

Ptouch

User Manual



SALDA
WWW.SALDA.LT



UAB SALDA
Ragainės g. 100
LT-78109 Šiauliai, Lithuania



+370 41 54 04 15
+370 41 54 04 17



office@salda.lt
www.salda.lt

1. SAFETY INSTRUCTIONS AND WARNINGS	2
2. PRODUCT INFORMATION	2
3. DESCRIPTION	2
4. TECHNICAL DATA	3
5. PACKAGE	3
6. INSTALLATION	4
7. CONNECTING PTOUCH TO AIR HANDLING UNIT	4
8. SOFTWARE UPDATE	5
9. HOW TO MOUNT PTOUCH ON THE WALL?	6
10. TROUBLESHOOTING	7
11. INSTRUCTIONS FOR DEVICES WITH PRV CONTROL BOARD	8
11.1 MAIN WINDOW	8
11.1.1 STATUS INDICATION	8
11.1.2 SCREEN LOCK	8
11.1.3 WIDGETS	9
11.1.4 SETPOINT	10
11.2 MENU	11
11.2.1 STATUS	12
11.2.2 NIGHT COOLING	14
11.2.3 BOOST	15
11.2.4 DATE & TIME	15
11.2.5 WEEKLY SCHEDULE	16
11.2.5.1 EDIT EVENT	17
11.2.5.2 COPY WEEKDAY	17
11.2.5.3 COPY EVENT	18
11.2.5.4 RESET ALL EVENTS IN WEEKDAYS	18
11.2.6 FILTERS	19
11.2.7 ALARMS	19
11.2.8 SERVICE	20
11.2.8.1 VENTILATION MODE	21
11.2.8.2 DX COOLER	22
11.2.8.3 FANS	23
11.2.8.3.1 SAF	24
11.2.8.3.2 EAF	25
11.2.8.3.3 OTHER	26
11.2.8.4 WATER HEATER	27
11.2.8.5 VENTILATION	28
11.2.8.6 PI	29
11.2.8.6.1 SYSTEM	30
11.2.8.6.2 ROOM	30
11.2.8.6.3 HEATER	30
11.2.8.6.4 PREHEATER	30
11.2.8.6.5 BYPASS/ROTOR	31
11.2.8.6.6 CHILLER	31
11.2.8.6.7 SAF	31

11.2.8.6.8 EAF	31
11.2.8.7 ANTIFROST	32
11.2.8.8 FILTERS	33
11.2.8.9 PRESSURE	34
11.2.8.10 CO ₂	35
11.2.8.11 HUMIDITY	36
11.2.8.12 COMMUNICATION	36
11.2.8.13 OTHER	37
11.2.8.14 FACTORY SETTINGS	38
11.2.8.15 LOGOUT	38
11.2.9 SETTINGS	38
11.2.10 ABOUT	39
12. INSTRUCTIONS FOR DEVICES WITH MCB/MINIMCB CONTROL BOARD	40
12.1 MAIN WINDOW	40
12.1.1 STATUS INDICATION	40
12.1.2 SCREEN LOCK	42
12.1.3 WIDGETS	43
12.1.4 SETPOINT	44
12.2 MENU	44
12.2.1 STATUS	46
12.2.2 NIGHT COOLING	48
12.2.3 BOOST	49
12.2.4 MODE	50
12.2.4.1 BUILDING PROTECTION	50
12.2.4.2 ECONOMY	50
12.2.4.3 COMFORT	51
12.2.5 FILTERS	51
12.2.6 HEATING SEASON	52
12.2.7 DATE & TIME	53
12.2.8 WEEKLY SCHEDULE	54
12.2.9 HOLIDAY SCHEDULE	54
12.2.10 ALARMS	55
12.2.11 ALARMS HISTORY	55
12.2.12 OTHER	56
12.2.13 SETTINGS	56
12.2.14 ADJUSTER	56
12.2.14.1 AIRFLOW	57
12.2.14.1.1 SUPPLY	57
12.2.14.1.2 EXTRACT	57
12.2.14.1.3 OTHER	58
12.2.14.2 PID	59
12.2.14.2.1 HEATER	60
12.2.14.2.2 PREHEATER	60
12.2.14.2.3 HEAT EXCHANGER	60
12.2.14.2.4 FANS PRESSURE	61
12.2.14.2.5 HYDRAULIC COOLER	61

12.2.14.2.6 FANS BY TEMPERATURE	61
12.2.14.2.7 RECIRCULATION BY SET POINT	61
12.2.14.3 MANUAL CONTROL	62
12.2.14.3.1 BLOCK VENTILATION CONTROL	62
12.2.14.3.2 HEATER	63
12.2.14.3.3 PREHEATER	64
12.2.14.3.4 FANS	64
12.2.14.3.5 HYDRAULIC COOLER	65
12.2.14.3.6 RECIRCULATION DAMPER	66
12.2.14.3.7 SUPPLY / EXTRACT DAMPER	67
12.2.14.3.8 BYPASS	68
12.2.14.3.9 ROTOR	69
12.2.14.3.10 DX COOLER	70
12.2.14.3.11 FIRE DAMPER	71
12.2.14.3.12 OTHER	72
12.2.14.4 STATUS	73
12.2.14.4.1 TEMPERATURE SENSORS	74
12.2.14.4.2 FANS	75
12.2.14.4.3 HYDRAULIC COOLER	75
12.2.14.4.4 ROTOR	75
12.2.14.4.5 FIRE DAMPER	76
12.2.14.4.6 STATUS INDICATION	76
12.2.14.4.7 OTHER	76
12.2.14.4.8 VERSION	77
12.2.14.4.9 HEATER	77
12.2.14.4.10 PREHEATER	77
12.2.14.4.11 BYPASS DAMPER	78
12.2.14.4.12 RECIRCULATION DAMPER	78
12.2.14.4.13 SUPPLY / EXTRACT DAMPER	78
12.2.14.4.14 DX COOLER	79
12.2.14.4.15 SENSORS	79
12.2.14.5 SAVE SETTINGS	80
12.2.14.6 LOGOUT	80
12.2.15 SERVICE	80
12.2.15.1 MAIN	81
12.2.15.1.1 BLOCK VENTILATION CONTROL	82
12.2.15.1.2 AIR TEMPERATURE CONTROL	82
12.2.15.1.3 AIR TEMPERATURE PROTECTION	82
12.2.15.1.4 SYSTEM MODE SWITCH	82
12.2.15.1.5 FANS SPEED SWITCH	83
12.2.15.1.6 AIR FILTERS PROTECTION	83
12.2.15.1.7 FIRE PROTECTION	83
12.2.15.1.8 CONTROLLER CABINET HEATING	84
12.2.15.1.9 CO ₂ REDUCTION FUNCTION	84
12.2.15.1.10 COOKING HOOD	84
12.2.15.1.11 CALIBRATIONS	84

12.2.15.2 FANS	85
12.2.15.2.1 FANS SPEED CONTROL	85
12.2.15.2.2 FANS VOLTAGE	85
12.2.15.2.3 FANS PROTECTION	86
12.2.15.3 DAMPERS	86
12.2.15.3.1 SUPPLY / EXTRACT DAMPER	86
12.2.15.3.2 RECIRCULATION DAMPER	86
12.2.15.3.3 FIRE DAMPER	87
12.2.15.4 HEAT EXCHANGER	87
12.2.15.4.1 TYPE	87
12.2.15.4.2 FROST PROTECTION	88
12.2.15.5 HEATERS	89
12.2.15.5.1 HEATER	90
12.2.15.5.2 PREHEATER	90
12.2.15.5.3 ELECTRICAL HEATERS COOLING	91
12.2.15.5.4 HYDRAULIC HEATERS PROTECTION	91
12.2.15.5.5 CONTROL POSITION	91
12.2.15.6 COOLERS	92
12.2.15.7 DIGITAL INPUTS	93
12.2.15.7.1 EXTERNAL CONTROL	93
12.2.15.7.2 FANS PROTECTION	94
12.2.15.7.3 HEATER PROTECTION	94
12.2.15.7.4 COOLER PROTECTION	94
12.2.15.7.5 FILTERS PRESSURE RELAY	94
12.2.15.7.6 FIRE DAMPER	95
12.2.15.7.7 HEAT EXCHANGER	95
12.2.15.7.8 PREHEATER PROTECTION	95
12.2.15.8 SENSORS	96
12.2.15.8.1 0-10VDC SENSORS	96
12.2.15.8.2 TEMPERATURE SENSORS	97
12.2.15.9 COMMUNICATION	101
12.2.15.9.1 INTERNAL PORT MODBUS	102
12.2.15.9.2 BMS PORT MODBUS	103
12.2.15.10 PASSWORDS	103
12.2.15.11 RESTORE DEFAULTS	103
12.2.15.12 SAVE SETTINGS	104
12.2.15.13 LOGOUT	104
12.2.16 ABOUT	104
13. DECLARATION OF CONFORMITY	105
14. RECYCLING	106
15. WARRANTY	107

1. SAFETY INSTRUCTIONS AND WARNINGS

The main safety instructions:

- Operate the equipment strictly within the provided temperature range.
- Prevent the possibility of moisture in the equipment.
- Keep the equipment away from direct sunlight.
- Protect the equipment from mechanical damage (hits, scratches, etc.).
- Mounting and installation work can only be performed by a qualified person.
- Electric connection must be performed according to electrical schematics and the technical requirements of the manufacturer.
- Avoid the use of foreign objects in the equipment.

2. PRODUCT INFORMATION

3. DESCRIPTION

The Ptouch remote control panel is designed for:

- SALDA ventilation units and other devices based on PRV (RIS EKO 3.0, RIRS EKO 3.0, Smarty 3R VER/VEL 3.0), MCB/MiniMCB (Smarty, SmartAir, SmartAir Compact) controllers;
- Modbus-controlled devices.



Attention!

- Some of the articles in this guide may not apply to you. It depends on the type of the control board on your device.
- Always choose accessories manufactured by Salda UAB. Otherwise, the warranty will be void.

4. TECHNICAL DATA

PARAMETER	UNITS	VALUE
Mounting		Surface
Voltage	V (AC/DC)	24 (max 4W)
Communication line		ModBus RS485/RS422
Cable length	[m]	13
Dimensions (W x H x D)	[mm]	124 x 84 x 18
Weight	[g]	150g (+-10g)
Protection class		IP-20
Ambient temperature	[C]	5 - 35
Relative humidity	[%]	30-90 (without condensation)

5. PACKAGE

Accessories to a Ptouch:

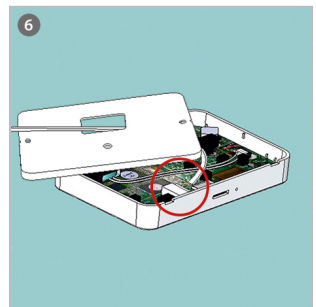
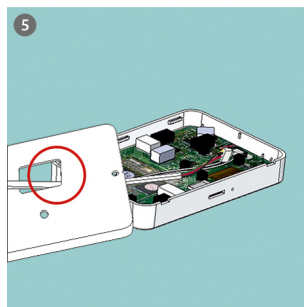
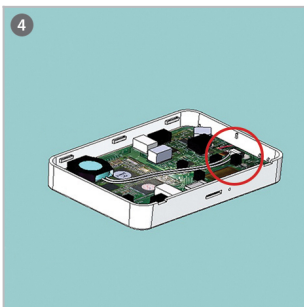
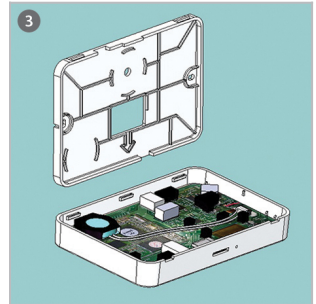
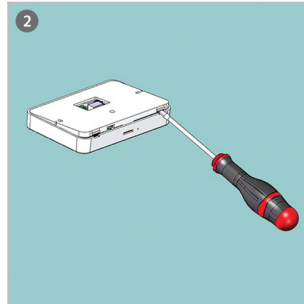
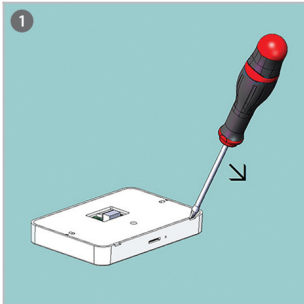
- 1x Ptouch control panel;
- 2x Cables (RJ45 for MCB/MiniMCB and RJ10 for PRV);
- 1x Manual;
- 2x Fastening elements (screw 3,9 x 25 DIN 7981 – 2 pcs, nylon plug 5x25 – 2 pcs, hammered steel plug 12x30 – 2 pcs);
- 1x External RTC battery;
- 1x Quick Launch Guide.

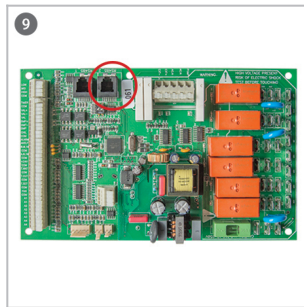
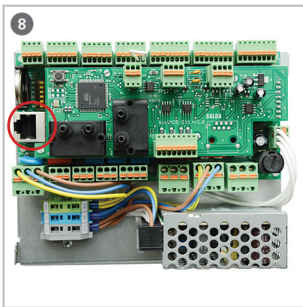
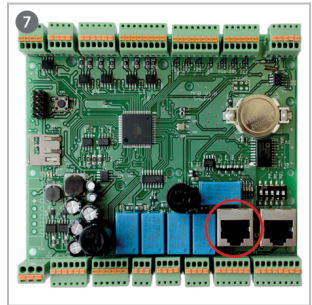
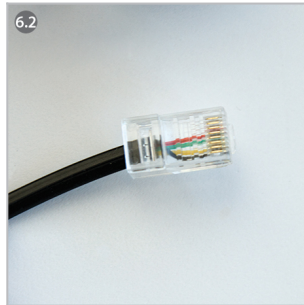
6. INSTALLATION

7. CONNECTING PTOUCH TO AIR HANDLING UNIT

Use the following steps to connect a Ptouch remote controller to an air handling unit:

- Unpack the Ptouch remote controller
- Take off the back cover from the remote controller with a screwdriver **pic. 1-3**;
- Connect an external battery to the X1 connector slot **pic. 4**;
- Put the cable through the cover **pic. 5**;
- Connect the cable to the K2 connector slot on the control panel **pic. 6**:
 - Use the cable with an RJ10 connector for the connection to the air handling unit with PRV control board **pic. 6.1**;
 - Use the cable with an RJ45 connector for the connection to the air handling unit with a MCB or mini MCB control board **pic. 6.2**.
- Plug in the RJ45 cable connector to the X18 MCB **pic. 7** or X18 miniMCB **pic. 8** connection slot on the control board. Make sure that the unit is switched off during the operation. If the ventilation unit is equipped with a PRV control board, plug the RJ10 cable connector into the RS485_2 slot on the equipment casing, **pic 9**;
- Plug the ventilation unit into the electric circuit.



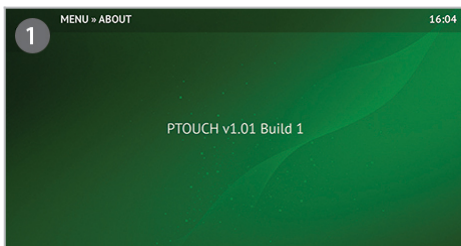


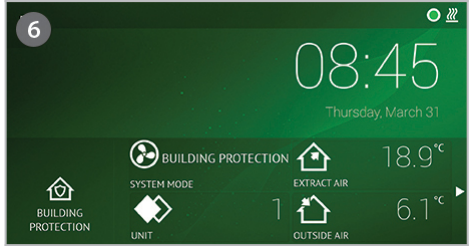
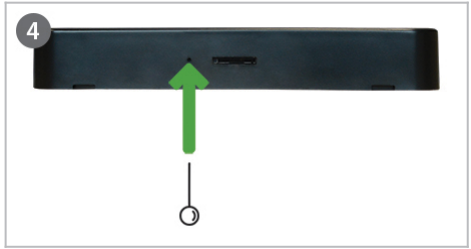
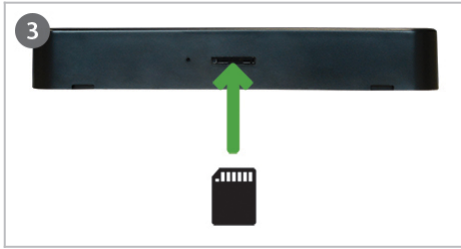
8. SOFTWARE UPDATE

The firmware updating requires a MicroSD card.

- Go to http://www.salda.it/en/products/category/download_page/ and check if you have the latest version already. Check the version on Ptouch. MENU > ABOUT. **Pic. 1-2.**
- Download the latest firmware version to your PC.
- Extract the files to the root folder of the MicroSD card.
- Put the MicroSD card into the slot located at the bottom of the Ptouch. **Pic. 3.**
- Press the reset button with a needle. The button is located in the pin hole next to the MicroSD card slot. **Pic. 4.**
- Information about updating the status will appear on the screen. Wait for about 2 minutes until the update is finished and the Ptouch will reload automatically. **Pic. 5.**
- After the installation is successfully completed, please remove the MicroSD card. **Pic. 6.**

If any problems occur during the update, please contact your distributor.



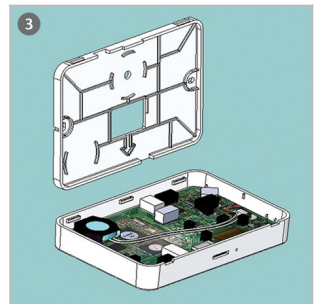
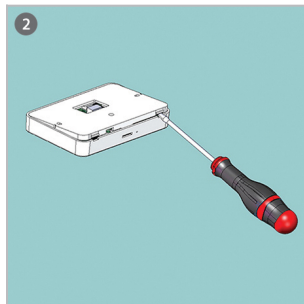
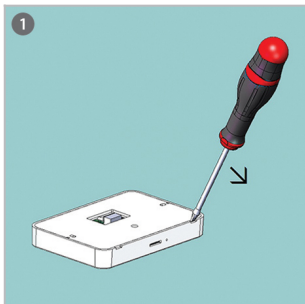


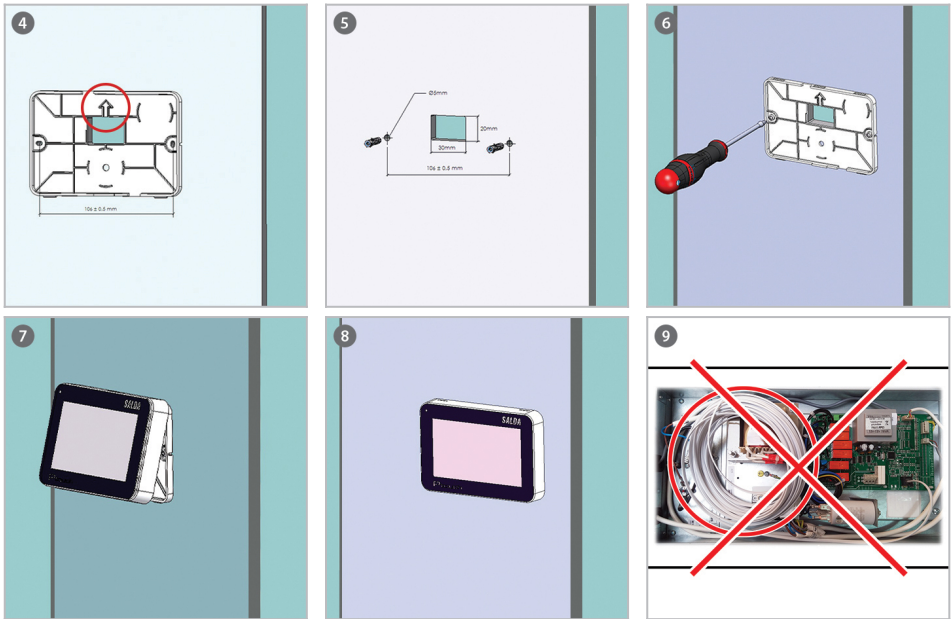
9. HOW TO MOUNT PTOUCH ON THE WALL?

- Turn the panel over and use a screwdriver to lift the cover as shown in **pic. 1-3**.
- Put it at the desired location on the wall **pic. 4**. The arrow must point upwards. Mark the positions of the mounting holes (distance centre-to-centre is 106 ± 0.5 mm). Also mark the position of the square hole for the cable (30 x 20 mm).
- Drill two 5 mm holes at the marked positions for the nylon plugs and the hole throughout the wall to install the cable **pic. 5** Insert the nylon plugs. **NOTE:** You can use special metal plugs (included) instead of the nylon ones.
- Use the included 2.9x16 DIN7981C screws and mount the panel to the wall as indicated in **pic. 6**. Connect the included cable to the panel and pass the other end of the cable through the square hole in the wall.
- Put the panel on the mounting bracket by aligning the upper indentations **pic. 7-8**. Then, push the lower part of the panel.

IMPORTANT: IT IS FORBIDDEN to leave the remaining remote controller's cable in the AHU's control box pic. 9.

IMPORTANT: Do not forget to connect the cable before.





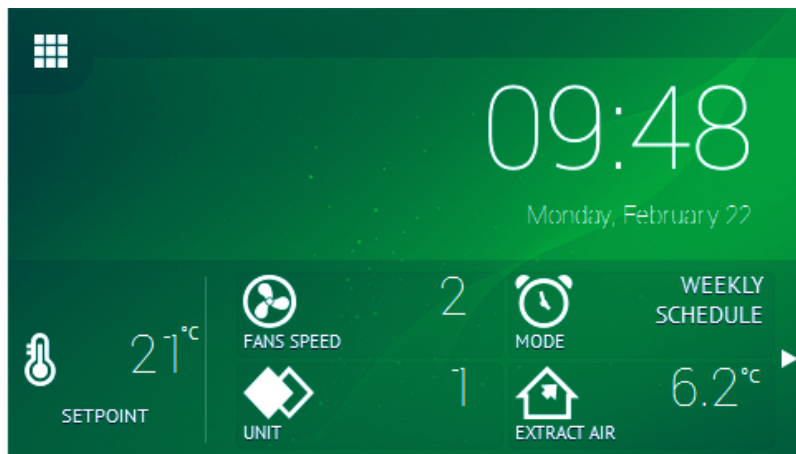
10. TROUBLESHOOTING

FAULT	SUGGESTED ACTION
Remote control panel doesn't turn on.	<ul style="list-style-type: none"> • Check if ventilation unit is turned on. • Check connection cable of the control panel • Touch the screen for at least 3 sec.
Remote panel can't connect to the ventilation unit	<ul style="list-style-type: none"> • Check the connection cable • Check the connection settings
Clock resets after restarting of the ventilation unit (PRV control board)	<ul style="list-style-type: none"> • Check if backup power battery is connected
One or several functions do not work properly	<ul style="list-style-type: none"> • Update the software
Remote panel does not start up	<ul style="list-style-type: none"> • Update the software
Remote panel does not beep after touching	<ul style="list-style-type: none"> • Check the audio settings
The colors are not correctly reflected on the screen	<ul style="list-style-type: none"> • Contact the supplier
Control panel doesn't work	<ul style="list-style-type: none"> • Contact the supplier
Unable to update a software of the remote panel	<ul style="list-style-type: none"> • Contact the supplier

11. INSTRUCTIONS FOR DEVICES WITH PRV CONTROL BOARD

11.1 MAIN WINDOW

MAIN WINDOW



NO.	LABEL
1	STATUS INDICATION
2	SCREEN LOCK
3	WIDGETS
4	SETPOINT


11.1.1 STATUS INDICATION

MAIN WINDOW » STATUS INDICATION

11.1.2 SCREEN LOCK

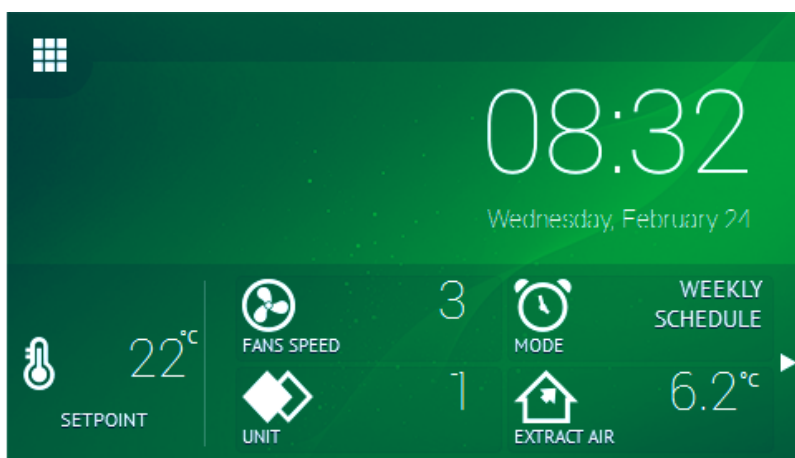
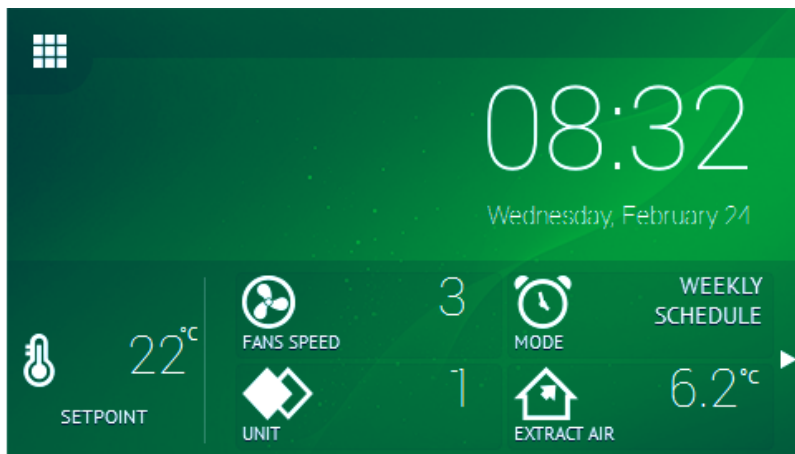
MAIN WINDOW » SCREEN LOCK



NO.	ICON	LABEL	DESCRIPTION
1		FANS SPEED	Range: [0 .. 3]
2		EXTRACT AIR	[°C]
3		EXTRACT AIR	Range: [0 .. 99 %]







NO.	ICON	LABEL	DESCRIPTION
4		OUTSIDE AIR	[°C]

11.1.3 WIDGETS

MAIN WINDOW » WIDGETS

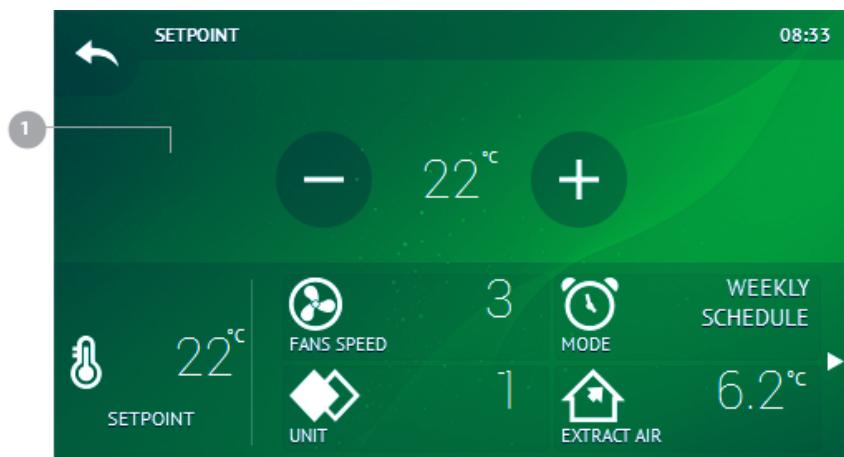



NO.	ICON	LABEL	DESCRIPTION
1		FANS SPEED	Range: [0 .. 3]
2			

NO.	ICON	LABEL	DESCRIPTION
3		MODE	Options: • <i>INACTIVE</i> • <i>ACTIVE</i>
4		EXTRACT AIR	[°C]
5		OUTSIDE AIR	[°C]
6		EXTRACT AIR	Range: [0 .. 99 %]
7		SUPPLY AIR	[°C]
8		EXHAUST AIR	[°C]
9		CO ₂	[ppm]

11.1.4 SETPOINT

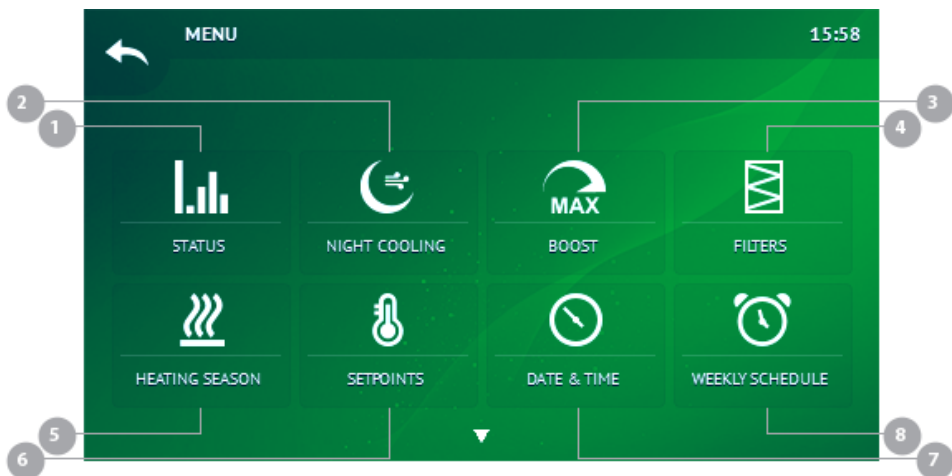
MAIN WINDOW » SETPOINT



NO.	ICON	LABEL	DESCRIPTION
1		SETPOINT	Range: [15 .. 30 °C]

11.2 MENU

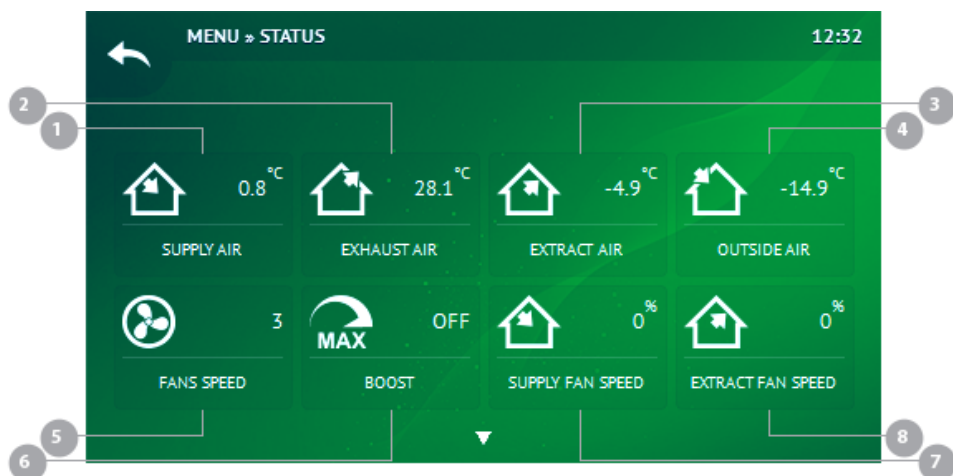
MENU













NO.	ICON	LABEL
1		STATUS
2		NIGHT COOLING
3		BOOST
4		DATE & TIME
5		WEEKLY SCHEDULE
6		FILTERS
7		ALARMS
8		SERVICE
9		SETTINGS
10		ABOUT

11.2.1 STATUS

MENU » STATUS

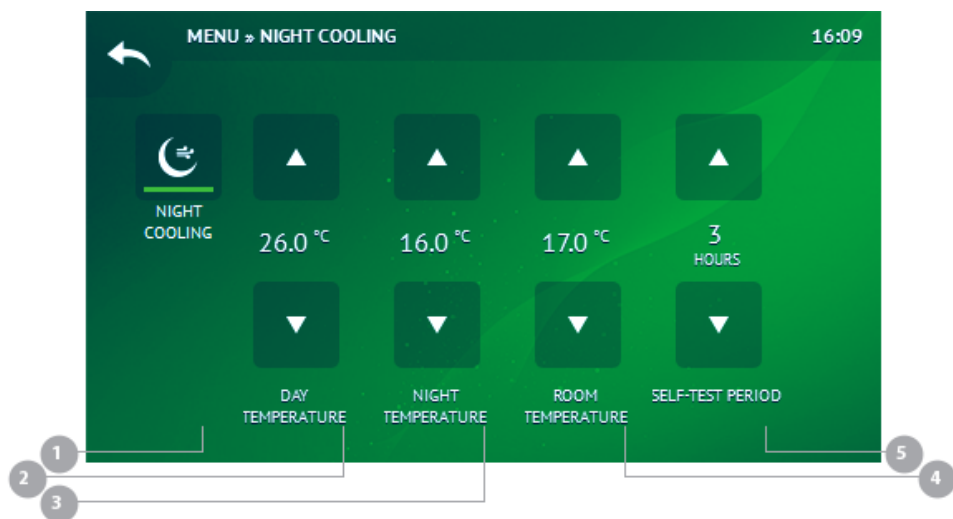


NO.	ICON	LABEL	DESCRIPTION
1		SUPPLY AIR	[°C]
2		EXHAUST AIR	[°C]
3		EXTRACT AIR	[°C]
4		OUTSIDE AIR	[°C]
5		FANS SPEED	Range: [0 .. 3]
6		BOOST	Options: • <i>DISABLED</i> • <i>ENABLED</i>
7		SUPPLY FAN SPEED	Range: [0 .. 100 %]
8		EXTRACT FAN SPEED	Range: [0 .. 100 %]
9		FANS STATE	Options: • <i>OFF</i> • <i>ON</i>
10		EXTRACT AIR	Range: [0 .. 99 %]
11		SETPOINT	Range: [15 .. 30 °C]

NO.	ICON	LABEL	DESCRIPTION
12		STANDBY	Options: • <i>INACTIVE</i> • <i>ACTIVE</i>
13		SYSTEM MODE	Options: • <i>MANUAL</i> • <i>WEEKLY SCHEDULE</i>
14		HEATER	Options: • <i>OFF</i> • <i>ON</i>
15		PREHEATER	Options: • <i>OFF</i> • <i>ON</i>
16		CO ₂	[ppm]
17		ROTOR	[rpm]
18		SUPPLY FAN SPEED RPM	[rpm]
19		EXTRACT FAN SPEED RPM	[rpm]
20		RETURN WATER TEMPERATURE	[°C]
21		OUTSIDE AIR DAMPER ACTUATOR	Range: [0 .. 1]
22		SEASON	Options: • <i>SUMMER</i> • <i>WINTER</i> • <i>ALWAYS</i>
23		SOFTWARE VERSION	

11.2.2 NIGHT COOLING

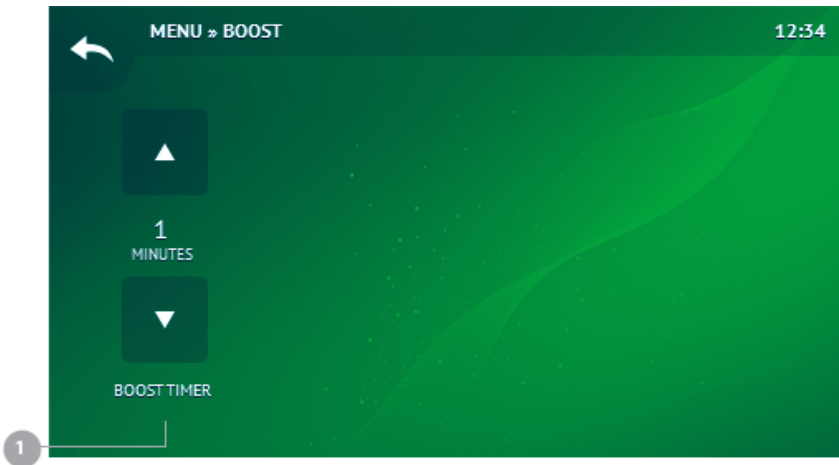
MENU » NIGHT COOLING



NO.	LABEL	DESCRIPTION
1	NIGHT COOLING	Options: • OFF • ON
2	DAY TEMPERATURE	Range: [15 .. 40 °C]
3	NIGHT TEMPERATURE	Range: [0 .. 25 °C]
4	ROOM TEMPERATURE	Range: [10 .. 30 °C]
5	SELF-TEST PERIOD	Range: [0 .. 600 HOURS]

11.2.3 BOOST

MENU » BOOST



NO.	LABEL	DESCRIPTION
1	BOOST TIMER	Range: [0 .. 255 MINUTES]

11.2.4 DATE & TIME

MENU » DATE & TIME



NO.	LABEL	DESCRIPTION
1	YEAR	Range: [0 .. 255 YEAR]
2	MONTH	Range: [1 .. 12 MONTH]
3	DAY	Range: [0 .. 31 DAY]
4	HOURS	Range: [0 .. 23 HOURS]
5	MINUTES	Range: [0 .. 59 MINUTES]

11.2.5 WEEKLY SCHEDULE

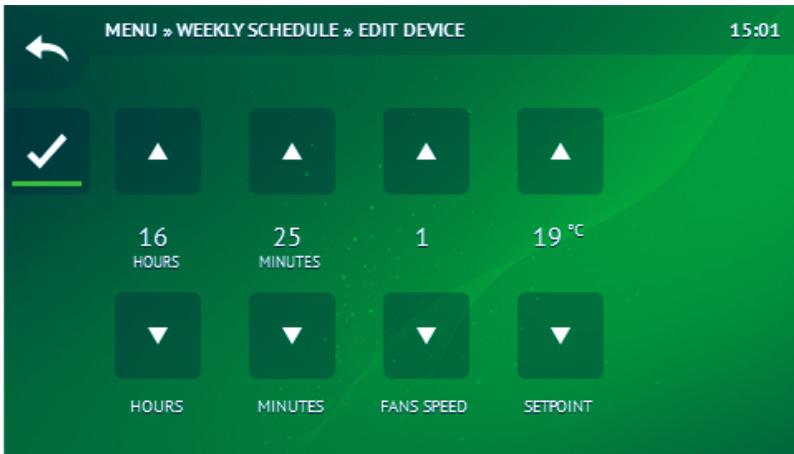
MENU » WEEKLY SCHEDULE



NO.	ICON	LABEL
1		EDIT EVENT
2		COPY WEEKDAY
3		COPY EVENT
4		RESET ALL EVENTS IN WEEKDAYS

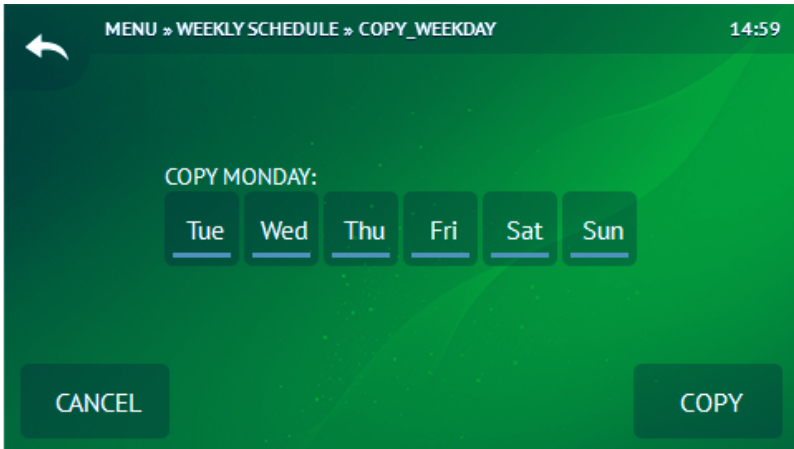
11.2.5.1 EDIT EVENT

MENU » WEEKLY SCHEDULE » EDIT EVENT



11.2.5.2 COPY WEEKDAY

MENU » WEEKLY SCHEDULE » COPY WEEKDAY



11.2.5.3 COPY EVENT

MENU » WEEKLY SCHEDULE » COPY EVENT

MENU » WEEKLY SCHEDULE » COPY_EVENT 14:59

COPY MONDAY EVENT 1:

Mon	Tue	Wed	Thu	Fri	Sat	Sun
2	3	4	5	6	7	8

CANCEL COPY

11.2.5.4 RESET ALL EVENTS IN WEEKDAYS

MENU » WEEKLY SCHEDULE » RESET ALL EVENTS IN WEEKDAYS

MENU » WEEKLY SCHEDULE » RESET_ALL_EVENTS_IN 14:59

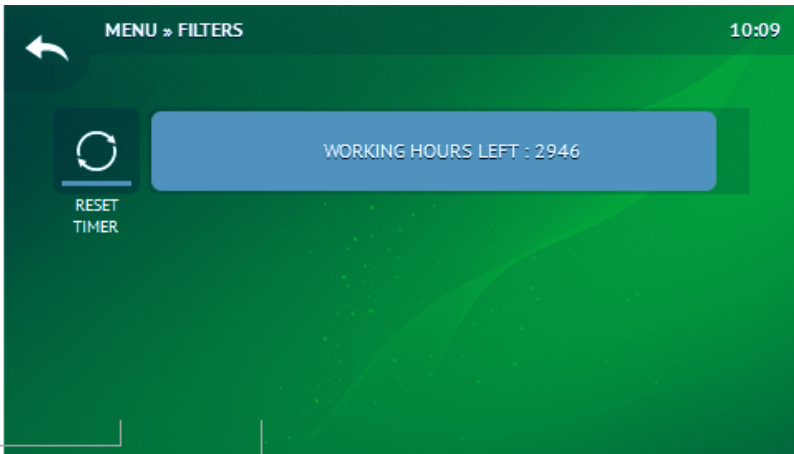
RESET_ALL_EVENTS_IN:

Mon	Tue	Wed	Thu	Fri	Sat	Sun
-----	-----	-----	-----	-----	-----	-----

CANCEL RESET

11.2.6 FILTERS

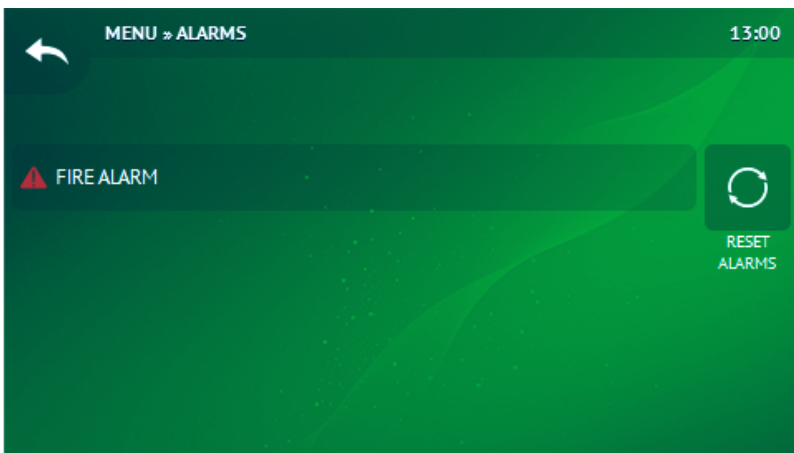
MENU » FILTERS



NO.	LABEL	DESCRIPTION
1	RESET TIMER	Options: • <i>NO ACTION</i> • <i>ACTIVATE</i>
2	WORKING DAYS LEFT	[HOURS]














11.2.7 ALARMS

MENU » ALARMS



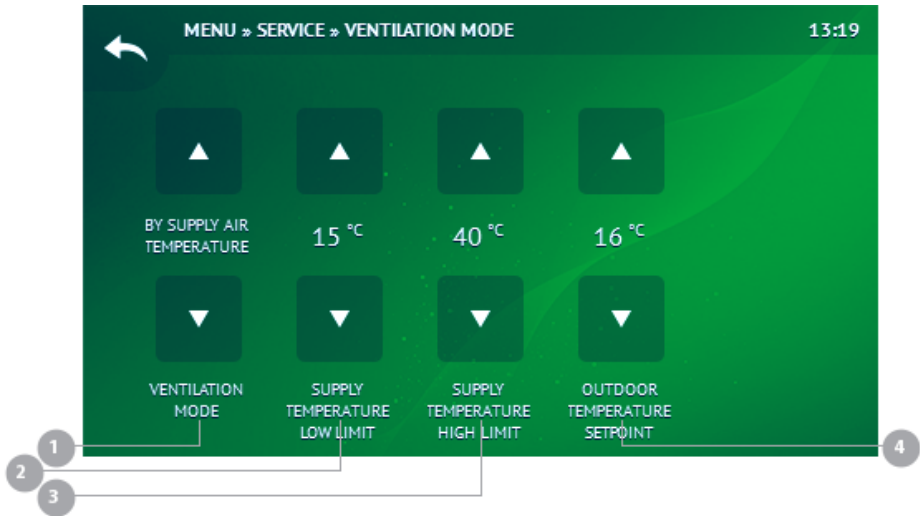
11.2.8 SERVICE

MENU » SERVICE

NO.	ICON	LABEL
1		VENTILATION MODE
2		DX COOLER
3		FANS
4		WATER HEATER
5		VENTILATION
6	PI	PI
7		ANTIFROST
8		FILTERS
9		PRESSURE
10		CO ₂
11		HUMIDITY
12		COMMUNICATION
13	•••	OTHER
14		FACTORY SETTINGS
15		LOGOUT

11.2.8.1 VENTILATION MODE

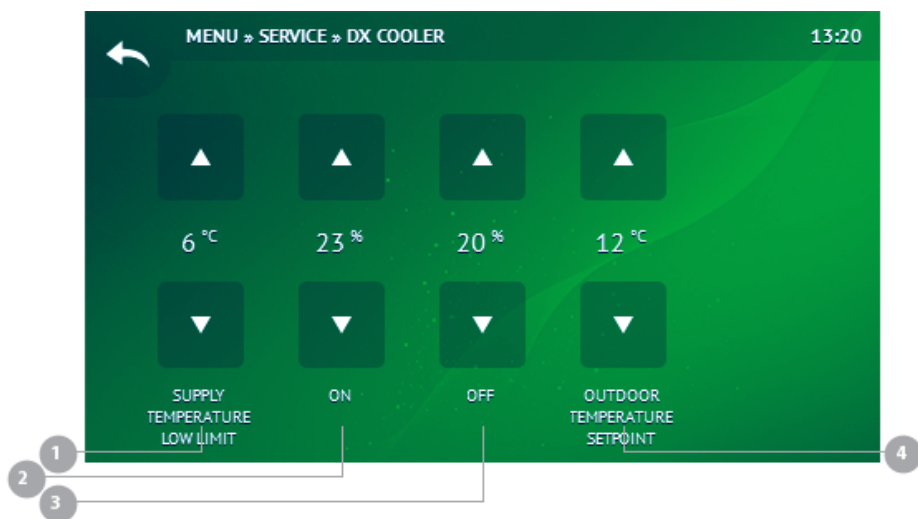
MENU » SERVICE » VENTILATION MODE



NO.	LABEL	DESCRIPTION
1	VENTILATION MODE	Options: <ul style="list-style-type: none"> • BY SUPPLY AIR TEMPERATURE • BY EXTRACT AIR TEMPERATURE • BY 3 DAYS OUTSIDE AIR AVERAGE TEMPERATURE
2	SUPPLY TEMPERATURE LOW LIMIT	Range: [15 .. 24 °C]
3	SUPPLY TEMPERATURE HIGH LIMIT	Range: [25 .. 40 °C]
4	OUTDOOR TEMPERATURE SETPOINT	Range: [10 .. 30 °C]

11.2.8.2 DX COOLER

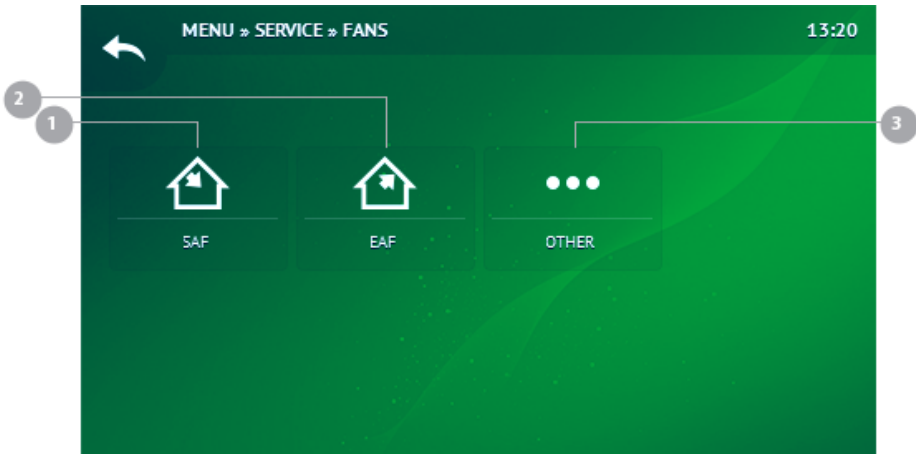
MENU » SERVICE » DX COOLER






NO.	LABEL	DESCRIPTION
1	SUPPLY TEMPERATURE LOW LIMIT	Range: [0 .. 15 °C]
2	ON	Range: [0 .. 99 %]
3	OFF	Range: [0 .. 0 %]
4	OUTDOOR TEMPERATURE SETPOINT	Range: [10 .. 30 °C]

11.2.8.3 FANS

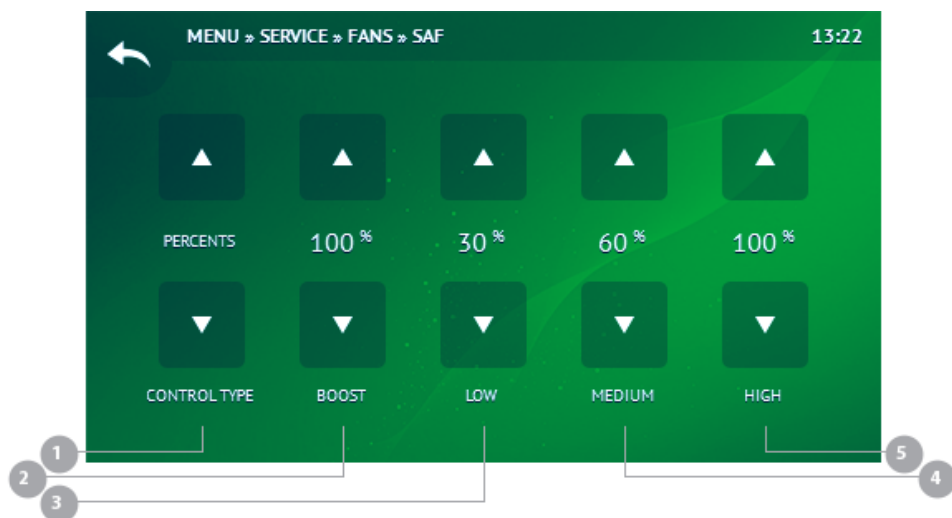
MENU » SERVICE » FANS



NO.	ICON	LABEL
1		SAF
2		EAF
3		OTHER

11.2.8.3.1 SAF

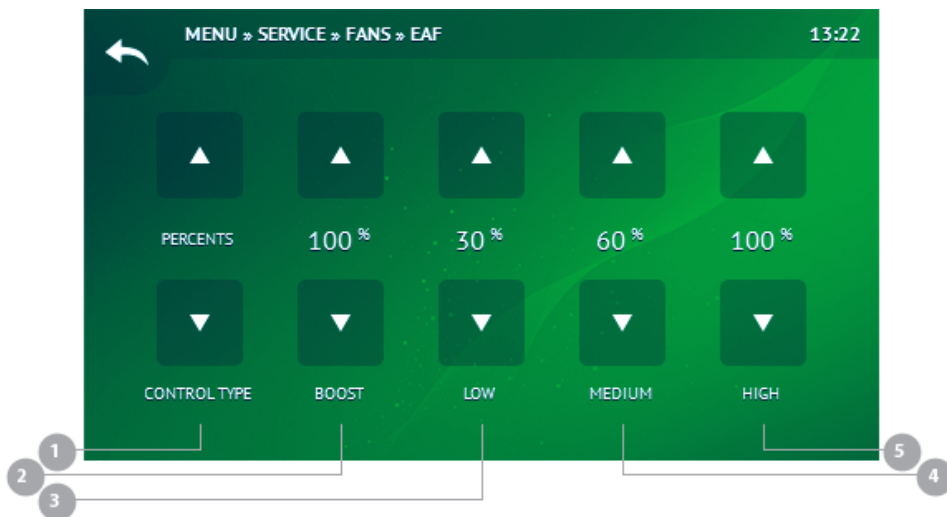
MENU » SERVICE » FANS » SAF



NO.	LABEL	DESCRIPTION
1	CONTROL TYPE	Options: • PERCENTS • PRESSURE • AIRFLOW
2	LOW	Range: [0 .. 100 %]
3	MEDIUM	Range: [0 .. 100 %]
4	HIGH	Range: [0 .. 100 %]
5	BOOST	Range: [0 .. 100 %]
6	LOW	Range: [0 .. 2000 Pa]
7	MEDIUM	Range: [0 .. 2000 Pa]
8	HIGH	Range: [0 .. 2000 Pa]
9	AIRFLOW	Range: [0 .. 65535 m ³ /h]
10	X FACTOR	Range: [0 .. 1000]
11	K FACTOR	Range: [0 .. 1000]

11.2.8.3.2 EAF

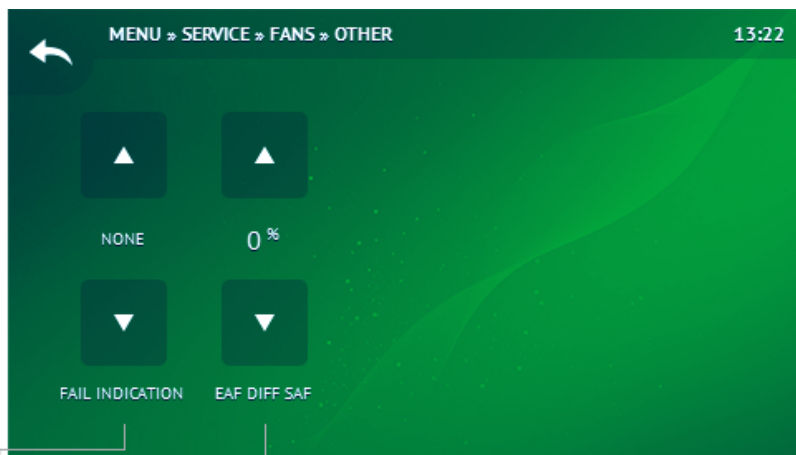
MENU » SERVICE » FANS » EAF



NO.	LABEL	DESCRIPTION
1	CONTROL TYPE	Options: • PERCENTS • PRESSURE • AIRFLOW
2	LOW	Range: [0 .. 100 %]
3	MEDIUM	Range: [0 .. 100 %]
4	HIGH	Range: [0 .. 100 %]
5	BOOST	Range: [0 .. 100 %]
6	LOW	Range: [0 .. 2000 Pa]
7	MEDIUM	Range: [0 .. 2000 Pa]
8	HIGH	Range: [0 .. 2000 Pa]
9	AIRFLOW	Range: [0 .. 65535 m ³ /h]
10	K FACTOR	Range: [0 .. 1000]
11	X FACTOR	Range: [0 .. 1000]

11.2.8.3.3 OTHER

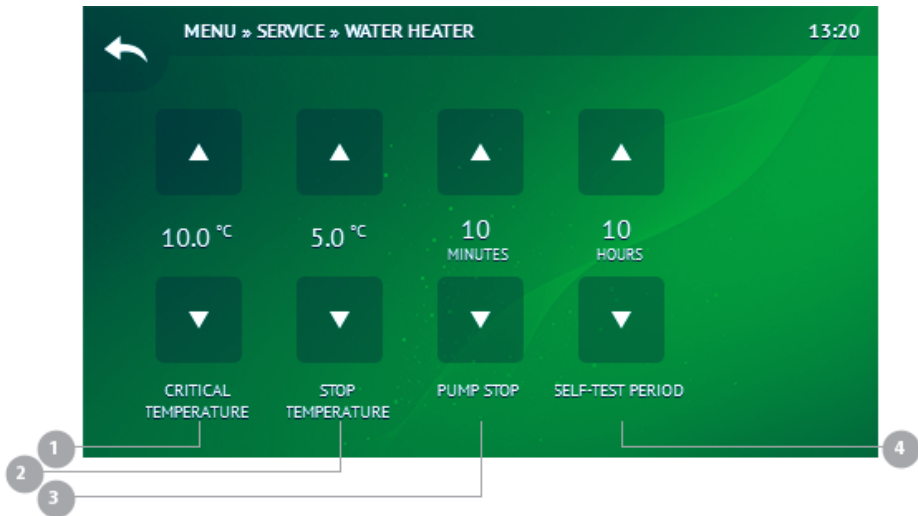
MENU » SERVICE » FANS » OTHER



NO.	LABEL	DESCRIPTION
1	FAIL INDICATION	Options: • <i>NONE</i> • <i>COUNT RPM</i>
2	EAF DIFF SAF	Range: [-100 .. 100 %]

11.2.8.4 WATER HEATER

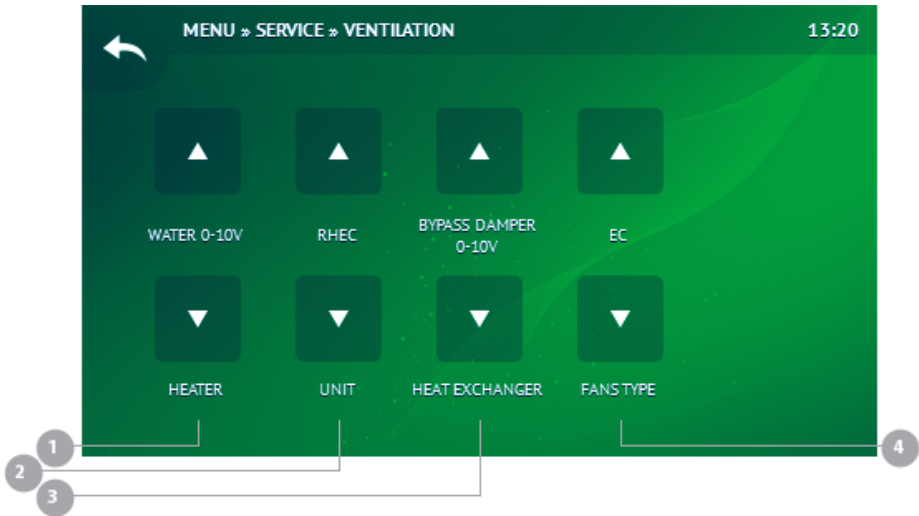
MENU » SERVICE » WATER HEATER



NO.	LABEL	DESCRIPTION
1	STOP TEMPERATURE	Range: [0 .. 0 °C]
2	CRITICAL TEMPERATURE	Range: [0 .. 20 °C]
3	PUMP STOP	Range: [10 .. 20 MINUTES]
4	SELF-TEST PERIOD	Range: [0 .. 1000 HOURS]

11.2.8.5 VENTILATION

MENU » SERVICE » VENTILATION



NO.	LABEL	DESCRIPTION
1	HEATER	Options: <ul style="list-style-type: none"> • ELECTRICAL ON/OFF • ELECTRICAL 0-10V • ELECTRICAL ESKM • WATER VAL+- • WATER 0-10V • H 0-10V
2	UNIT	Options: <ul style="list-style-type: none"> • RHC • RHEC • TK
3	HEAT EXCHANGER	Options: <ul style="list-style-type: none"> • BYPASS DAMPER DMP • BYPASS DAMPER 0-10V • ROTOR ON/OFF • ROTOR 0-10V
4	FANS TYPE	Options: <ul style="list-style-type: none"> • AC • EC • EC 0-100%

11.2.8.6 PI

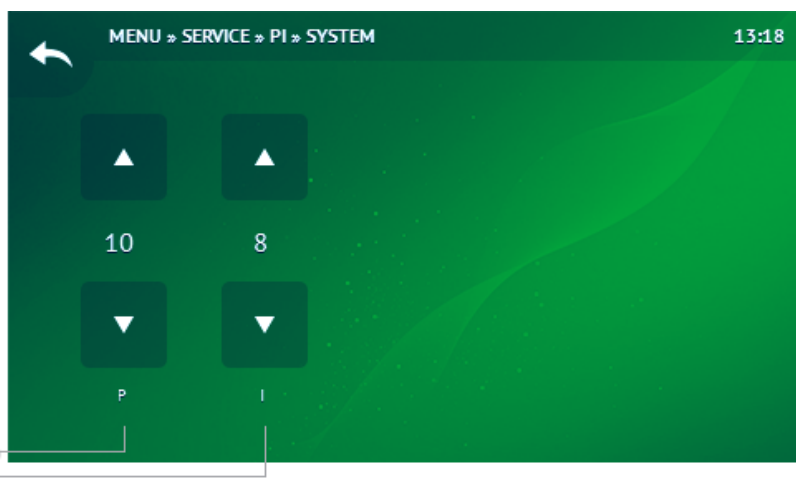
MENU » SERVICE » PI



NO.	ICON	LABEL
1	PI	SYSTEM
2	PI	ROOM
3	PI	HEATER
4	PI	PREHEATER
5	PI	BYPASS/ROTOR
6	PI	CHILLER
7	PI	SAF
8	PI	EAF

11.2.8.6.1 SYSTEM

MENU » SERVICE » PI » SYSTEM



NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.2 ROOM

MENU » SERVICE » PI » ROOM

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.3 HEATER

MENU » SERVICE » PI » HEATER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.4 PREHEATER

MENU » SERVICE » PI » PREHEATER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.5 BYPASS/ROTOR

MENU » SERVICE » PI » BYPASS/ROTOR

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.6 CHILLER

MENU » SERVICE » PI » CHILLER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]

11.2.8.6.7 SAF

MENU » SERVICE » PI » SAF

NO.	LABEL	DESCRIPTION
1	P	Range: [1 .. 65535]
2	I	Range: [1 .. 65535]

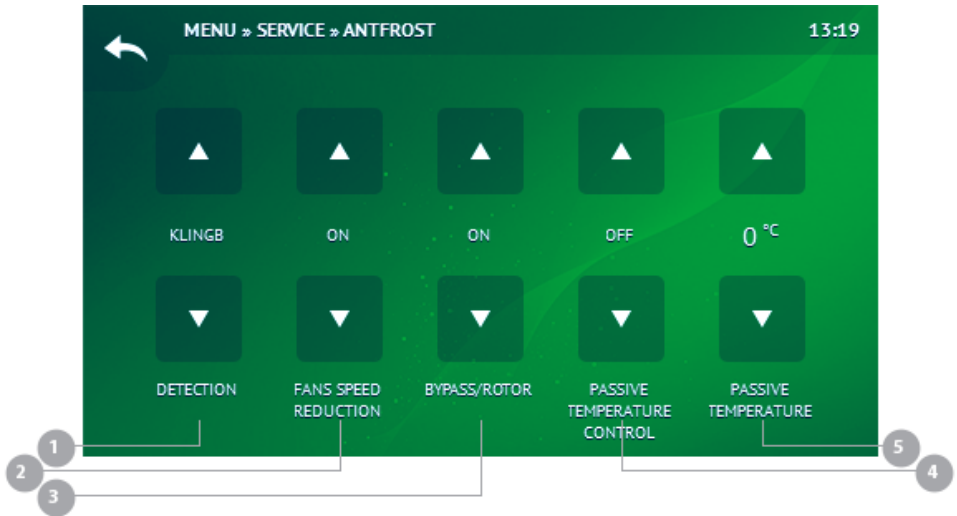
11.2.8.6.8 EAF

MENU » SERVICE » PI » EAF

NO.	LABEL	DESCRIPTION
1	P	Range: [1 .. 65535]
2	I	Range: [1 .. 65535]

11.2.8.7 ANTIFROST

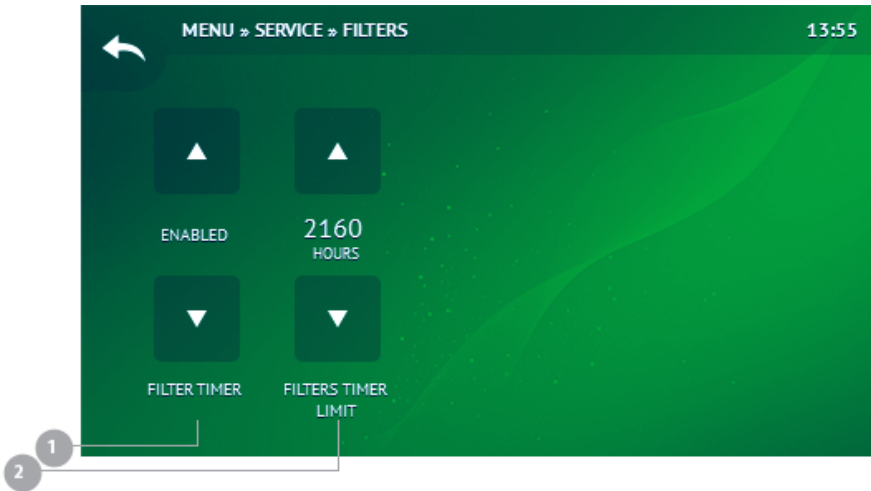
MENU » SERVICE » ANTIFROST



NO.	LABEL	DESCRIPTION
1	DETECTION	Options: <ul style="list-style-type: none"> • HEATEX • KLINGB • TSETPOINT • TOUTSIDE • DEWP PLATET • OFF
2	FANS SPEED REDUCTION	Options: <ul style="list-style-type: none"> • OFF • ON
3	BYPASS/ROTOR	Options: <ul style="list-style-type: none"> • OFF • ON
4	PASSIVE TEMPERATURE CONTROL	Options: <ul style="list-style-type: none"> • OFF • ON
5	PASSIVE TEMPERATURE	Range: [-10 .. 30 °C]
6	EXHAUST AIR TEMPERATURE	Range: [-30 .. 20 °C]
7	ROTOR PWM	Range: [0 .. 100 %]
8	DEFROST STOP TIME	Range: [0 .. 60]

11.2.8.8 FILTERS

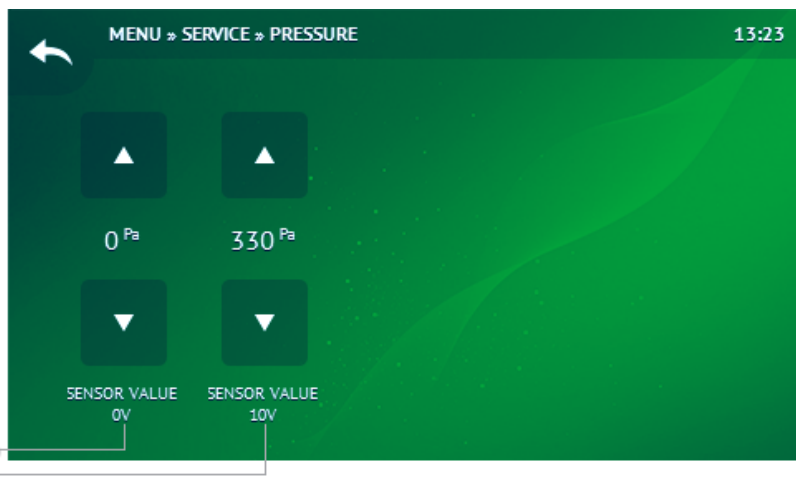
MENU » SERVICE » FILTERS



NO.	LABEL	DESCRIPTION
1	FILTER TIMER	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	FILTERS TIMER LIMIT	Range: [168 .. 6480 HOURS]

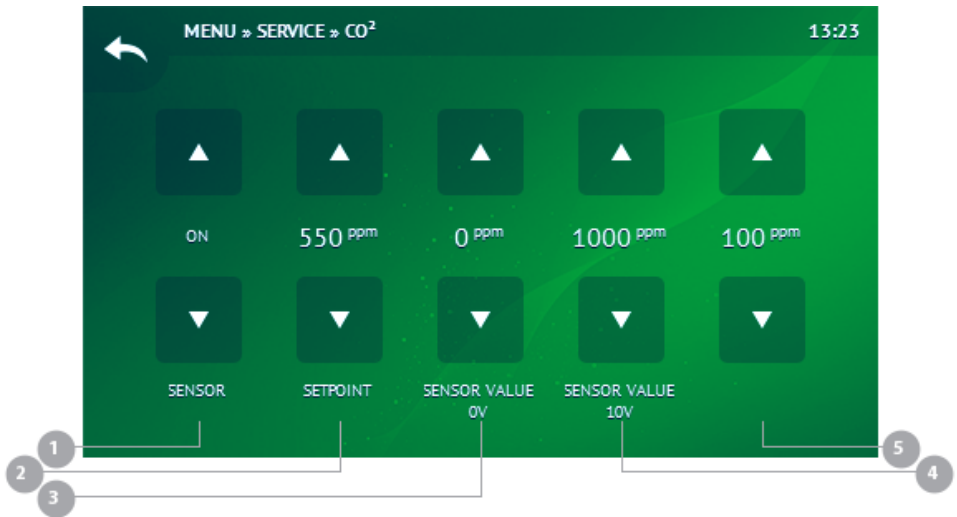
11.2.8.9 PRESSURE

MENU » SERVICE » PRESSURE



NO.	LABEL	DESCRIPTION
1	SENSOR VALUE 0V	Range: [0 .. 2000 Pa]
2	SENSOR VALUE 10V	Range: [0 .. 2000 Pa]

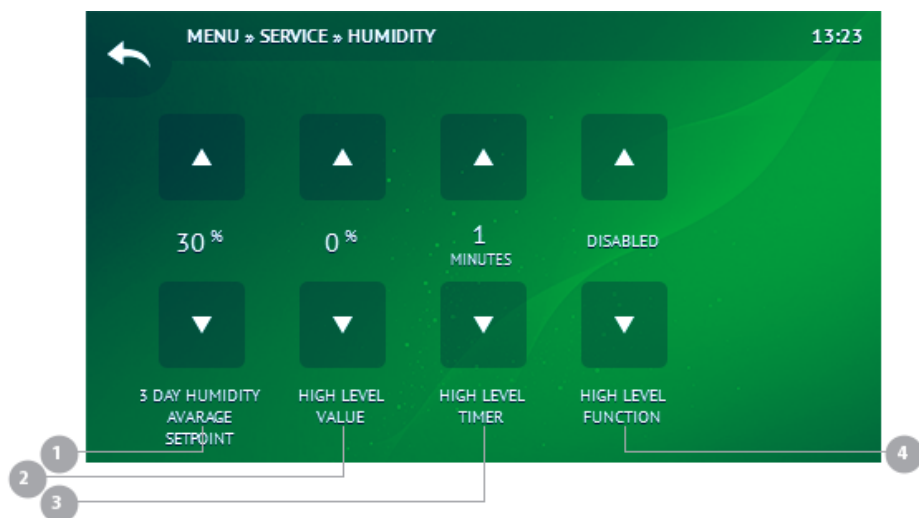
11.2.8.10 CO₂
 MENU » SERVICE » CO₂



NO.	LABEL	DESCRIPTION
1	SENSOR	Options: • OFF • ON
2	SETPOINT	Range: [10 .. 1000 ppm]
3	SENSOR VALUE 0V	Range: [0 .. 2000 ppm]
4	SENSOR VALUE 10V	Range: [0 .. 2000 ppm]
5	WHEN 100 PPM	Range: [0 .. 255 ppm]

11.2.8.11 HUMIDITY

MENU » SERVICE » HUMIDITY



NO.	LABEL	DESCRIPTION
1	3 DAY HUMIDITY AVERAGE SETPOINT	Range: [0 .. 70 %]
2	HIGH LEVEL VALUE	Range: [0 .. 100 %]
3	HIGH LEVEL TIMER	Range: [0 .. 255 MINUTES]
4	HIGH LEVEL FUNCTION	Options: • <i>DISABLED</i> • <i>ENABLED</i>

11.2.8.12 COMMUNICATION

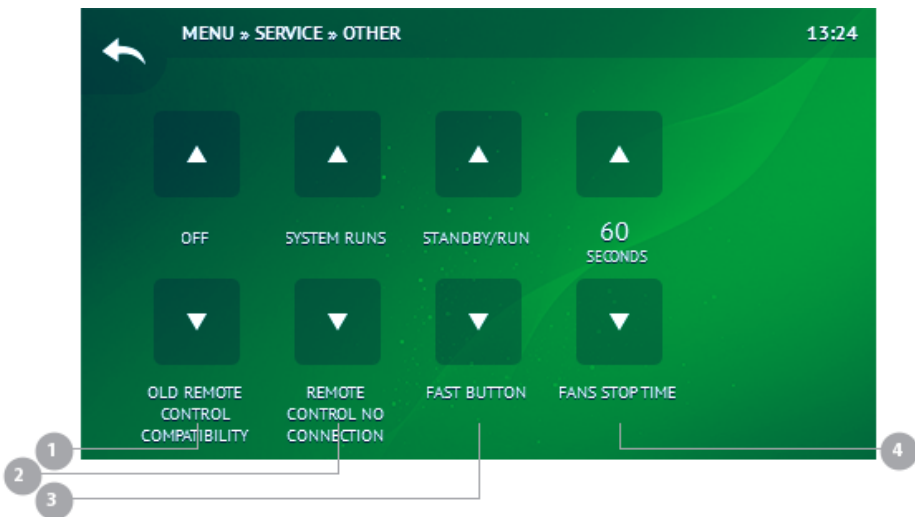
MENU » SERVICE » COMMUNICATION

NO.	LABEL	DESCRIPTION
1		
2	ADDRESS	Range: [1 .. 247]
3	BAUDRATE	Options: • <i>2400 bps</i> • <i>4800 bps</i> • <i>9600 bps</i> • <i>19200 bps</i> • <i>38400 bps</i>

NO.	LABEL	DESCRIPTION
4	PARITY	Options: • <i>NONE</i> • <i>ODD</i> • <i>EVEN</i>
5	STOP BIT	Options: • <i>NONE</i> • <i>1 BIT</i> • <i>2 BITS</i>

11.2.8.13 OTHER

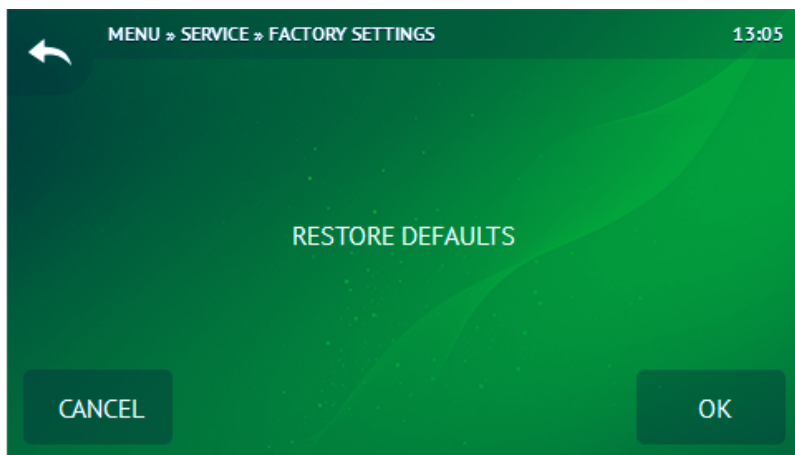
MENU » SERVICE » OTHER



NO.	LABEL	DESCRIPTION
1	OLD REMOTE CONTROL COMPATIBILITY	Options: • <i>OFF</i> • <i>ON</i>
2	REMOTE CONTROL NO CONNECTION	Options: • <i>SYSTEM RUNS</i> • <i>SYSTEM STOPS</i>
3	FAST BUTTON	Options: • <i>NONE</i> • <i>BOOST</i> • <i>STANDBY/RUN</i>
4	FANS STOP TIME	Range: [0 .. 255 SECONDS]

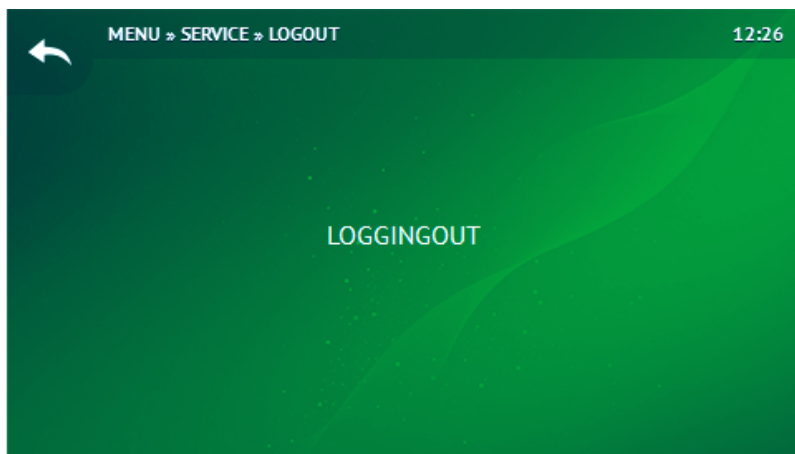
11.2.8.14 FACTORY SETTINGS

MENU » SERVICE » FACTORY SETTINGS



11.2.8.15 LOGOUT

MENU » SERVICE » LOGOUT

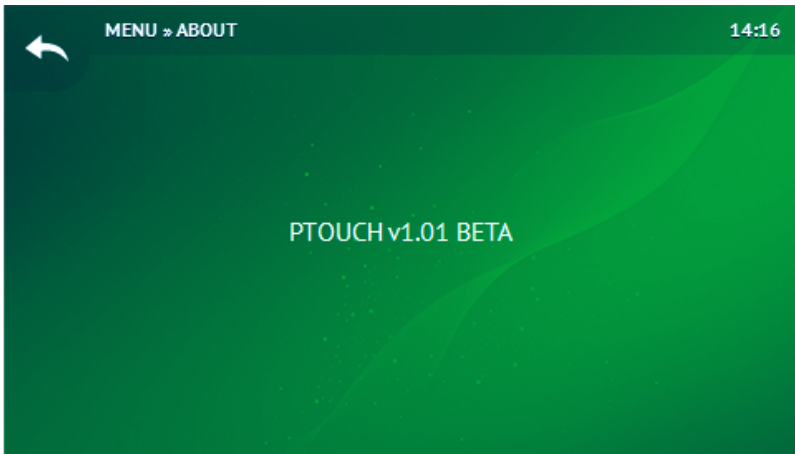


11.2.9 SETTINGS

MENU » SETTINGS

11.2.10 ABOUT

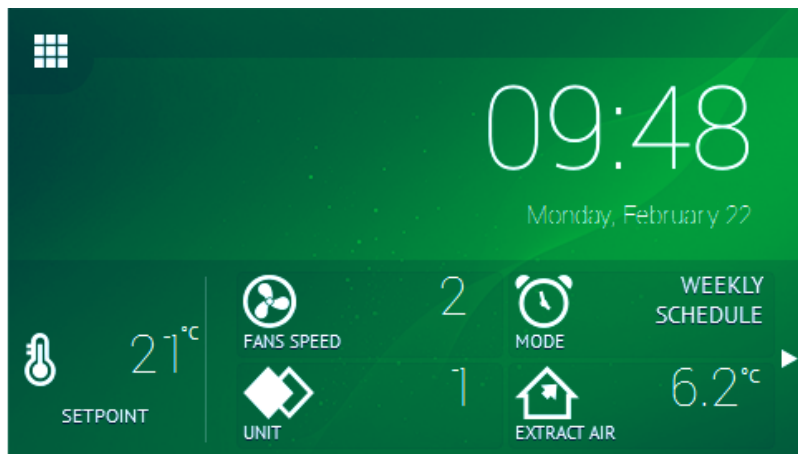
MENU » ABOUT



12. INSTRUCTIONS FOR DEVICES WITH MCB/MINIMCB CONTROL BOARD

12.1 MAIN WINDOW

MAIN WINDOW











NO.	LABEL
1	STATUS INDICATION
2	SCREEN LOCK
3	WIDGETS
4	SETPOINT

12.1.1 STATUS INDICATION

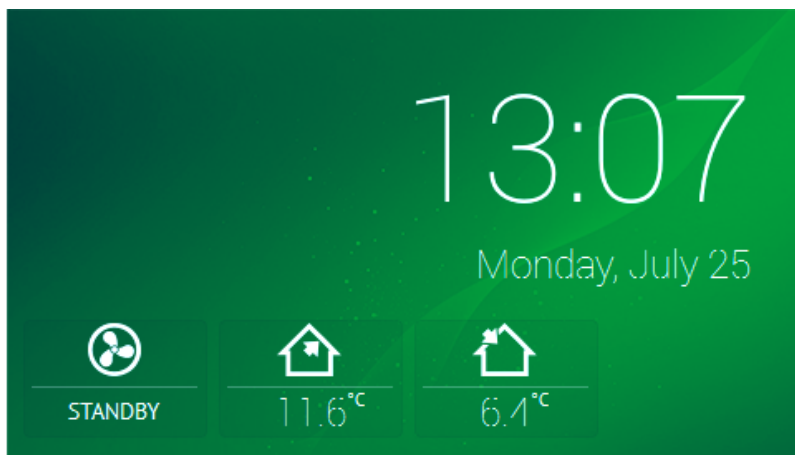
MAIN WINDOW » STATUS INDICATION

NO.	ICON	LABEL	DESCRIPTION
1		WORKING INDICATION	Options: • INACTIVE • ACTIVATE
2		ALARM INDICATION OUTPUT	Options: • INACTIVE • ACTIVATE
3		SLOWING DOWN FANS BY TEMPERATURE	Options: • INACTIVE • ACTIVATE
4		CO ₂ REDUCTION FUNCTION	Options: • INACTIVE • ACTIVATE

NO.	ICON	LABEL	DESCRIPTION
5		HYDRAULIC PUMP EXERCISE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
6		SEASON	Options: • <i>COOLING</i> • <i>HEATING SEASON</i>
7		STANDBY BLOCKING MODE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
8		NIGHT COOLING	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
9		SLOWING DOWN FANS	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
10		BLOCK AUTOMATIC CONTROL	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
11		HOLIDAY SCHEDULE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
12		SYSTEM MODE SWITCH	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
13		FANS SPEED SWITCH	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
14		FULL RECIRCULATION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.1.2 SCREEN LOCK

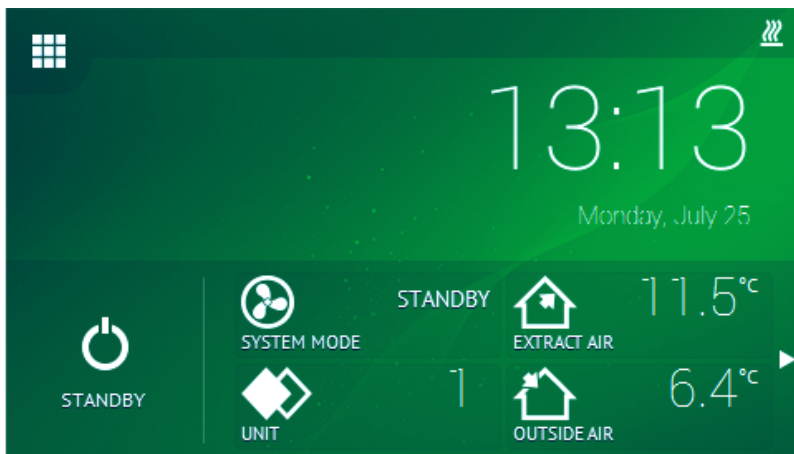
MAIN WINDOW » SCREEN LOCK








NO.	ICON	LABEL	DESCRIPTION
1		SYSTEM MODE	Options: <ul style="list-style-type: none"> • <i>STANDBY</i> • <i>BUILDING PROTECTION</i> • <i>ECONOMY</i> • <i>COMFORT</i>
2		EXTRACT AIR	[°C]
3		OUTSIDE AIR	[°C]

12.1.3 WIDGETS

MAIN WINDOW » WIDGETS



NO.	ICON	LABEL	DESCRIPTION
1		SYSTEM MODE	Options: <ul style="list-style-type: none"> • STANDBY • BUILDING PROTECTION • ECONOMY • COMFORT
2			
3		EXTRACT AIR	[°C]

NO.	ICON	LABEL	DESCRIPTION
4		OUTSIDE AIR	[°C]
5		SUPPLY AIR	[°C]
6		EXHAUST AIR	[°C]
7		STANDBY BLOCKING TIME LEFT THIS DAY	Range: [0 .. 500 MINUTES]
8		NEXT EVENT IN	Range: [0 .. 24 HOURS]

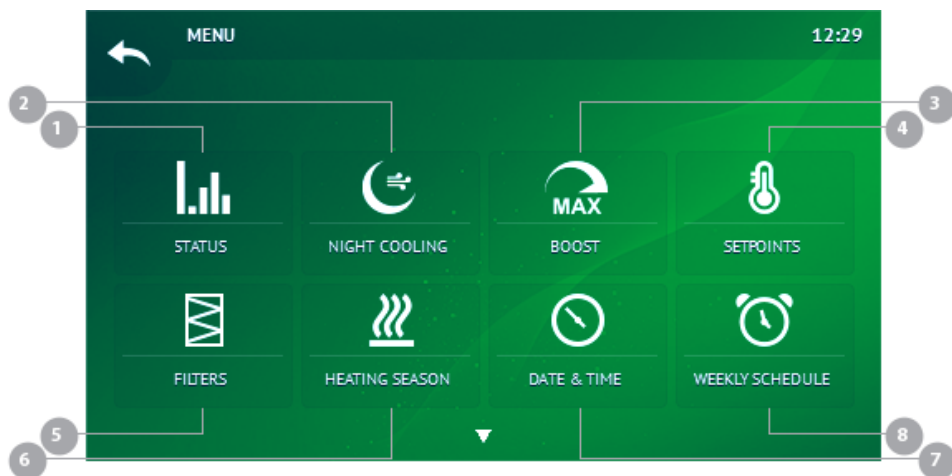
12.1.4 SETPOINT

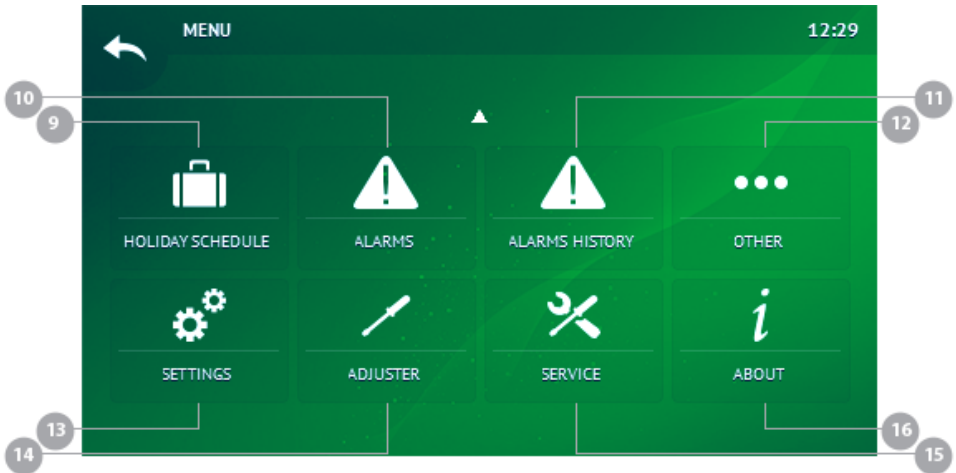
MAIN WINDOW » SETPOINT

NO.	LABEL	DESCRIPTION
1	SYSTEM MODE	Options: <ul style="list-style-type: none"> • <i>STANDBY</i> • <i>BUILDING PROTECTION</i> • <i>ECONOMY</i> • <i>COMFORT</i>

12.2 MENU

MENU



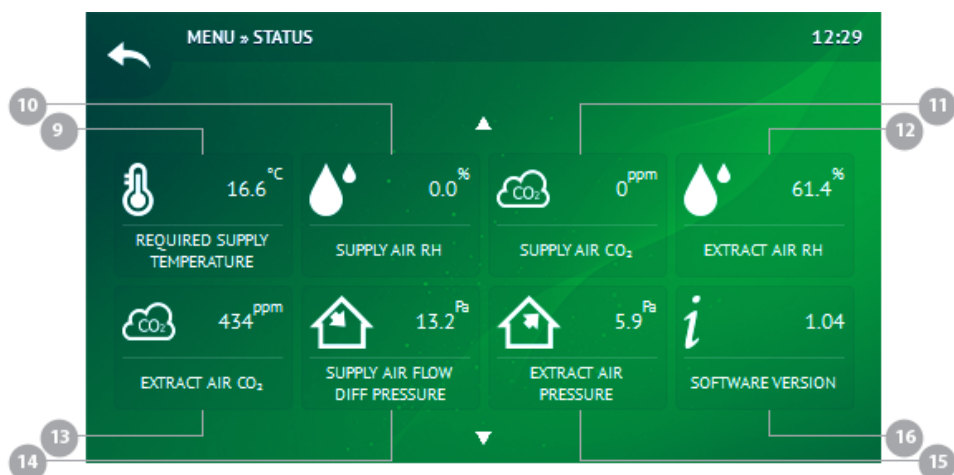
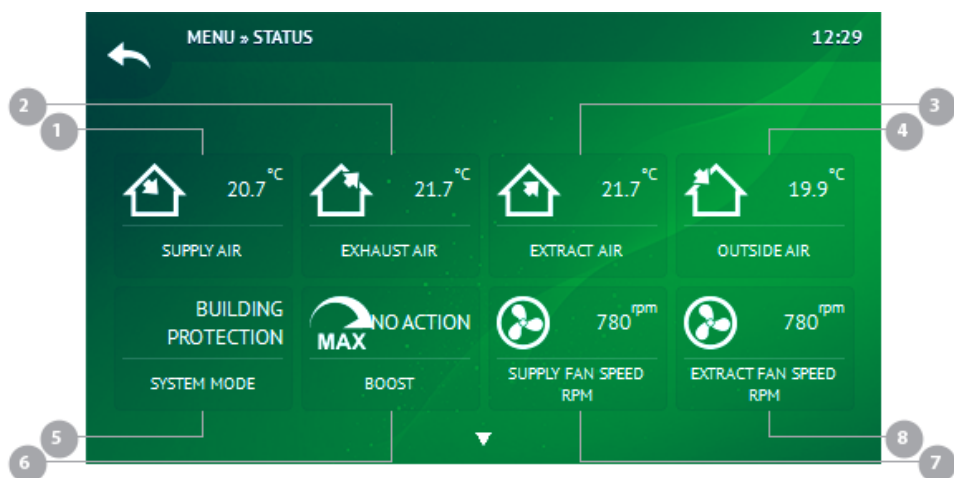


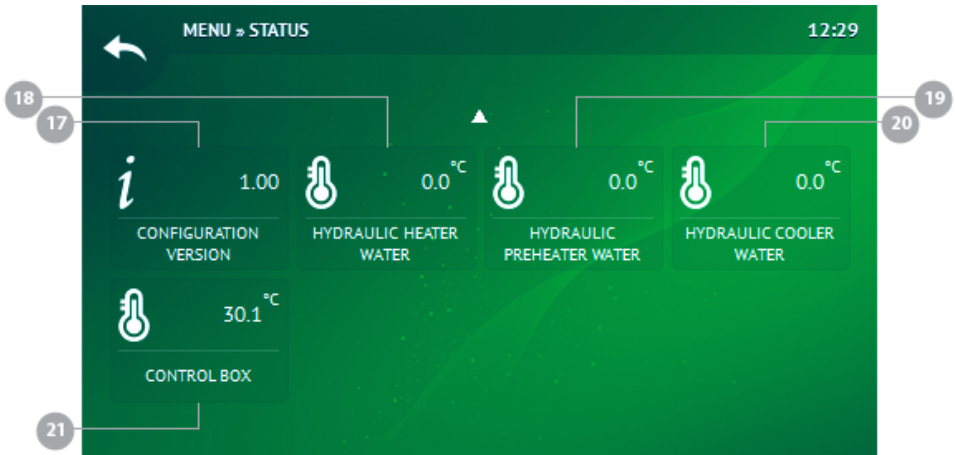
NO.	ICON	LABEL
1		STATUS
2		NIGHT COOLING
3		BOOST
4		MODE
5		FILTERS
6		HEATING SEASON
7		DATE & TIME
8		WEEKLY SCHEDULE
9		HOLIDAY SCHEDULE
10		ALARMS
11		ALARMS HISTORY
12		OTHER
13		SETTINGS

NO.	ICON	LABEL
14		ADJUSTER
15		SERVICE
16		ABOUT










12.2.1 STATUS

MENU » STATUS



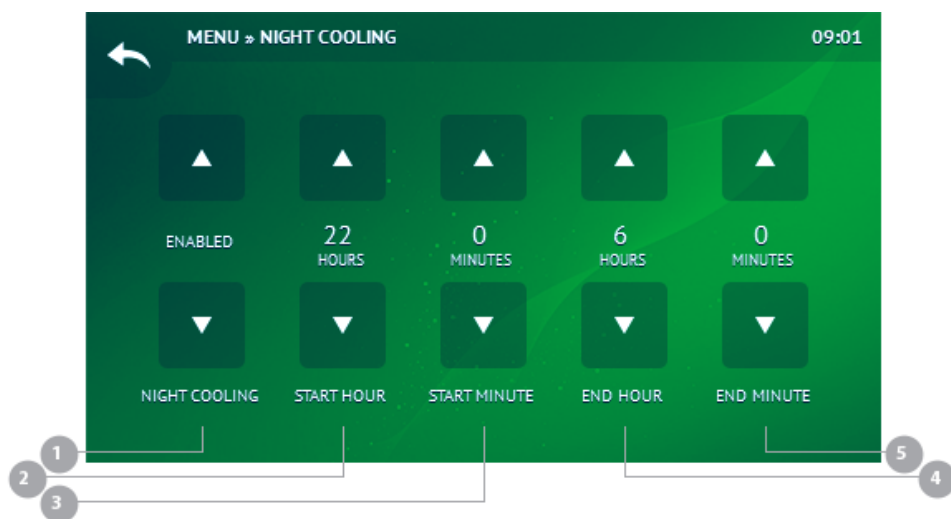


NO.	ICON	LABEL	DESCRIPTION
1		SUPPLY AIR	[°C]
2		EXHAUST AIR	[°C]
3		EXTRACT AIR	[°C]
4		OUTSIDE AIR	[°C]
5		SYSTEM MODE	Options: • <i>STANDBY</i> • <i>BUILDING PROTECTION</i> • <i>ECONOMY</i> • <i>COMFORT</i>
6		BOOST	Options: • <i>NO ACTION</i> • <i>ACTIVATE</i>
7		SUPPLY FAN SPEED RPM	Range: [0 .. 5000 rpm]
8		EXTRACT FAN SPEED RPM	Range: [0 .. 5000 rpm]
9		REQUIRED SUPPLY TEMPERATURE	[°C]
10		SUPPLY AIR RH	[%]
11		SUPPLY AIR CO ₂	Range: [0 .. 2000 ppm]
12		EXTRACT AIR RH	Range: [0 .. 100 %]

NO.	ICON	LABEL	DESCRIPTION
13		EXTRACT AIR CO ₂	Range: [0 .. 2000 ppm]
14		SUPPLY AIR FLOW DIFF PRESSURE	Range: [0 .. 2000 Pa]
15		EXTRACT AIR PRESSURE	Range: [0 .. 2000 Pa]
16		SOFTWARE VERSION	
17		CONFIGURATION VERSION	
18		HYDRAULIC HEATER WATER	[°C]
19		HYDRAULIC PREHEATER WATER	[°C]
20		HYDRAULIC COOLER WATER	[°C]
21		CONTROLLER CABINET	[°C]

12.2.2 NIGHT COOLING

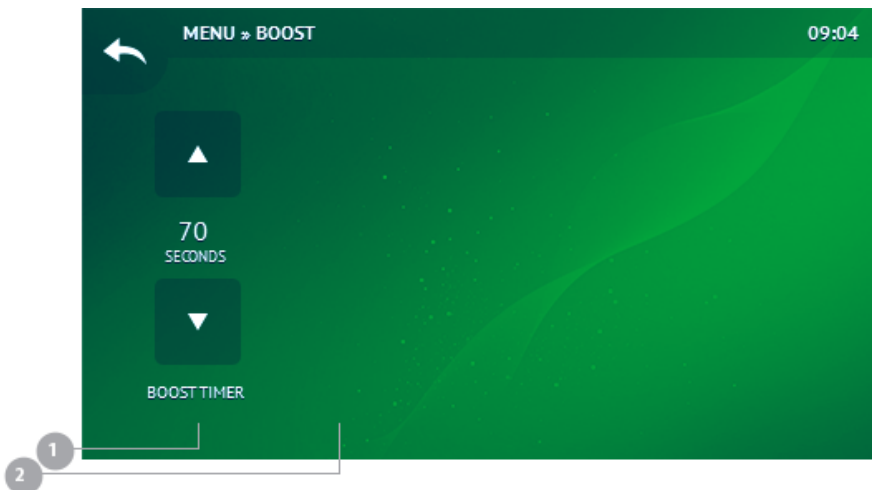
MENU » NIGHT COOLING



NO.	LABEL	DESCRIPTION
1	NIGHT COOLING	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	START HOUR	Range: [0 .. 23 HOURS]
3	START MINUTE	Range: [0 .. 59 MINUTES]
4	END HOUR	Range: [0 .. 23 HOURS]
5	END MINUTE	Range: [0 .. 59 MINUTES]
6	START EXTRACT TEMPERATURE	Range: [13 .. 30 °C]
7	STOP EXTRACT TEMPERATURE	Range: [13 .. 30 °C]
8	OUTDOOR TEMPERATURE LIMIT	Range: [0 .. 30 °C]
9	ROOM TEMPERATURE SETPOINT	Range: [0 .. 30 °C]

12.2.3 BOOST

MENU » BOOST






NO.	LABEL	DESCRIPTION
1	BOOST TIMER	Range: [0 .. 18000 SECONDS]
2	BOOST	Options: • <i>NO ACTION</i> • <i>ACTIVATE</i>

12.2.4 MODE

MENU » MODE



NO.	ICON	LABEL
1		BUILDING PROTECTION
2		ECONOMY
3		COMFORT

12.2.4.1 BUILDING PROTECTION

MENU » MODE » BUILDING PROTECTION

NO.	LABEL	DESCRIPTION
1	SETPOINT	Options: • <i>INACTIVE</i> • <i>ACTIVE</i>
2	SETPOINT	Range: [10 .. 32 °C]

12.2.4.2 ECONOMY

MENU » MODE » ECONOMY

NO.	LABEL	DESCRIPTION
1	SETPOINT	Options: • <i>INACTIVE</i> • <i>ACTIVE</i>
2	SETPOINT	Range: [10 .. 32 °C]

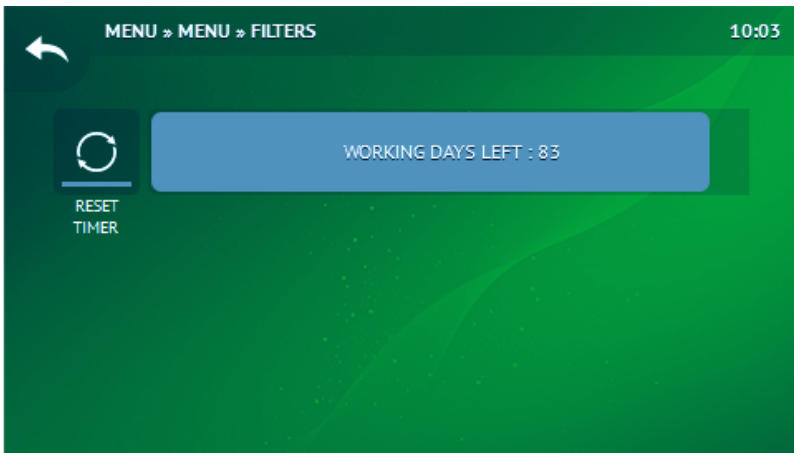
12.2.4.3 COMFORT

MENU » MODE » COMFORT

NO.	LABEL	DESCRIPTION
1	SETPOINT	Range: [1 .. 32 °C]

12.2.5 FILTERS

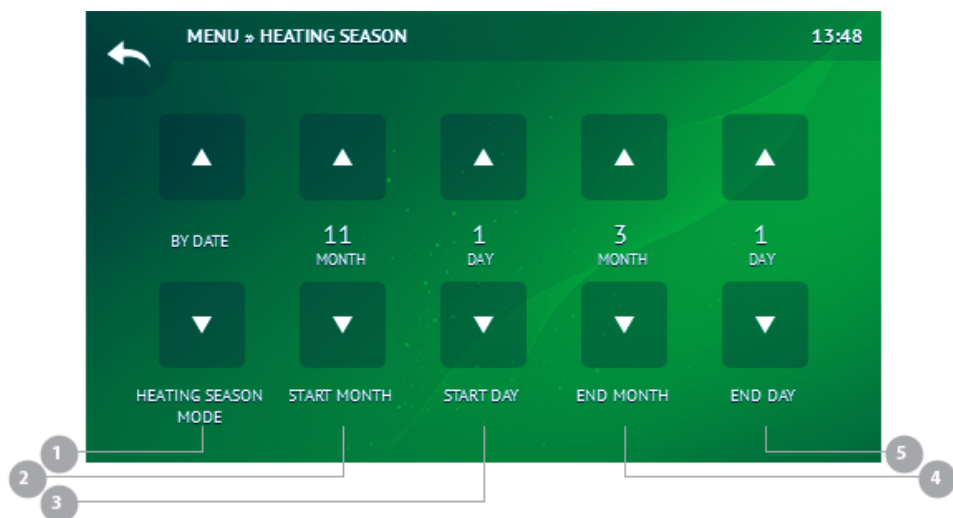
MENU » FILTERS



NO.	LABEL	DESCRIPTION
1	RESET TIMER	Options: • <i>NO ACTION</i> • <i>ACTIVATE</i>
2		

12.2.6 HEATING SEASON

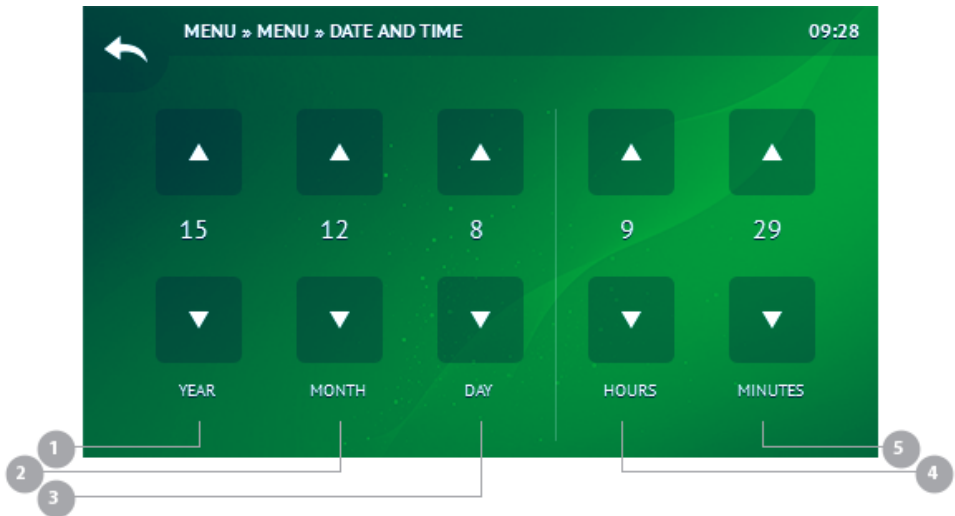
MENU » HEATING SEASON



NO.	LABEL	DESCRIPTION
1	HEATING SEASON MODE	Options: <ul style="list-style-type: none"> • COOLING • HEATING SEASON • BY DATE • BY 3 DAY AVARAGE
2	START MONTH	Range: [1 .. 12 MONTH]
3	START DAY	Range: [1 .. 31 DAY]
4	END MONTH	Range: [1 .. 12 MONTH]
5	END DAY	Range: [1 .. 31 DAY]
6	TEMPERATURE LIMIT	Range: [0 .. 30 °C]

12.2.7 DATE & TIME

MENU » DATE & TIME



NO.	LABEL	DESCRIPTION
1	YEAR	Range: [0 .. 99 YEARS]
2	MONTH	Range: [1 .. 12 MONTH]
3	DAY	Range: [1 .. 31 DAY]
4	HOURS	Range: [0 .. 23 HOURS]
5	MINUTES	Range: [0 .. 59 MINUTES]

12.2.8 WEEKLY SCHEDULE

MENU » WEEKLY SCHEDULE

MENU » WEEKLY SCHEDULER 10:01

1 2 3 4 5 6 7 8 9 10

EVENTS SUMMARY

- 1. 16:00 🌸 MON TUE WED THU
- 2. 07:00 👤 MON TUE WED THU FRI
- 3. 16:00 🏠 FRI SAT SUN
- 4. Disabled
- 5. Disabled
- 6. Disabled
- 7. Disabled
- 8. Disabled

EVENT 1 DETAILS

TIME: 16:00
MODE: ECONOMY
WEEKDAYS: MON TUE WED THU

EDIT

12.2.9 HOLIDAY SCHEDULE

MENU » HOLIDAY SCHEDULE

MENU » HOLIDAY SCHEDULER 10:02

1 2 3 4 5

EVENTS SUMMARY

- 1. Disabled
- 2. Disabled
- 3. Disabled
- 4. Disabled
- 5. Disabled

EVENT 1 DETAILS

EDIT

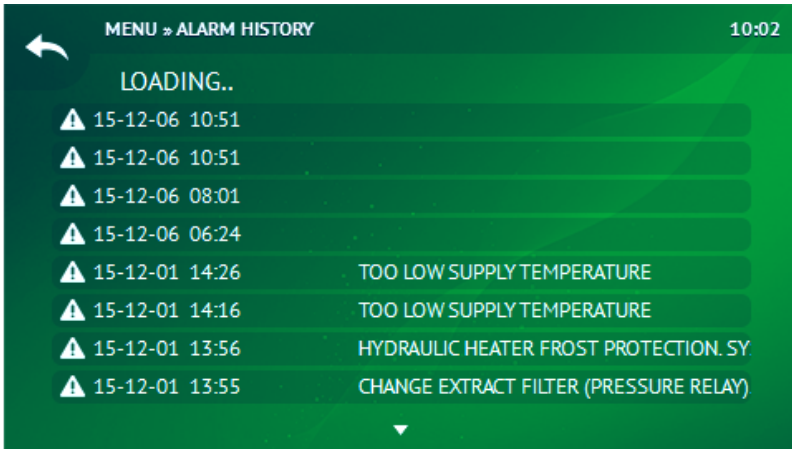
12.2.10 ALARMS

MENU » ALARMS



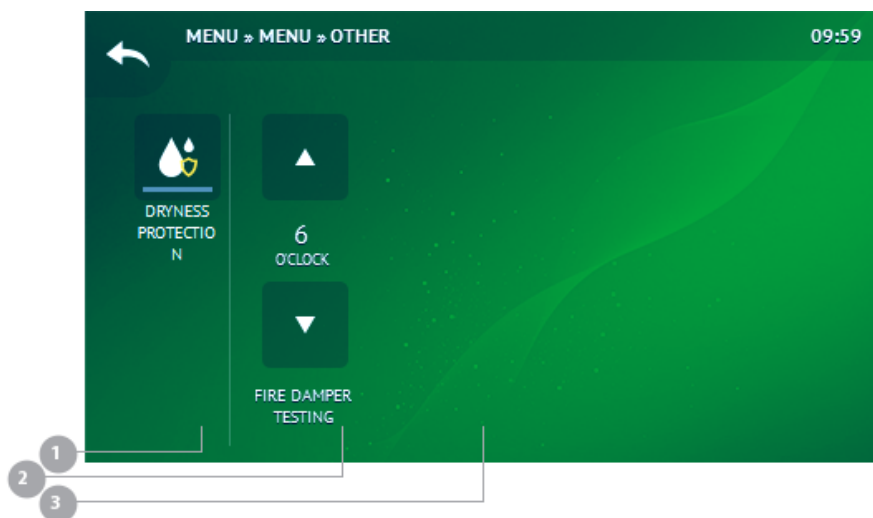
12.2.11 ALARMS HISTORY

MENU » ALARMS HISTORY



12.2.12 OTHER

MENU » OTHER







NO.	LABEL	DESCRIPTION
1	DRYNESS PROTECTION	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	FIRE DAMPER TESTING HOUR	Range: [0 .. 23 HOUR]


12.2.13 SETTINGS

MENU » SETTINGS

12.2.14 ADJUSTER


MENU » ADJUSTER

NO.	ICON	LABEL
1		AIRFLOW
2		PID
3		MANUAL CONTROL
4		STATUS

NO.	ICON	LABEL
5		SAVE SETTINGS
6		LOGOUT

12.2.14.1 AIRFLOW

MENU » ADJUSTER » AIRFLOW

NO.	ICON	LABEL
1		SUPPLY
2		EXTRACT
3		OTHER

12.2.14.1.1 SUPPLY

MENU » ADJUSTER » AIRFLOW » SUPPLY

NO.	LABEL	DESCRIPTION
1	BUILDING PROTECTION	Range: [0 .. 100 %]
2	ECONOMY	Range: [0 .. 100 %]
3	COMFORT	Range: [0 .. 100 %]
4	BOOST	Range: [0 .. 100 %]
5	BUILDING PROTECTION	Range: [0 .. 100 %]
6	ECONOMY	Range: [0 .. 100 %]
7	COMFORT	Range: [0 .. 100 %]
8	BOOST	Range: [0 .. 100 %]
9	BUILDING PROTECTION	Range: [0 .. 100 %]
10	ECONOMY	Range: [0 .. 100 %]
11	COMFORT	Range: [0 .. 100 %]
12	BOOST	Range: [0 .. 100 %]

12.2.14.1.2 EXTRACT

MENU » ADJUSTER » AIRFLOW » EXTRACT

NO.	LABEL	DESCRIPTION
1	BUILDING PROTECTION	Range: [0 .. 100 %]
2	ECONOMY	Range: [0 .. 100 %]
3	COMFORT	Range: [0 .. 100 %]
4	BOOST	Range: [0 .. 100 %]
5	BUILDING PROTECTION	Range: [0 .. 100 %]
6	ECONOMY	Range: [0 .. 100 %]
7	COMFORT	Range: [0 .. 100 %]
8	BOOST	Range: [0 .. 100 %]
9	BUILDING PROTECTION	Range: [0 .. 100 %]
10	ECONOMY	Range: [0 .. 100 %]
11	COMFORT	Range: [0 .. 100 %]
12	BOOST	Range: [0 .. 100 %]

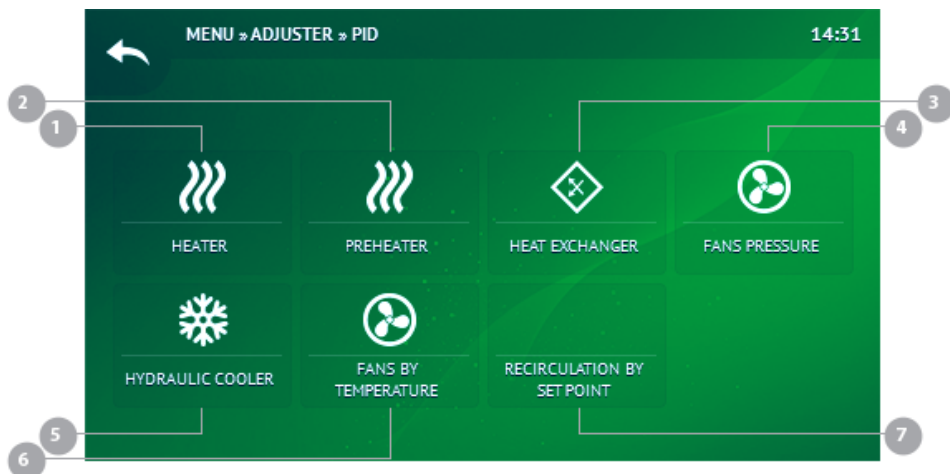
12.2.14.1.3 OTHER








MENU » ADJUSTER » AIRFLOW » OTHER

NO.	LABEL	DESCRIPTION
1	EXTRACT FAN SPEED FROM SUPPLY FAN SPEED DIFERENCE	Range: [-100 .. 100 %]
2	DX COOLER TEMPERATURE HIST	Range: [1 .. 10 °C]

12.2.14.2 PID

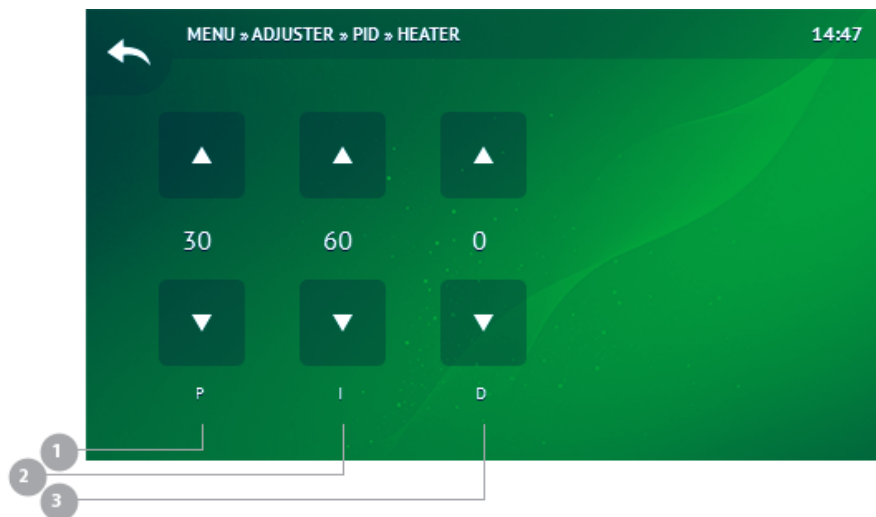
MENU » ADJUSTER » PID



NO.	ICON	LABEL
1		HEATER
2		PREHEATER
3		HEAT EXCHANGER
4		FANS PRESSURE
5		HYDRAULIC COOLER
6		FANS BY TEMPERATURE
7		RECIRCULATION BY SET POINT

12.2.14.2.1 HEATER

MENU » ADJUSTER » PID » HEATER



NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.2.2 PREHEATER

MENU » ADJUSTER » PID » PREHEATER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.2.3 HEAT EXCHANGER

MENU » ADJUSTER » PID » HEAT EXCHANGER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]

NO.	LABEL	DESCRIPTION
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.2.4 FANS PRESSURE

MENU » ADJUSTER » PID » FANS PRESSURE

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.2.5 HYDRAULIC COOLER

MENU » ADJUSTER » PID » HYDRAULIC COOLER

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.2.6 FANS BY TEMPERATURE

MENU » ADJUSTER » PID » FANS BY TEMPERATURE

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]













12.2.14.2.7 RECIRCULATION BY SET POINT

MENU » ADJUSTER » PID » RECIRCULATION BY SET POINT

NO.	LABEL	DESCRIPTION
1	P	Range: [0 .. 1000]
2	I	Range: [0 .. 1000]
3	D	Range: [0 .. 1000]

12.2.14.3 MANUAL CONTROL

MENU » ADJUSTER » MANUAL CONTROL

NO.	ICON	LABEL
1		BLOCK VENTILATION CONTROL
2		HEATER
3		PREHEATER
4		FANS
5		HYDRAULIC COOLER
6		RECIRCULATION DAMPER
7		SUPPLY / EXTRACT DAMPER
8		BYPASS
9		ROTOR
10		DX COOLER
11		FIRE DAMPER
12		OTHER

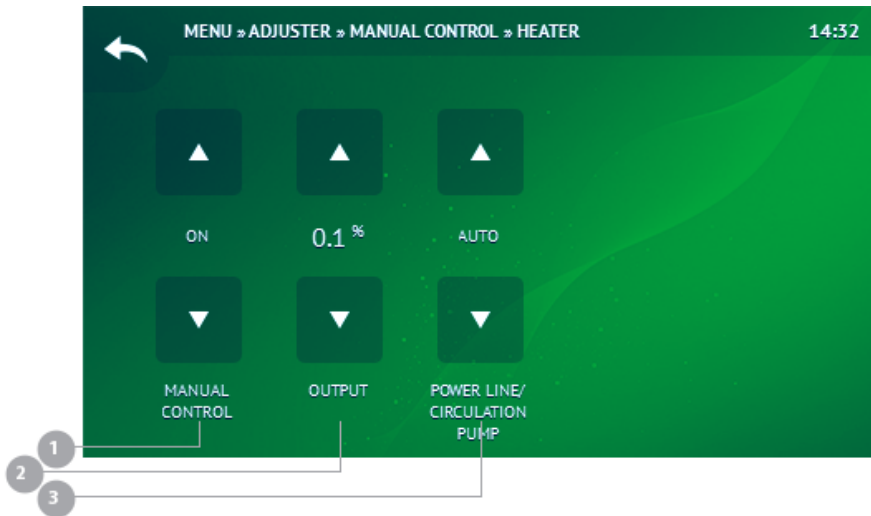
12.2.14.3.1 BLOCK VENTILATION CONTROL

MENU » ADJUSTER » MANUAL CONTROL » BLOCK VENTILATION CONTROL

NO.	LABEL	DESCRIPTION
1	SYSTEM BLOCKING	Options: • <i>DISABLED</i> • <i>ENABLED</i>

12.2.14.3.2 HEATER

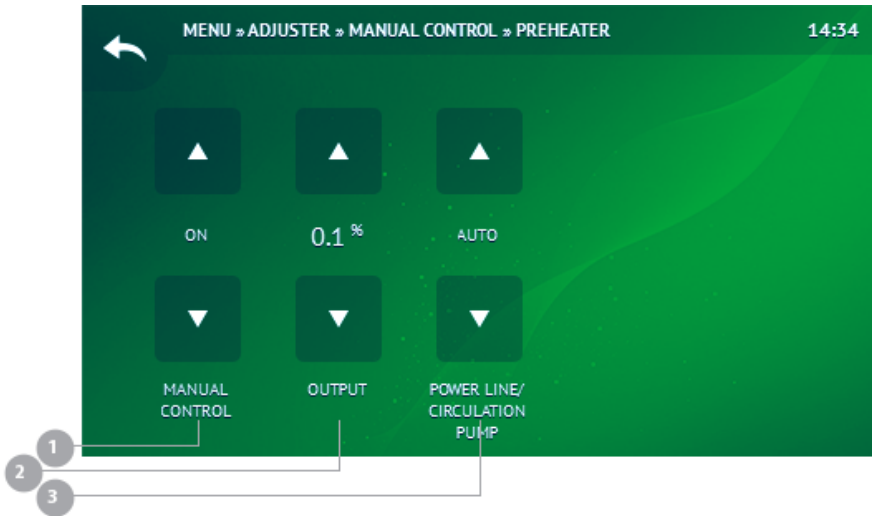
MENU » ADJUSTER » MANUAL CONTROL » HEATER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	POWER LINE/CIRCULATION PUMP	Options: • AUTO • OFF • ON

12.2.14.3.3 PREHEATER

MENU » ADJUSTER » MANUAL CONTROL » PREHEATER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	POWER LINE/CIRCULATION PUMP	Options: • AUTO • OFF • ON

12.2.14.3.4 FANS

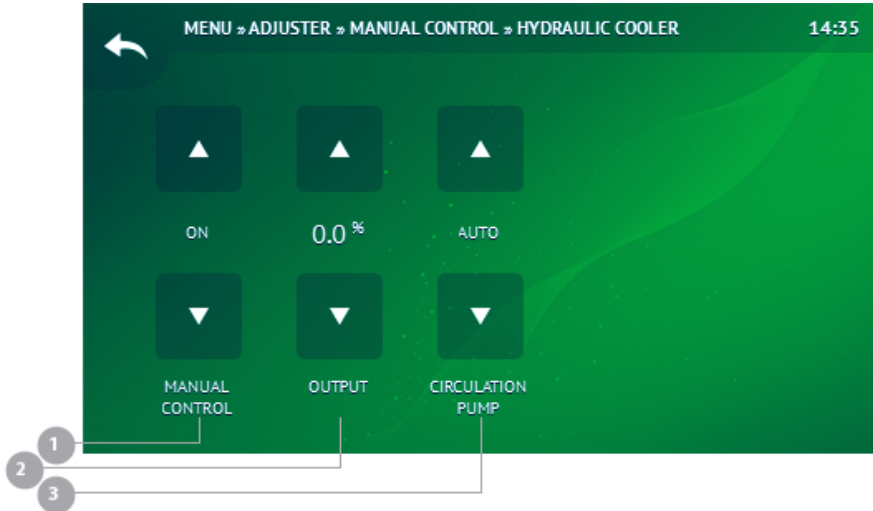
MENU » ADJUSTER » MANUAL CONTROL » FANS

NO.	LABEL	DESCRIPTION
1	SUPPLY MANUAL CONTROL	Options: • OFF • ON
2	SUPPLY OUTPUT	Range: [0 .. 100 %]
3	EXTRACT MANUAL CONTROL	Options: • OFF • ON
4	EXTRACT OUTPUT	Range: [0 .. 100 %]

NO.	LABEL	DESCRIPTION
5	POWER LINE	Options: • <i>AUTO</i> • <i>OFF</i> • <i>ON</i>

12.2.14.3.5 HYDRAULIC COOLER

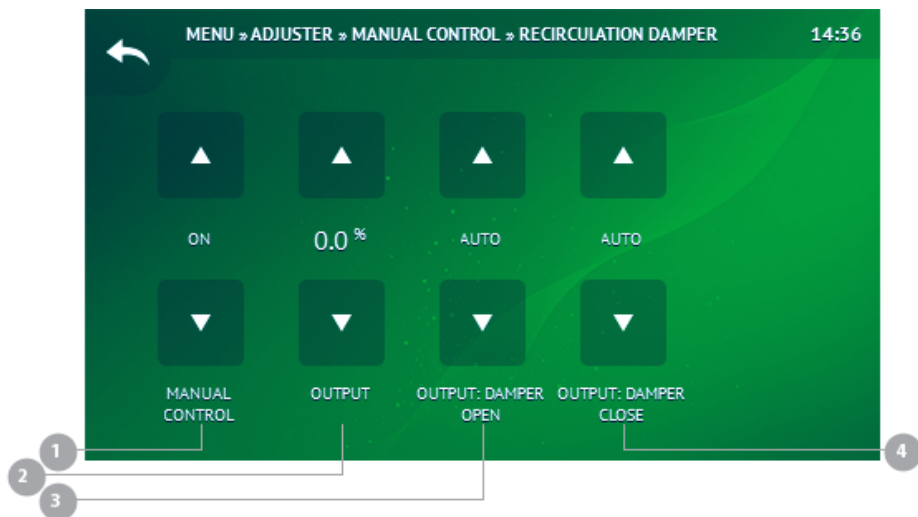
MENU » ADJUSTER » MANUAL CONTROL » HYDRAULIC COOLER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • <i>OFF</i> • <i>ON</i>
2	OUTPUT	Range: [0 .. 100 %]
3	CIRCULATION PUMP	Options: • <i>AUTO</i> • <i>OFF</i> • <i>ON</i>

12.2.14.3.6 RECIRCULATION DAMPER

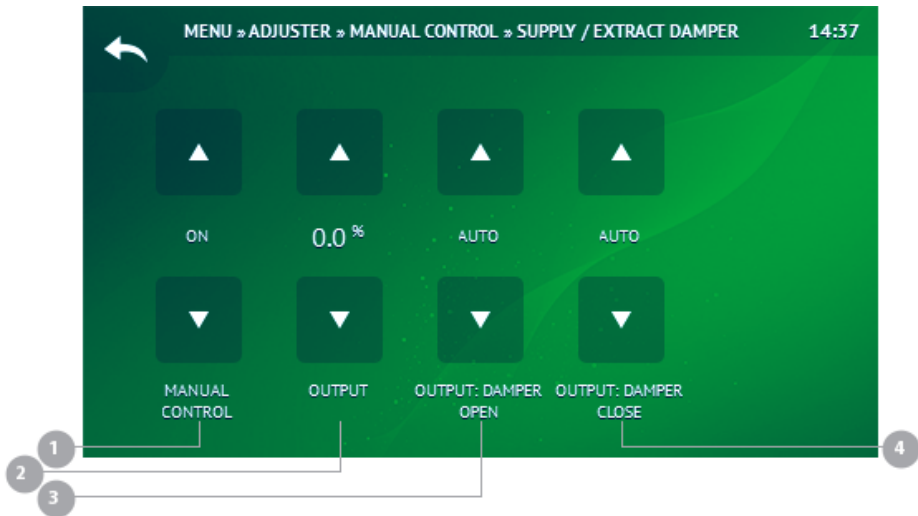
MENU » ADJUSTER » MANUAL CONTROL » RECIRCULATION DAMPER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	OUTPUT: DAMPER OPEN	Options: • AUTO • OFF • ON
4	OUTPUT: DAMPER CLOSE	Options: • AUTO • OFF • ON

12.2.14.3.7 SUPPLY / EXTRACT DAMPER

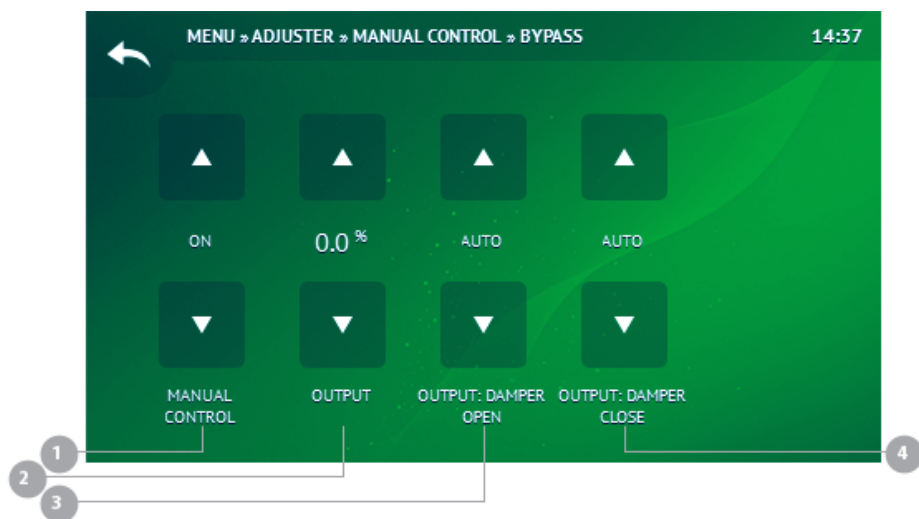
MENU » ADJUSTER » MANUAL CONTROL » SUPPLY / EXTRACT DAMPER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	OUTPUT: DAMPER OPEN	Options: • AUTO • OFF • ON
4	OUTPUT: DAMPER CLOSE	Options: • AUTO • OFF • ON

12.2.14.3.8 BYPASS

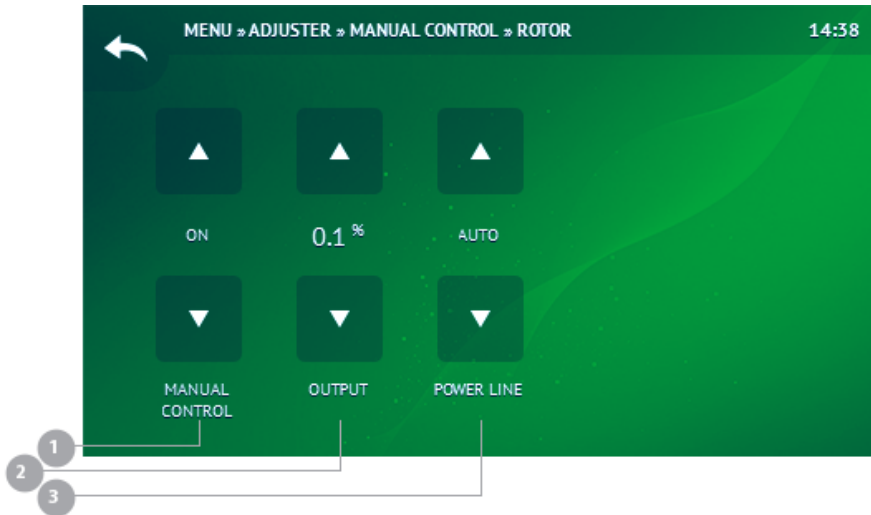
MENU » ADJUSTER » MANUAL CONTROL » BYPASS



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	OUTPUT: DAMPER OPEN	Options: • AUTO • OFF • ON
4	OUTPUT: DAMPER CLOSE	Options: • AUTO • OFF • ON

12.2.14.3.9 ROTOR

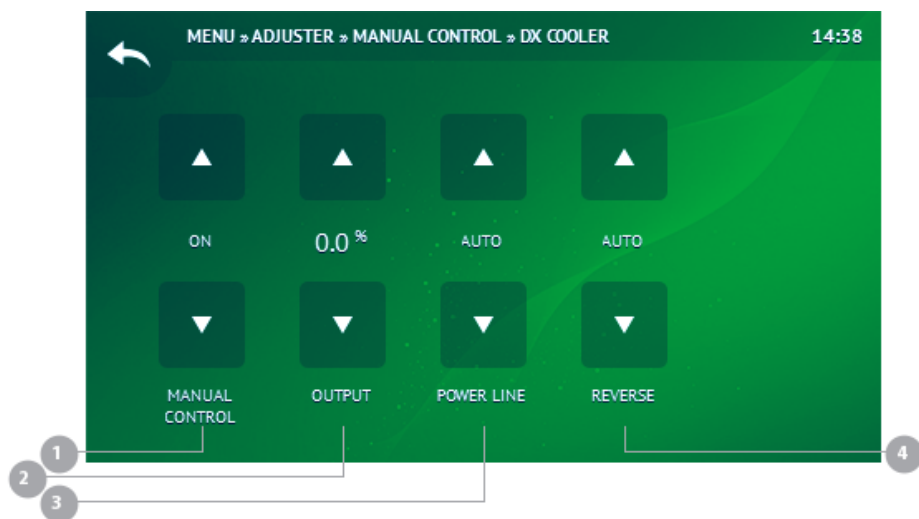
MENU » ADJUSTER » MANUAL CONTROL » ROTOR



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	POWER LINE	Options: • AUTO • OFF • ON

12.2.14.3.10 DX COOLER

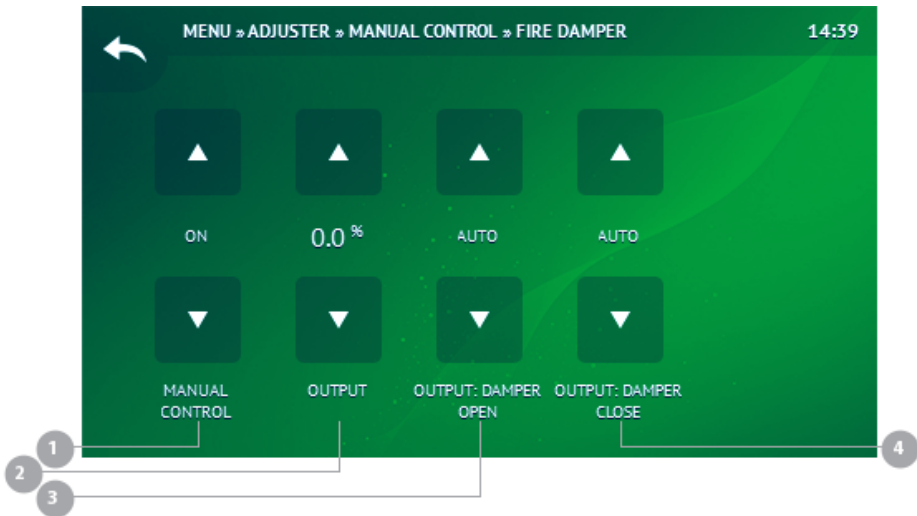
MENU » ADJUSTER » MANUAL CONTROL » DX COOLER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	POWER LINE	Options: • AUTO • OFF • ON
4	REVERSE	Options: • AUTO • OFF • ON

12.2.14.3.11 FIRE DAMPER

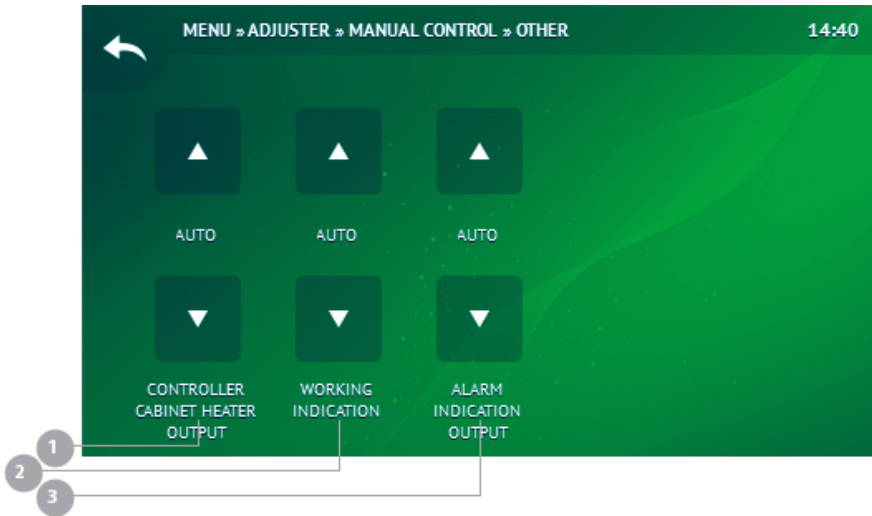
MENU » ADJUSTER » MANUAL CONTROL » FIRE DAMPER



NO.	LABEL	DESCRIPTION
1	MANUAL CONTROL	Options: • OFF • ON
2	OUTPUT	Range: [0 .. 100 %]
3	OUTPUT: DAMPER OPEN	Options: • AUTO • OFF • ON
4	OUTPUT: DAMPER CLOSE	Options: • AUTO • OFF • ON

12.2.14.3.12 OTHER

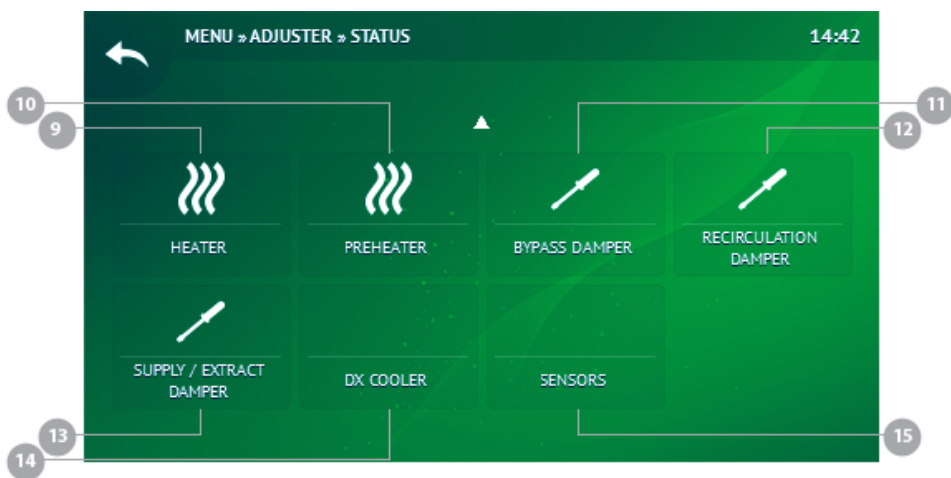
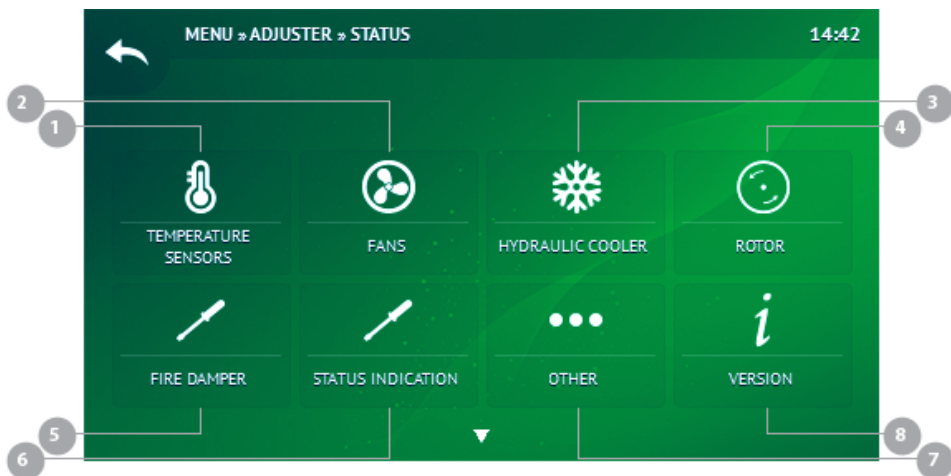
MENU » ADJUSTER » MANUAL CONTROL » OTHER














NO.	LABEL	DESCRIPTION
1	CONTROLLER CABINET HEATER OUTPUT	Options: • <i>AUTO</i> • <i>OFF</i> • <i>ON</i>
2	WORKING INDICATION	Options: • <i>AUTO</i> • <i>OFF</i> • <i>ON</i>
3	ALARM INDICATION OUTPUT	Options: • <i>AUTO</i> • <i>OFF</i> • <i>ON</i>

12.2.14.4 STATUS

MENU » ADJUSTER » STATUS












NO.	ICON	LABEL
1		TEMPERATURE SENSORS
2		FANS
3		HYDRAULIC COOLER
4		ROTOR

NO.	ICON	LABEL
5		FIRE DAMPER
6		STATUS INDICATION
7		OTHER
8		VERSION
9		HEATER
10		PREHEATER
11		BYPASS DAMPER
12		RECIRCULATION DAMPER
13		SUPPLY / EXTRACT DAMPER
14		DX COOLER
15		SENSORS

12.2.14.4.1 TEMPERATURE SENSORS






MENU » ADJUSTER » STATUS » TEMPERATURE SENSORS

NO.	ICON	LABEL	DESCRIPTION
1		REQUIRED SUPPLY TEMPERATURE	[°C]
2		SUPPLY AIR	[°C]
3		EXTRACT AIR	[°C]
4		OUTSIDE AIR	[°C]
5		EXHAUST AIR	[°C]
6		HYDRAULIC HEATER WATER	[°C]
7		HYDRAULIC PREHEATER WATER	[°C]

NO.	ICON	LABEL	DESCRIPTION
8		HYDRAULIC COOLER WATER	[°C]
9		CONTROLLER CABINET	[°C]

12.2.14.4.2 FANS

MENU » ADJUSTER » STATUS » FANS

NO.	ICON	LABEL	DESCRIPTION
1		SUPPLY FAN SPEED	Range: [0 .. 10 V]
2		EXTRACT FAN SPEED	Range: [0 .. 10 V]
3		POWER LINE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4		SUPPLY FAN PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
5		EXTRACT FAN PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
6		SUPPLY FILTER PRESSURE RELAY	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
7		EXTRACT FILTER PRESSURE RELAY	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.3 HYDRAULIC COOLER


MENU » ADJUSTER » STATUS » HYDRAULIC COOLER

NO.	LABEL	DESCRIPTION
1	OUTPUT	Range: [0 .. 100 %]
2	CIRCULATION PUMP	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.4 ROTOR

MENU » ADJUSTER » STATUS » ROTOR

NO.	ICON	LABEL	DESCRIPTION
1		OUTPUT	Range: [0 .. 100 %]

NO.	ICON	LABEL	DESCRIPTION
2		POWER LINE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3		SPEED	Range: [0 .. 100 rpm]



12.2.14.4.5 FIRE DAMPER

MENU » ADJUSTER » STATUS » FIRE DAMPER

NO.	LABEL	DESCRIPTION
1	POSITION	Range: [0 .. 100 %]
2	OUTPUT: OPEN	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	OUTPUT: CLOSE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4	INPUT: OPENED	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
5	INPUT: CLOSED	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.6 STATUS INDICATION

MENU » ADJUSTER » STATUS » STATUS INDICATION

NO.	ICON	LABEL	DESCRIPTION
1		WORKING INDICATION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
2		ALARM INDICATION OUTPUT	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.7 OTHER






MENU » ADJUSTER » STATUS » OTHER

NO.	LABEL	DESCRIPTION
1	FIRE PROTECTION INPUT	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
2	SYSTEM MODE SWITCH	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

NO.	LABEL	DESCRIPTION
3	FANS SPEED SWITCH	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4	PRESSURE RELAY	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
5	CONTROLLER CABINET HEATING	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>




12.2.14.4.8 VERSION

MENU » ADJUSTER » STATUS » VERSION

NO.	ICON	LABEL	DESCRIPTION
1		EX1 MODULE	
2		EX2 MODULE	
3		COMUNICATION MODULE	
4		SOFTWARE VERSION	
5		CONFIGURATION VERSION	




12.2.14.4.9 HEATER

MENU » ADJUSTER » STATUS » HEATER

NO.	ICON	LABEL	DESCRIPTION
1		OUTPUT	Range: [0 .. 100 %]
2		POWER LINE/CIRCULATION PUMP	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3		MANUAL PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4		AUTOMATIC PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.10 PREHEATER

MENU » ADJUSTER » STATUS » PREHEATER

NO.	ICON	LABEL	DESCRIPTION
1		OUTPUT	Range: [0 .. 100 %]
2		POWER LINE/CIRCULATION PUMP	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3		MANUAL PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4		AUTOMATIC PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.11 BYPASS DAMPER

MENU » ADJUSTER » STATUS » BYPASS DAMPER

NO.	LABEL	DESCRIPTION
1	POSITION	Range: [0 .. 100 %]
2	OUTPUT: OPEN	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	OUTPUT: CLOSE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4	INPUT: CLOSED	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.12 RECIRCULATION DAMPER

MENU » ADJUSTER » STATUS » RECIRCULATION DAMPER

NO.	LABEL	DESCRIPTION
1	POSITION	Range: [0 .. 100 %]
2	OUTPUT: OPEN	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	OUTPUT: CLOSE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
4	INPUT: CLOSED	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.13 SUPPLY / EXTRACT DAMPER

MENU » ADJUSTER » STATUS » SUPPLY / EXTRACT DAMPER

NO.	LABEL	DESCRIPTION
1	POSITION	Range: [0 .. 100 %]
2	OUTPUT: OPEN	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	OUTPUT: CLOSE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.14 DX COOLER

MENU » ADJUSTER » STATUS » DX COOLER

NO.	LABEL	DESCRIPTION
1	REVERSE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
2	DX COOLER PROTECTION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	POWER LINE	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>

12.2.14.4.15 SENSORS

MENU » ADJUSTER » STATUS » SENSORS

NO.	LABEL	DESCRIPTION
1	SUPPLY AIR	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
2	EXTRACT AIR	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
3	EXHAUST AIR	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
4	OUTSIDE AIR	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
5	HYDRAULIC HEATER WATER	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
6	HYDRAULIC PREHEATER WATER	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>
7	HYDRAULIC COOLER WATER	Options: • <i>%OP_FAILURE%</i> • <i>%OP_OK%</i>

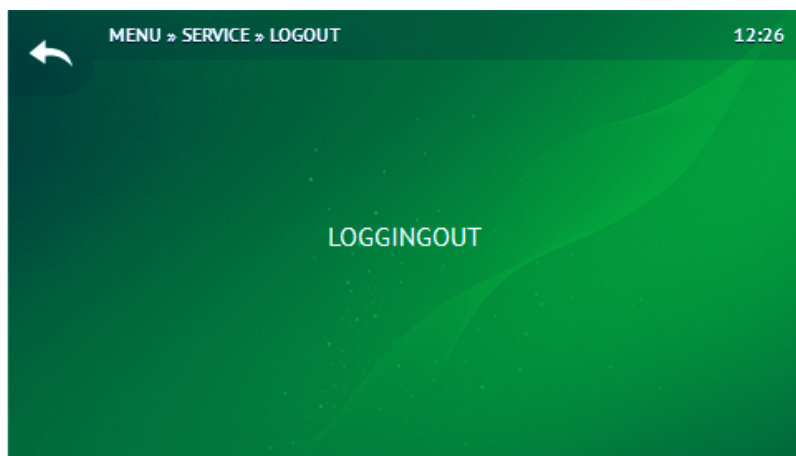
NO.	LABEL	DESCRIPTION
8	CONTROLLER CABINET	Options: •%OP_FAILURE% •%OP_OK%

12.2.14.5 SAVE SETTINGS

MENU » ADJUSTER » SAVE SETTINGS







12.2.14.6 LOGOUT







MENU » ADJUSTER » LOGOUT



12.2.15 SERVICE












MENU » SERVICE

NO.	ICON	LABEL
1		MAIN
2		FANS
3		DAMPERS
4		HEAT EXCHANGER
5		HEATERS
6		COOLERS

NO.	ICON	LABEL
7		DIGITAL INPUTS
8		SENSORS
9		COMMUNICATION
10	****	PASSWORDS
11		RESTORE DEFAULTS
12		SAVE SETTINGS
13		LOGOUT

12.2.15.1 MAIN

MENU » SERVICE » MAIN

NO.	ICON	LABEL
1		BLOCK VENTILATION CONTROL
2		AIR TEMPERATURE CONTROL
3		AIR TEMPERATURE PROTECTION
4		SYSTEM MODE SWITCH
5		FANS SPEED SWITCH
6		AIR FILTERS PROTECTION
7		FIRE PROTECTION
8		CONTROLLER CABINET HEATING
9		CO ₂ REDUCTION FUNCTION
10		COOKING HOOD
11		CALIBRATIONS

12.2.15.1.1 BLOCK VENTILATION CONTROL

MENU » SERVICE » MAIN » BLOCK VENTILATION CONTROL

NO.	LABEL	DESCRIPTION
1	SYSTEM BLOCKING	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	STANDBY BLOCKING MODE	Options: • <i>NEVER</i> • <i>ALWAYS</i> • <i>HEATING SEASON</i> • <i>COOLING</i>
3	STANDBY TIME LIMIT PER DAY	Range: [0 .. 500 MINUTES]

12.2.15.1.2 AIR TEMPERATURE CONTROL

MENU » SERVICE » MAIN » AIR TEMPERATURE CONTROL

NO.	LABEL	DESCRIPTION
1	TEMPERATURE CONTROL TYPE	Options: • <i>SUPPLY</i> • <i>EXTRACT</i>
2	SUPPLY TEMPERATURE COMPENSATION	Range: [0 .. 100 %]

12.2.15.1.3 AIR TEMPERATURE PROTECTION

MENU » SERVICE » MAIN » AIR TEMPERATURE PROTECTION

NO.	LABEL	DESCRIPTION
1	SUPPLY TEMPERATURE LOW LIMIT	Range: [0 .. 20 °C]
2	SUPPLY TEMPERATURE HIGH LIMIT	Range: [20 .. 60 °C]
3	SUPPLY TEMPERATURE LIMIT TIMEOUT	Range: [0 .. 1000 SECONDS]
4	SUPPLY TEMPERATURE LIMIT ALARM ACTION	Options: • <i>SHOW WARNING</i> • <i>STOP SYSTEM</i>

12.2.15.1.4 SYSTEM MODE SWITCH

MENU » SERVICE » MAIN » SYSTEM MODE SWITCH

NO.	LABEL	DESCRIPTION
1	TYPE	Options: • <i>NONE</i> • <i>PULSE</i> • <i>ON/OFF</i> • <i>PIR</i>

NO.	LABEL	DESCRIPTION
2	MODE	Options: <ul style="list-style-type: none"> • <i>STANDBY</i> • <i>BUILDING PROTECTION</i> • <i>ECONOMY</i> • <i>COMFORT</i>

12.2.15.1.5 FANS SPEED SWITCH

MENU » SERVICE » MAIN » FANS SPEED SWITCH

NO.	LABEL	DESCRIPTION
1	TYPE	Options: <ul style="list-style-type: none"> • <i>NONE</i> • <i>PULSE - CUSTOM</i> • <i>ON/OFF - CUSTOM</i> • <i>PULSE - BOOST</i> • <i>ON/OFF - BOOST</i>
2	SUPPLY FAN SPEED	Range: [0 .. 100 %]
3	EXTRACT FAN SPEED	Range: [0 .. 100 %]

12.2.15.1.6 AIR FILTERS PROTECTION

MENU » SERVICE » MAIN » AIR FILTERS PROTECTION

NO.	LABEL	DESCRIPTION
1	FILTERS PRESSURE RELAY	Options: <ul style="list-style-type: none"> • <i>NONE</i> • <i>SUPPLY</i> • <i>EXTRACT</i> • <i>BOTH</i>
2	FILTERS TIMER LIMIT	Range: [1 .. 365 DAYS]

12.2.15.1.7 FIRE PROTECTION

MENU » SERVICE » MAIN » FIRE PROTECTION

NO.	LABEL	DESCRIPTION
1	FIRE PROTECTION ACTION	Options: <ul style="list-style-type: none"> • <i>STOP SYSTEM</i> • <i>SUPPLY</i> • <i>EXTRACT</i> • <i>BOTH</i>
2	TIMEOUT	Range: [0 .. 100 SECONDS]

12.2.15.1.8 CONTROLLER CABINET HEATING

MENU » SERVICE » MAIN » CONTROLLER CABINET HEATING

NO.	LABEL	DESCRIPTION
1	CONTROLLER CABINET HEATING	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	TEMPERATURE CONTROLLED BY	Options: • <i>HEATER</i> • <i>FAN</i>
3	SETPOINT	Range: [1 .. 20 °C]

12.2.15.1.9 CO₂ REDUCTION FUNCTIONMENU » SERVICE » MAIN » CO₂ REDUCTION FUNCTION

NO.	LABEL	DESCRIPTION
1	CO ₂ REDUCTION FUNCTION	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	SETPOINT	Range: [0 .. 1000 ppm]
3	CO ₂ ALLOWED DIFFERENCE FROM SET POINT	Range: [0 .. 1000 ppm]

12.2.15.1.10 COOKING HOOD

MENU » SERVICE » MAIN » COOKING HOOD

NO.	LABEL	DESCRIPTION
1	SHOW ALARMS ON COOKING HOOD	Options: • <i>DISABLED</i> • <i>ENABLED</i>

12.2.15.1.11 CALIBRATIONS

MENU » SERVICE » MAIN » CALIBRATIONS

NO.	LABEL
1	BYPASS DAMPER
2	RECIRCULATION DAMPER
3	PRESSURE

12.2.15.1.11.1 BYPASS DAMPER

MENU » SERVICE » MAIN » CALIBRATIONS » BYPASS DAMPER

12.2.15.1.11.2 RECIRCULATION DAMPER




MENU » SERVICE » MAIN » CALIBRATIONS » RECIRCULATION DAMPER

12.2.15.1.11.3 PRESSURE

MENU » SERVICE » MAIN » CALIBRATIONS » PRESSURE

12.2.15.2 FANS

MENU » SERVICE » FANS

NO.	ICON	LABEL
1		FANS SPEED CONTROL
2		FANS VOLTAGE
3		FANS PROTECTION

12.2.15.2.1 FANS SPEED CONTROL

MENU » SERVICE » FANS » FANS SPEED CONTROL

NO.	LABEL	DESCRIPTION
1	FIXED AIR FLOWS	Options: • <i>NO</i> • <i>YES</i>
2	FANS CONTROL TYPE	Options: • <i>PERCENTS</i> • <i>PRESSURE</i> • <i>AIRFLOW</i>
3	SUPPLY AIR K FACTOR	Range: [0 .. 1000]
4	EXTRACT AIR K FACTOR	Range: [0 .. 1000]
5	MAXIMAL AIR FLOW	Range: [0 .. 1000 m ³ /h]
6	MAXIMAL AIR FLOW PRESSURE	Range: [0 .. 1000 Pa]

12.2.15.2.2 FANS VOLTAGE

MENU » SERVICE » FANS » FANS VOLTAGE

NO.	LABEL	DESCRIPTION
1	MINIMAL VOLTAGE	Range: [0 .. 10 V]
2	MAXIMAL VOLTAGE	Range: [0 .. 10 V]




12.2.15.2.3 FANS PROTECTION

MENU » SERVICE » FANS » FANS PROTECTION

NO.	LABEL	DESCRIPTION
1	FANS PROTECTION BY RPM	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	TACHO PULSES PER REVOLUTION	Range: [1 .. 10 rpm]
3	PRESSURE PROTECTION	Options: • <i>DISABLED</i> • <i>ENABLED</i>
4	PRESSURE PROTECTION TIME	Range: [0 .. 1000 SECONDS]
5	FIRE PLACE PROTECTION	Options: • <i>DISABLED</i> • <i>ENABLED</i>
6	ALLOW SLOWING DOWN FANS BY TEMPERATURE	Options: • <i>DISABLED</i> • <i>ENABLED</i>

12.2.15.3 DAMPERS

MENU » SERVICE » DAMPERS

NO.	ICON	LABEL
1		SUPPLY / EXTRACT DAMPER
2		RECIRCULATION DAMPER
3		FIRE DAMPER

12.2.15.3.1 SUPPLY / EXTRACT DAMPER

MENU » SERVICE » DAMPERS » SUPPLY / EXTRACT DAMPER

NO.	LABEL	DESCRIPTION
1	TYPE	Options: • <i>NONE</i> • <i>ON/OFF</i> • <i>OPEN/CLOSE</i>
2	OPEN TIME	Range: [0 .. 255 SECONDS]

12.2.15.3.2 RECIRCULATION DAMPER

MENU » SERVICE » DAMPERS » RECIRCULATION DAMPER

NO.	LABEL	DESCRIPTION
1	RECIRCULATION DAMPER	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	OPEN TIME	Range: [0 .. 255 SECONDS]
3	RECIRCULATION BY SET POINT	Options: • <i>DISABLED</i> • <i>ENABLED</i>



12.2.15.3.3 FIRE DAMPER

MENU » SERVICE » DAMPERS » FIRE DAMPER

NO.	LABEL	DESCRIPTION
1	TYPE	Options: • <i>NONE</i> • <i>ONE SWITCH</i> • <i>TWO SWITCHES</i>
2	OPEN TIME	Range: [0 .. 255 SECONDS]
3	TESTING	Options: • <i>DISABLED</i> • <i>ENABLED</i>
4	TESTING DAYS INTERVAL	Range: [1 .. 120 DAYS]
5	ACTION ON FIRE ALARM	Options: • <i>OPEN</i> • <i>CLOSE</i>

12.2.15.4 HEAT EXCHANGER

MENU » SERVICE » HEAT EXCHANGER

NO.	ICON	LABEL
1		TYPE
2		FROST PROTECTION

12.2.15.4.1 TYPE

MENU » SERVICE » HEAT EXCHANGER » TYPE

NO.	LABEL	DESCRIPTION
1	HEAT EXCHANGER	Options: • <i>NONE</i> • <i>PLATE</i> • <i>ROTOR</i>

NO.	LABEL	DESCRIPTION
2	TYPE	Options: • 0-10VDC • ON/OFF
3	OUTPUT THRESHOLD	Range: [0 .. 100 %]
4	SERVICE TIMER LIMIT	Range: [1 .. 1000 DAYS]
5		Options: • DISABLED • ENABLED
6	BYPASS OPEN/CLOSE LIMIT	Range: [0 .. 100 %]
7	BYPASS OPEN TIME	Range: [0 .. 255 SECONDS]

12.2.15.4.2 FROST PROTECTION

MENU » SERVICE » HEAT EXCHANGER » FROST PROTECTION

NO.	ICON	LABEL
1		ACTIVATION
2		DEACTIVATION
3		PROTECTIONS

12.2.15.4.2.1 ACTIVATION

MENU » SERVICE » HEAT EXCHANGER » FROST PROTECTION » ACTIVATION

NO.	LABEL	DESCRIPTION
1	OUTSIDE AIR TEMPERATURE	Options: • ACTIVE • INACTIVE
2	OUTSIDE AIR TEMPERATURE	Range: [-40 .. -0.1 °C]
3	EXHAUST AIR TEMPERATURE	Options: • INACTIVE • ACTIVE
4	EXHAUST AIR TEMPERATURE	Range: [0.1 .. 20 °C]
5	DIFFERENCE FROM FROST POINT	Options: • INACTIVE • ACTIVE
6	DIFFERENCE FROM FROST POINT	Range: [0.1 .. 10 °C]
7	PRESSURE RELAY	Options: • INACTIVE • ACTIVATE

12.2.15.4.2.2 DEACTIVATION

MENU » SERVICE » HEAT EXCHANGER » FROST PROTECTION » DEACTIVATION

NO.	LABEL	DESCRIPTION
1	ANTIFROST DEACTIVATION T. DIFFERENCE	Range: [0 .. 10 °C]

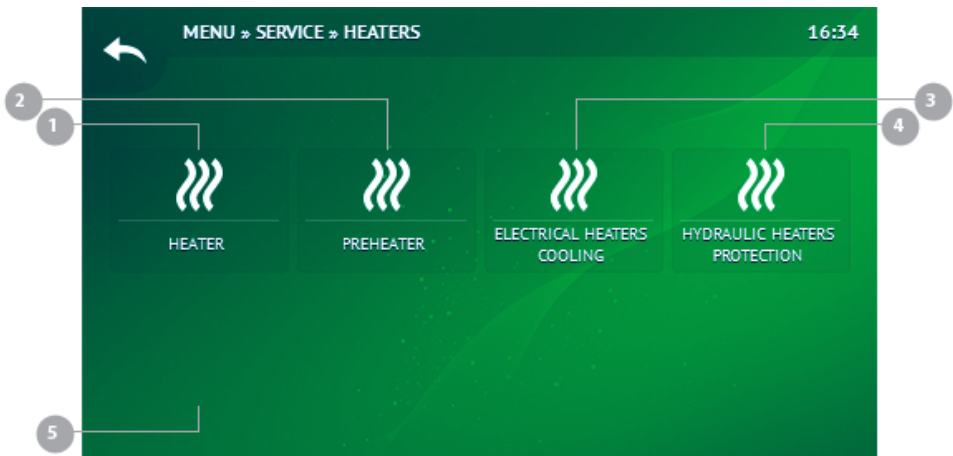
12.2.15.4.2.3 PROTECTIONS

MENU » SERVICE » HEAT EXCHANGER » FROST PROTECTION » PROTECTIONS

NO.	LABEL	DESCRIPTION
1	SLOW DOWN SUPPLY AIR FAN (-30%)	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
2	USE RECIRCULATION	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
3	USE PRE-HEATER	Options: • <i>INACTIVE</i> • <i>ON/OFF</i> • <i>SETPOINT</i>
4	USE BYPASS DAMPER/ROTOR	Options: • <i>INACTIVE</i> • <i>ACTIVATE</i>
5	ANTIFROST PROTECTIONS CHANGING TIME	Range: [1 .. 600 MINUTES]

12.2.15.5 HEATERS

MENU » SERVICE » HEATERS



NO.	ICON	LABEL
1		HEATER
2		PREHEATER
3		ELECTRICAL HEATERS COOLING
4		HYDRAULIC HEATERS PROTECTION
5		CONTROL POSITION

12.2.15.5.1 HEATER

MENU » SERVICE » HEATERS » HEATER

NO.	LABEL	DESCRIPTION
1	TYPE	Options: <ul style="list-style-type: none"> • NONE • %E010% • %EONOFF% • HYDRAULIC
2	PWM TIME INTERVAL	Range: [0 .. 300]
3	ALARM ACTION	Options: <ul style="list-style-type: none"> • STOP SYSTEM • BOOST
4	ALARM ACTION	Options: <ul style="list-style-type: none"> • STOP SYSTEM • BOOST

12.2.15.5.2 PREHEATER

MENU » SERVICE » HEATERS » PREHEATER

NO.	LABEL	DESCRIPTION
1	TYPE	Options: <ul style="list-style-type: none"> • NONE • %E010% • %EONOFF% • HYDRAULIC
2	PWM TIME INTERVAL	Range: [0 .. 300]
3	ALARM ACTION	Options: <ul style="list-style-type: none"> • STOP SYSTEM • BOOST
4	FROST TEMPERATURE	Range: [-30 .. 10 °C]

12.2.15.5.3 ELECTRICAL HEATERS COOLING

MENU » SERVICE » HEATERS » ELECTRICAL HEATERS COOLING

NO.	LABEL	DESCRIPTION
1	TIME	Range: [0 .. 100 SECONDS]

12.2.15.5.4 HYDRAULIC HEATERS PROTECTION

MENU » SERVICE » HEATERS » HYDRAULIC HEATERS PROTECTION

NO.	LABEL	DESCRIPTION
1	PREPARING TIME	Range: [0 .. 100 SECONDS]
2	FROST TEMPERATURE	Range: [-30 .. 10 °C]
3	WATER TEMPERATURE LOW LIMIT	Range: [-30 .. 10 °C]
4	SELF-TEST PERIOD	Range: [1 .. 30 DAYS]

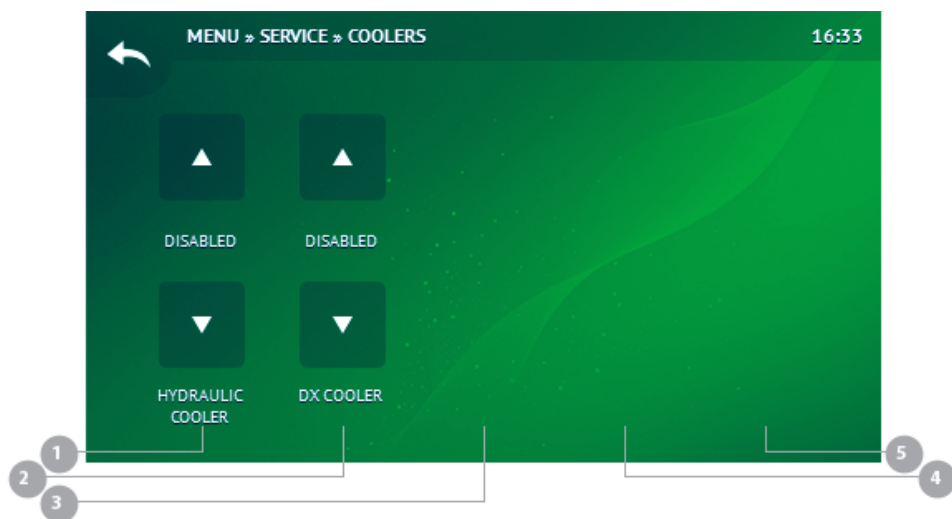
12.2.15.5.5 CONTROL POSITION

MENU » SERVICE » HEATERS » CONTROL POSITION

NO.	LABEL	DESCRIPTION
1	CONTROL POSITION	Options: <ul style="list-style-type: none"> • <i>HEATER on BASIC</i> • <i>PRE-HEATER on BASIC</i>

12.2.15.6 COOLERS

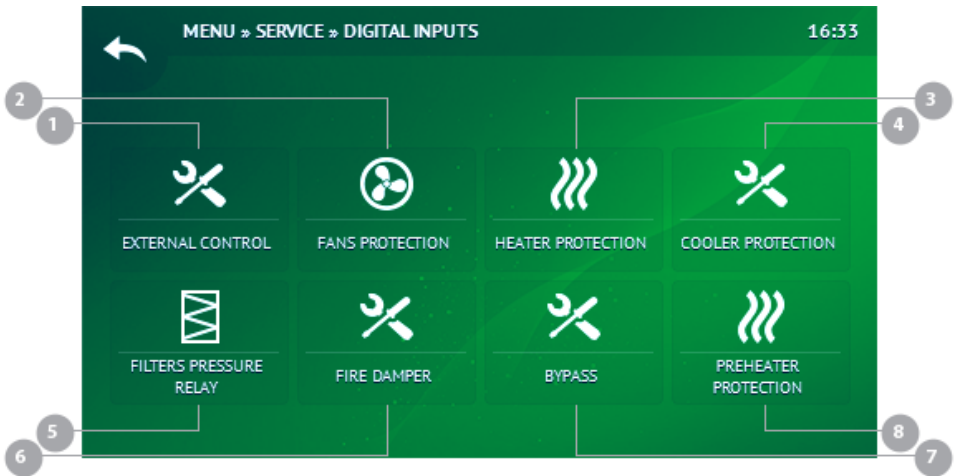
MENU » SERVICE » COOLERS



NO.	LABEL	DESCRIPTION
1	HYDRAULIC COOLER	Options: • <i>DISABLED</i> • <i>ENABLED</i>
2	HYDRAULIC COOLER FROST TEMPERATURE	Range: [-30 .. 10 °C]
3	DX COOLER	Options: • <i>DISABLED</i> • <i>ENABLED</i>
4	DX COOLER MINIMAL OFF TIME	Range: [1 .. 30 MINUTES]
5	REVERSE	Options: • <i>DISABLED</i> • <i>ENABLED</i>

12.2.15.7 DIGITAL INPUTS

MENU » SERVICE » DIGITAL INPUTS



NO.	ICON	LABEL
1		EXTERNAL CONTROL
2		FANS PROTECTION
3		HEATER PROTECTION
4		COOLER PROTECTION
5		FILTERS PRESSURE RELAY
6		FIRE DAMPER
7		HEAT EXCHANGER
8		PREHEATER PROTECTION

12.2.15.7.1 EXTERNAL CONTROL

MENU » SERVICE » DIGITAL INPUTS » EXTERNAL CONTROL

NO.	LABEL	DESCRIPTION
1	FIRE PROTECTION	Options: • NO • NC

NO.	LABEL	DESCRIPTION
2	SYSTEM MODE SWITCH	Options: •NO •NC
3	FANS SPEED SWITCH	Options: •NO •NC
4	FIRE PLACE PROTECTION	Options: •NO •NC

12.2.15.7.2 FANS PROTECTION

MENU » SERVICE » DIGITAL INPUTS » FANS PROTECTION

NO.	LABEL	DESCRIPTION
1	SUPPLY FAN PROTECTION	Options: •NO •NC
2	EXTRACT FAN PROTECTION	Options: •NO •NC

12.2.15.7.3 HEATER PROTECTION

MENU » SERVICE » DIGITAL INPUTS » HEATER PROTECTION

NO.	LABEL	DESCRIPTION
1	MANUAL PROTECTION	Options: •NO •NC
2	AUTOMATIC PROTECTION	Options: •NO •NC

12.2.15.7.4 COOLER PROTECTION

MENU » SERVICE » DIGITAL INPUTS » COOLER PROTECTION

NO.	LABEL	DESCRIPTION
1	COOLER PROTECTION	Options: •NO •NC
2		Options: •NO •NC

12.2.15.7.5 FILTERS PRESSURE RELAY

MENU » SERVICE » DIGITAL INPUTS » FILTERS PRESSURE RELAY

NO.	LABEL	DESCRIPTION
1	SUPPLY	Options: •NO •NC
2	EXTRACT	Options: •NO •NC

12.2.15.7.6 FIRE DAMPER

MENU » SERVICE » DIGITAL INPUTS » FIRE DAMPER

NO.	LABEL	DESCRIPTION
1	OPENED	Options: •NO •NC
2	CLOSED	Options: •NO •NC

12.2.15.7.7 HEAT EXCHANGER

MENU » SERVICE » DIGITAL INPUTS » HEAT EXCHANGER

NO.	LABEL	DESCRIPTION
1	PRESSURE RELAY	Options: •NO •NC
2	BYPASS DAMPER CLOSED	Options: •NO •NC

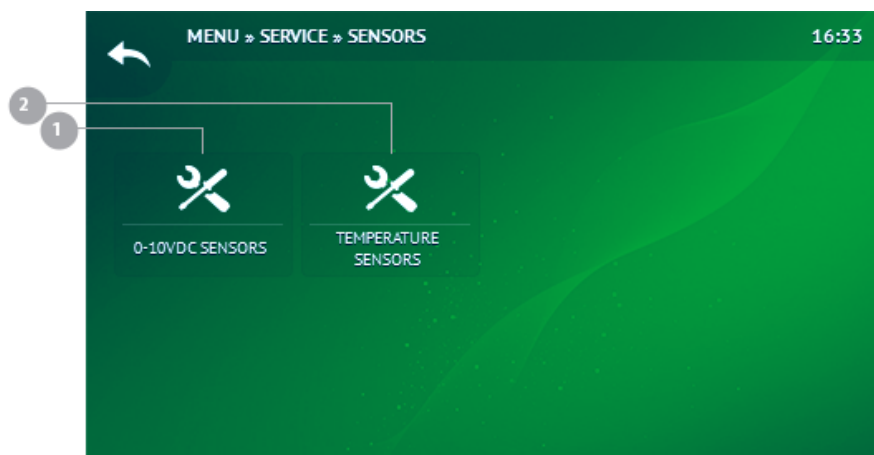
12.2.15.7.8 PREHEATER PROTECTION

MENU » SERVICE » DIGITAL INPUTS » PREHEATER PROTECTION

NO.	LABEL	DESCRIPTION
1	MANUAL PROTECTION	Options: •NO •NC
2	AUTOMATIC PROTECTION	Options: •NO •NC

12.2.15.8 SENSORS

MENU » SERVICE » SENSORS



NO.	ICON	LABEL
1		0-10VDC SENSORS
2		TEMPERATURE SENSORS

12.2.15.8.1 0-10VDC SENSORS

MENU » SERVICE » SENSORS » 0-10VDC SENSORS

NO.	ICON	LABEL
1		AIR QUALITY SENSOR 1
2		AIR QUALITY SENSOR 2

12.2.15.8.1.1 AIR QUALITY SENSOR 1

MENU » SERVICE » SENSORS » 0-10VDC SENSORS » AIR QUALITY SENSOR 1

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: <ul style="list-style-type: none"> • NONE • SUPPLY RH • NONE • EXTRACT RH • EXTRACT CO₂ • SUPPLY PRESSURE
2	MINIMUM PPM	Range: [0 .. 2000 ppm]

NO.	LABEL	DESCRIPTION
3	MAXIMUM PPM	Range: [0 .. 2000 ppm]

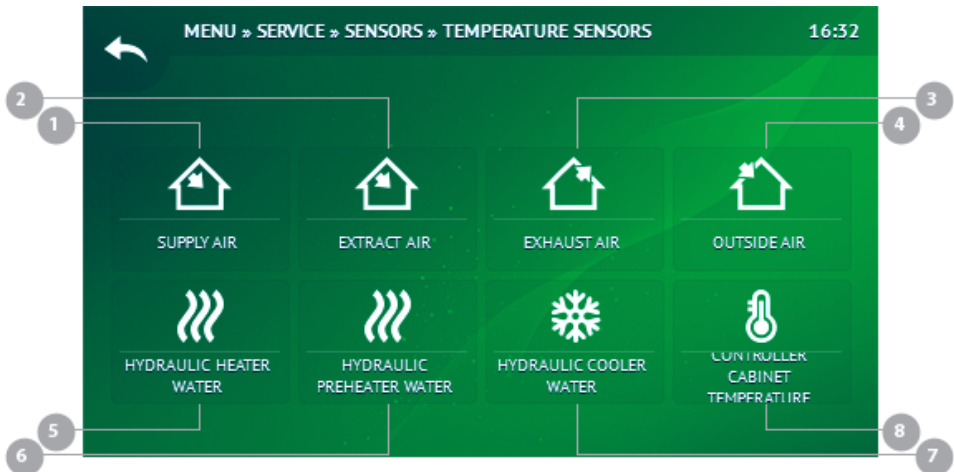
12.2.15.8.1.2 AIR QUALITY SENSOR 2

MENU » SERVICE » SENSORS » 0-10VDC SENSORS » AIR QUALITY SENSOR 2






NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: <ul style="list-style-type: none"> • NONE • SUPPLY RH • NONE • EXTRACT RH • EXTRACT CO₂ • EXTRACT PRESSURE
2	MINIMUM PPM	Range: [0 .. 2000 ppm]
3	MAXIMUM PPM	Range: [0 .. 2000 ppm]

12.2.15.8.2 TEMPERATURE SENSORS

MENU » SERVICE » SENSORS » TEMPERATURE SENSORS

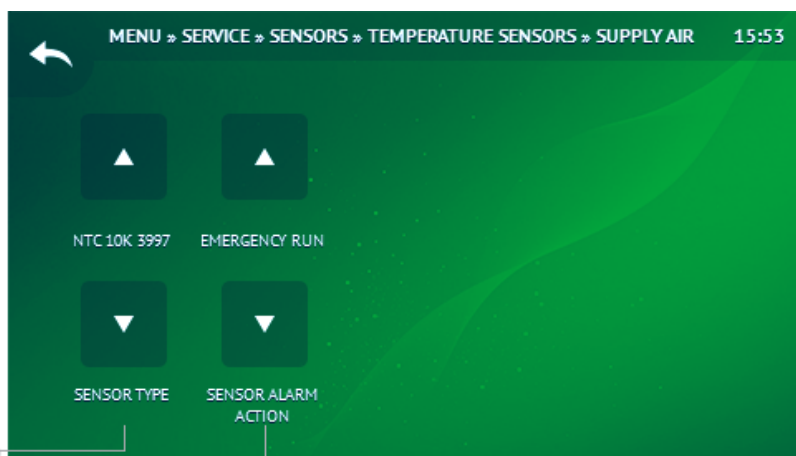


NO.	ICON	LABEL
1		SUPPLY AIR
2		EXTRACT AIR
3		EXHAUST AIR

NO.	ICON	LABEL
4		OUTSIDE AIR
5		HYDRAULIC HEATER WATER
6		HYDRAULIC PREHEATER WATER
7		HYDRAULIC COOLER WATER
8		CONTROLLER CABINET TEMPERATURE

12.2.15.8.2.1 SUPPLY AIR

MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » SUPPLY AIR



NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: <ul style="list-style-type: none"> • NONE • REMOTE • NTC 10K 3997
2	SENSOR ALARM ACTION	Options: <ul style="list-style-type: none"> • NONE • STOP SYSTEM • EMERGENCY RUN

12.2.15.8.2.2 EXTRACT AIR

MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » EXTRACT AIR

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.8.2.3 EXHAUST AIR
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » EXHAUST AIR

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.8.2.4 OUTSIDE AIR
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » OUTSIDE AIR

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.8.2.5 HYDRAULIC HEATER WATER
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » HYDRAULIC HEATER WATER

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.8.2.6 HYDRAULIC PREHEATER WATER
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » HYDRAULIC PREHEATER WATER

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.8.2.7 HYDRAULIC COOLER WATER
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » HYDRAULIC COOLER WATER

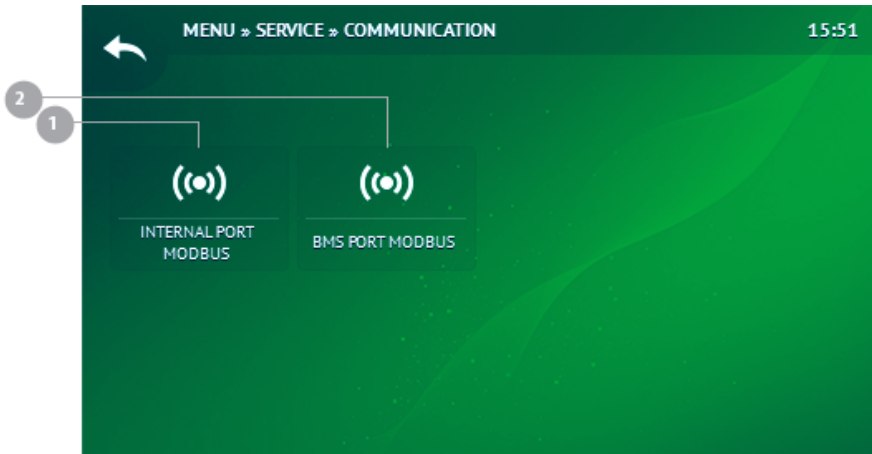
NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>



12.2.15.8.2.8 CONTROLLER CABINET TEMPERATURE
MENU » SERVICE » SENSORS » TEMPERATURE SENSORS » CONTROLLER CABINET TEMPERATURE

NO.	LABEL	DESCRIPTION
1	SENSOR TYPE	Options: • <i>NONE</i> • <i>REMOTE</i> • <i>NTC 10K 3997</i>
2	SENSOR ALARM ACTION	Options: • <i>NONE</i> • <i>STOP SYSTEM</i> • <i>EMERGENCY RUN</i>

12.2.15.9 COMMUNICATION

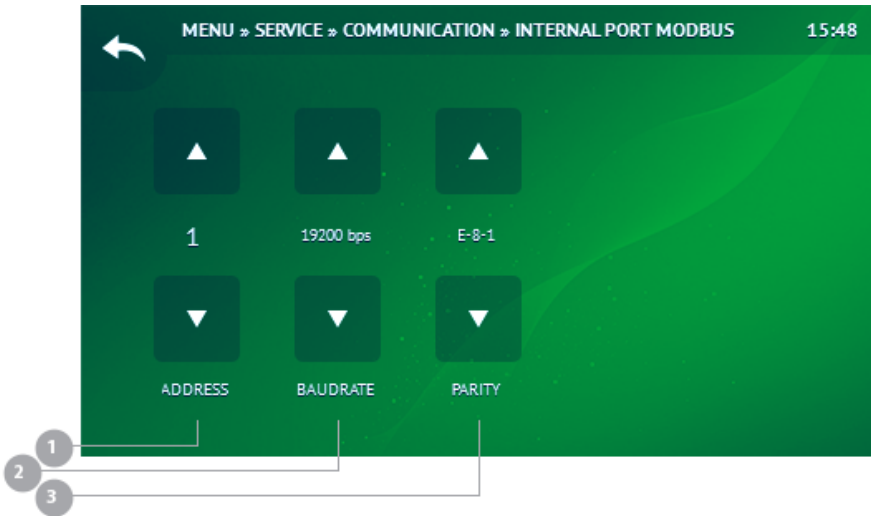
MENU » SERVICE » COMMUNICATION



NO.	ICON	LABEL
1		INTERNAL PORT MODBUS
2		BMS PORT MODBUS

12.2.15.9.1 INTERNAL PORT MODBUS

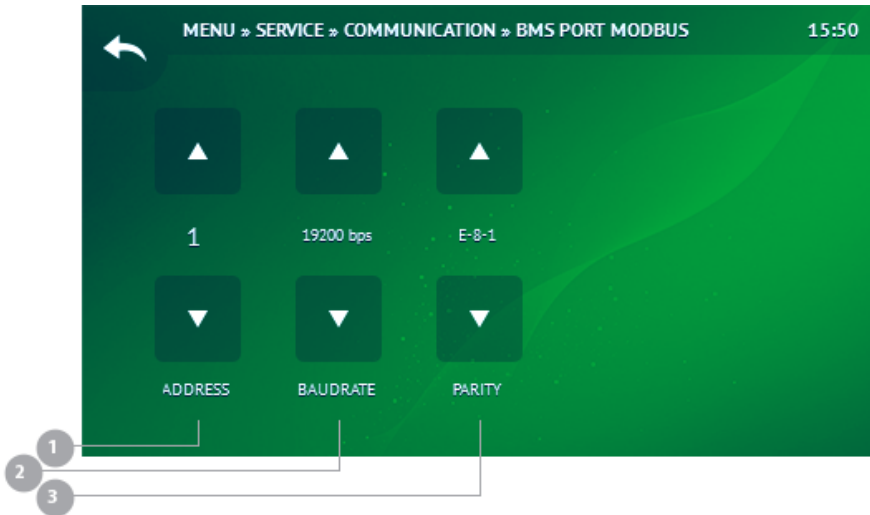
MENU » SERVICE » COMMUNICATION » INTERNAL PORT MODBUS



NO.	LABEL	DESCRIPTION
1	ADDRESS	Range: [1 .. 247]
2	BAUDRATE	Options: <ul style="list-style-type: none"> • 1200 bps • 2400 bps • 4800 bps • 9600 bps • 19200 bps • 38400 bps • 57600 bps • 115200 bps
3	PARITY	Options: <ul style="list-style-type: none"> • N-8-1 • E-8-1 • O-8-1 • N-8-2 • E-8-2 • O-8-2

12.2.15.9.2 BMS PORT MODBUS

MENU » SERVICE » COMMUNICATION » BMS PORT MODBUS



NO.	LABEL	DESCRIPTION
1	ADDRESS	Range: [1 .. 247]
2	BAUDRATE	Options: <ul style="list-style-type: none"> • 1200 bps • 2400 bps • 4800 bps • 9600 bps • 19200 bps • 38400 bps • 57600 bps • 115200 bps
3	PARITY	Options: <ul style="list-style-type: none"> • N-8-1 • E-8-1 • O-8-1 • N-8-2 • E-8-2 • O-8-2

12.2.15.10 PASSWORDS

MENU » SERVICE » PASSWORDS

12.2.15.11 RESTORE DEFAULTS

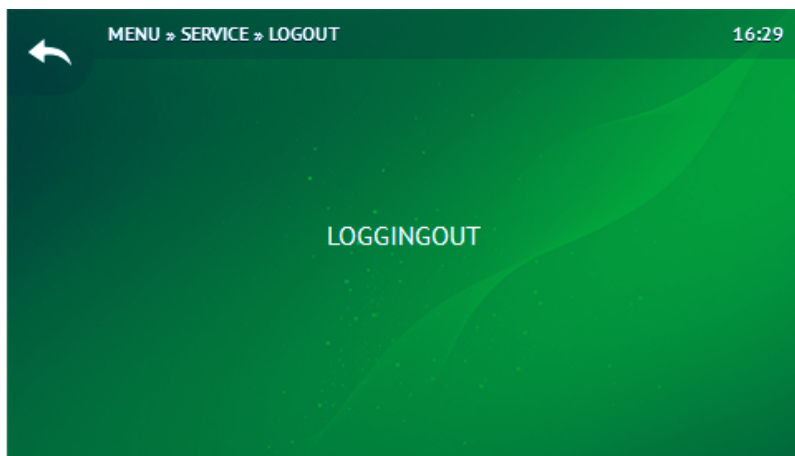
MENU » SERVICE » RESTORE DEFAULTS

12.2.15.12 SAVE SETTINGS

MENU » SERVICE » SAVE SETTINGS

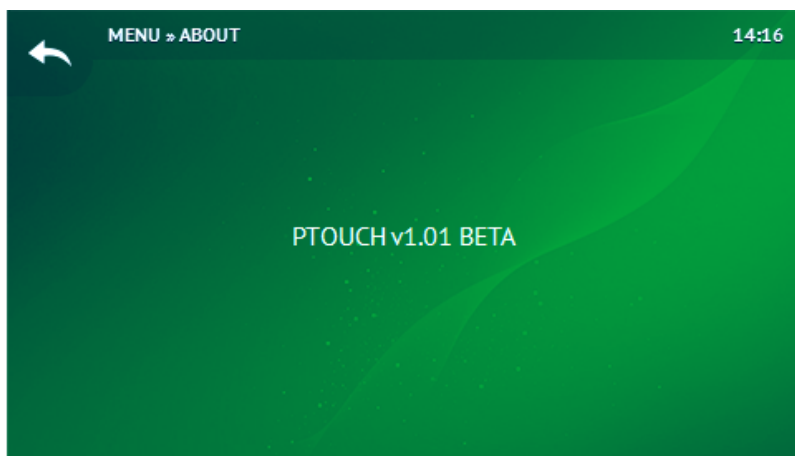
12.2.15.13 LOGOUT

MENU » SERVICE » LOGOUT



12.2.16 ABOUT

MENU » ABOUT





Declaration of Conformity

Manufacturer

UAB "SALDA"
Ragainės g. 100
LT-78109 Šiauliai, Lithuania
Tel.: +370 41 540415
www.salda.lt

Hereby confirms that the following product – touch screen controller:

Ptouch *

(where by „*“ indicates possible unit installation type and modification)

Provided it was delivered and installed in the facility in accordance with the included installation instructions, comply with all applicable requirements in the following directives:

EMC Directive 2014/30/EU

The following harmonized standards are applied in applicable parts:

LST EN 60730-2-9 - Automatic electrical controls for household and similar use -- Part 2-9: Particular requirements for temperature sensing controls.

LST EN 61000-6-2 - Electromagnetic compatibility (EMC) -- Part 6-2: Generic standards - Immunity for industrial environments.

LST EN 61000-6-3 - Electromagnetic compatibility (EMC) -- Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.

Should any alterations be made in the product, this declaration will no longer apply.

Quality: UAB "Salda" activities are in line with the international quality management system standard ISO 9001:2015.

Date 2015-09-01

A handwritten signature in black ink, appearing to be "Kęstutis Kuzminskas", written over a white background.

Kęstutis Kuzminskas
Technical manager

14. RECYCLING

Electrical and electronic waste.

- Follow local regulations regarding disposal of the equipment.
- Bring the equipment to a recycling area or container in order to minimize the effect on the environment and public health.
- For further information on recycling, please contact the seller or the supplier.

15. WARRANTY

Dear Consumer, we appreciate your choice and guarantee that all ventilation equipment manufactured in our plant is carefully checked and tested. Direct buyer gets functioning and good quality product straight from the territory of the company. **The product is given a 24-month warranty from the invoice date.** Your opinion is very important for us, therefore we always welcome your comments, feedback or proposals regarding technical and operational qualities of the equipment.

In order to avoid any misunderstandings, please read the technical manual carefully. The equipment series number on sticker placed on the equipment must correspond to the number indicated in the warranty certificate.

The warranty certificate is effective if it has clear stamps and entries of the seller on it. It is forbidden to change, erase or rewrite any information indicated in the warranty certificate – this makes the warranty certificate ineffective.

By this warranty certificate the manufacturer confirms the obligations provided for in applicable consumer protection laws to fulfil consumers' requirements in case defects in products are found.

The manufacturer retains the right to refuse providing free warranty service in case the following warranty conditions are not met.

Warranty conditions

1. The term of the manufacturer's equipment quality warranty indicated in this certificate starts to run from the date of the invoice.
2. If equipment is damaged during transportation, claims must be made to the transportation company.
3. Warranty does not apply in the following cases:
 - if the buyer cannot present a warranty certificate;
 - if the equipment series number on the identification sticker placed on the equipment is changed or removed;
 - in case of a breach of the rules and conditions for using the product given in the product transportation, assembly and service instructions;
 - in case of improper operation of the equipment – failure to perform technical maintenance;
 - when the equipment is used not for its direct purpose;
 - when the equipment was modernized or repaired without the company's knowledge and consent;
 - in case of mechanical damage;
 - in case of damage caused by strange items, substances, liquids that got inside the equipment;
 - when failure is caused by a natural disaster, emergency (change of voltage in the power supply system, lightning, etc.) or accident.
4. The company does not assume liability for direct or indirect damage caused by its products if the cause of such damage is failure to observe the rules and conditions for use and assembly of the equipment, wilful or negligent conduct of consumers or third parties. The above-listed operation mistakes and damage to the equipment can be easily noticed after return of the product to our plant and performance of initial examination. If the buyer notices that the ventilation equipment does not function or fails to function properly, he must apply to the company that sold the ventilation equipment, indicating reasons for the application and must deliver the equipment to the manufacturer at his own expense.

I received complete package and technical manual of the product ready for usage. I have read warranty terms and conditions and agree with them.

SERIAL NUMBER _____

CUSTOMER'S SIGNATURE _____