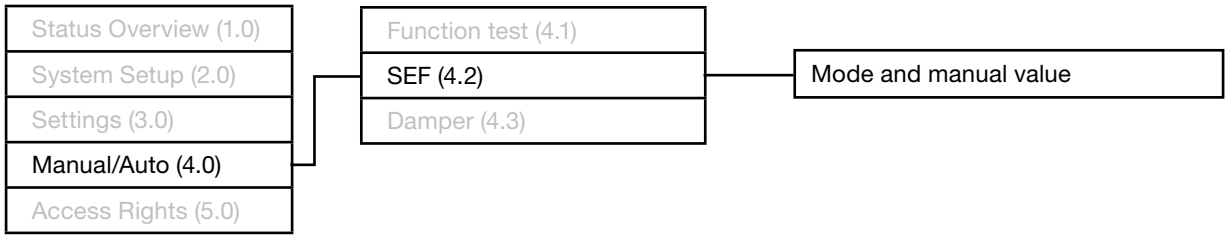
3.4 Manual/Auto

For customized setups

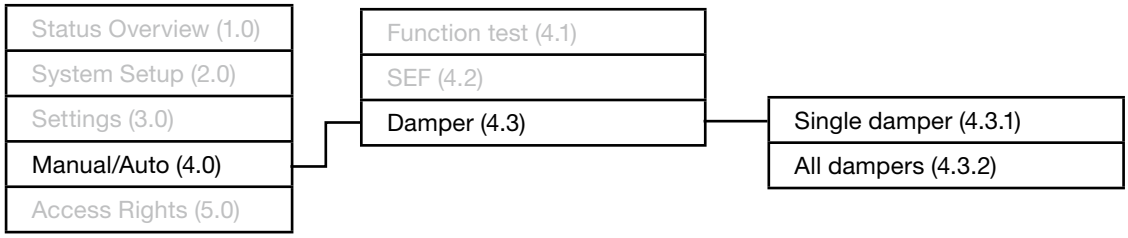
3.4.1 Function test



3.4.2 SEF



3.4.3 Damper

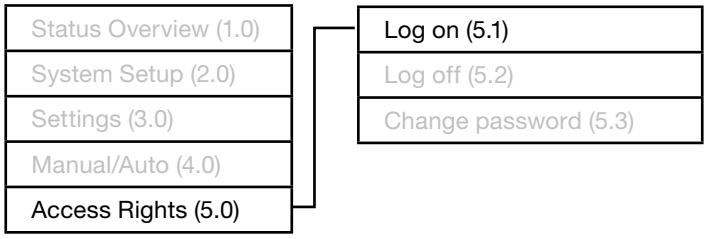


FireSystemPro

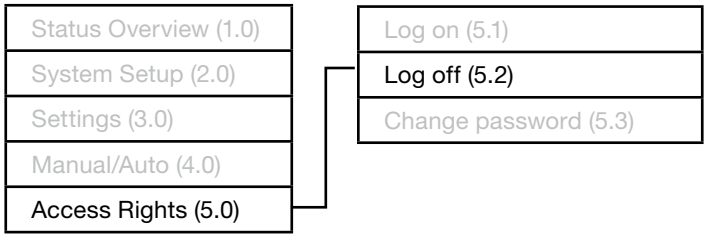
3.5 Access rights

Log on/off to the system and change password for different levels.

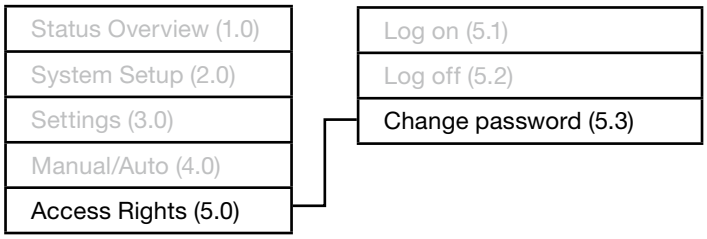
3.5.1 Log on



3.5.2 Log off



3.5.3 Change password



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We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

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