# **SMARTY XP S300**

EN MOUNTING AND INSTALLATION INSTRUCTION



### **X** SALDA

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### 2. SYMBOLS AND MARKING



Warning - pay attention

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**Additional information** 

Apply the auxiliary label on the unit (on an easily accessible location) or on the dashed location of the technical manual in order to keep the important information about the unit.

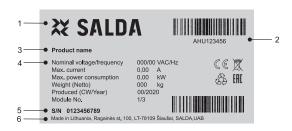


Figure. 2.1. Technical label

1 - Logo; 2 - Product code (SKU); 3 - Product name; 4 - Technical data; 5 - Serial number; 6 - Production place.









Figure. 2.2. Indication for duct connection.

ODA - outdoor air; SUP - supply air; ETA - extract air; EHA - exhaust air.

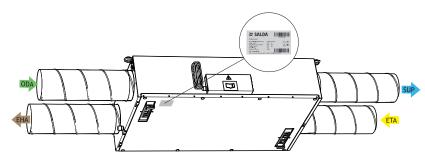


Figure. 2.3. Smarty 2XP S300 Technical label location and air duct indication

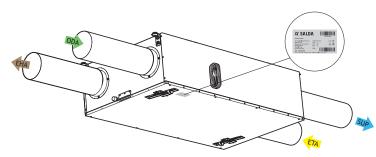


Figure. 2.4. Smarty 3-4XP S300 Technical label location and air duct indication

A

NOTE. Ducts are not the part of the unit.

#### 3. SAFETY INSTRUCTIONS AND PRECAUTIONS

Read these instructions very carefully before installing and using this equipment. Installation, connection and maintenance should be carried out by a qualified technician and in accordance with the local regulations and legislation.

The company shall take no responsibility for the injuries or damaged property if the safety requirements are not followed or the device is modified without the permission of the manufacturer.

#### Main safety rules

#### Danger

- Before carrying out any electrical or maintenance works, make sure that the device is disconnected from the mains and all moving parts of the device have stopped.
- Make sure that the fans are not accessible through air ducts or branch openings.



- Do not plug the device into the mains that differ from the one indicated on the label or on the housing.
- · Voltage of the mains should comply with the electro technical parameters indicated on the label.
- The device should be earthed in accordance with the regulations on the installation of electric devices. Turning on and using unearthed device is not allowed. Follow the requirements specified on the device's labels that indicate danger.

### Warnings

- Connection of electricity and maintenance of the device should be performed by the qualified personnel only and in accordance with the manufacturer's instructions and safety requirements.
- In order to reduce the risk during installation and maintenance, suitable protective clothing must be worn.
- Beware of sharp angles while carrying out installation and maintenance works.
- Do not touch heating elements until they haven't cooled down.
- · Some devices are heavy, you should be very careful while transporting and installing them. Use suitable lifting equipment.
- When connecting electricity to the mains, a circuit breaker of suitable size must be used.

#### Warning!



- If the device is installed in a cold environment, make sure that all connections and tubes are properly isolated. Intake and discharge air ducts should be isolated in all cases.
- Openings of the ducts should be covered during transportation and installation.
- · Make sure not to damage the heater when connecting the piping of the water heater. For tightening up, use a wrench/spanner.

#### Before starting up the device

- · make sure, that there are no strange objects inside;
- manually check fans to make sure they are not stuck or blocked;



- if rotary heat exchanger is installed in the device, make sure that it is not stuck or blocked;
- · check the earthling;
- make sure that all components and accessories are connected in accordance with the wiring diagram or provided instructions.

#### Danger: Fumes



Salda Antifrost system uses dis-balancing of an airflow and it may cause negative pressure in premises. Care must be taken when using the device in the premises together with another heating appliance that depends on the air in the premises. Such appliances include gas, oil, wood or coal-fired boilers and heaters, fireplaces, continuous flow or other water heaters, gas hobs, cookers or ovens that draw the air in from the room and the duct-exhaust gases out through chimney or extraction ducting. The heating appliance can be starved of oxygen, impairing combustion. In exceptional cases, harmful gases could be drawn out of the chimney or extraction ducting back into the room. In such case we strictly recommend to turn off Salda Antifrost and use an external preheater for heat exchanger anti-frost protection (see Salda Antifrost function in the Remote Controller Operation Manual).

### 4. INFORMATION ABOUT THE PRODUCT

### 4.1. DESCRIPTION

Smarty XP is the residential air handling unit with a high efficiency (up to 90%) counter flow heat exchanger. The unit supplies ventilation in home and takes the heat from exhaust air. AHU complies with ErP 2018 and Passivhaus requirements. The unit is operated by a separate remote control panel. Remote control panel is optional and not included in the standard package.

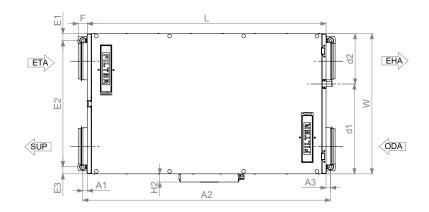
			Heat recov-	Tamanara	Dymana	Optional hea	Optional heating elements	
Product name	Control board	Туре	ery	Tempera- ture control	Bypass damper	Duct based Air Pre-Heater	Duct based Air Heater	
Smarty 2X P S300	S300	Advanced	+	+	+	+*	+*	
Smarty 3X P S300	S300	Advanced	+	+	+	+*	+*	
Smarty 4X P S300	S300	Advanced	+	+	+	+*	+*	

<sup>\*-</sup> only pre-heater or heater



Not suitable for operation in pools, saunas and other similar premises.

### 4.2. DIMENSIONS AND WEIGHT



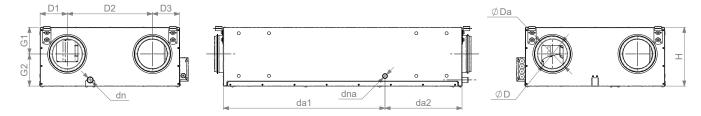


Figure 4.2.1. Smarty 2XP S300

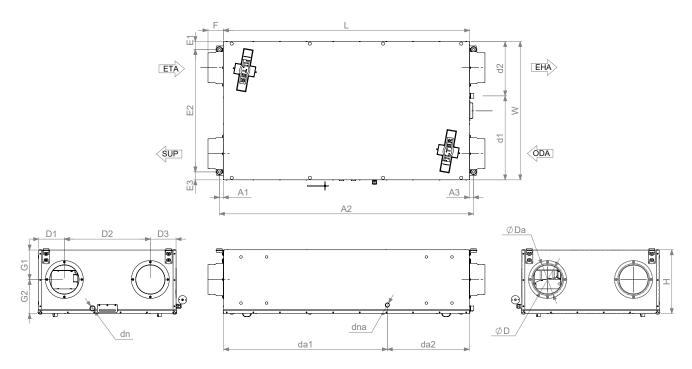


Figure 4.2.2. Smarty 3-4 XP S300

SMARTY		2XP S300	3XP S300	4XP \$300
L	[mm]	1010	1228	1228
W	[mm]	590	690	690
Н	[mm]	250	324	324
H2	[mm]	35	-	-
øD	[mm]	125	160	160
øDa	[mm]	160	150	150
F	[mm]	39	80	80
dn		G1/2	G1/2	G1/2
dna		G3/8	G3/8	G3/8
A1	[mm]	21	21	21
A2	[mm]	1047	1268	1268
A3	[mm]	21	21	21
E1	[mm]	29	37	37
E2	[mm]	532	611	611
E3	[mm]	29	37	37
d1	[mm]	379	419	419
d2	[mm]	211	271	271
da1	[mm]	684	817	817
da2	[mm]	326	409	409
D1	[mm]	115	128	128
D2	[mm]	360	429	429
D3	[mm]	115	128	128
G1	[mm]	113	148	148
G2	[mm]	136	170	170
Weight	[kg]	40	53	53

### 4.3. TECHNICAL DATA

SMARTY		2XP S300	3XP S300	4XP S300
Exhaust air fan				
phase/voltage	[50 Hz/VAC]	1/230	1/230	1/230
power/current	[kW/A]	0,05/0,4	0,09/0,75	0,17/1,35
speed	[min <sup>-1</sup> ]	4525	3200	4120
control input	[VDC]	0-10	0-10	0-10
protection class		IP 44	IP 54	IP54
Supply air fan				
phase/voltage	[50 Hz/VAC]	1/230	1/230	1/230
power/current	[kW/A]	0,05/0,4	0,09/0,75	0,17/1,35
speed	[min <sup>-1</sup> ]	4525	3200	4120
control input	[VDC]	0-10	0-10	0-10
protection class		IP 44	IP 54	IP54
Total power/current consumption	[kW/A]	0,15/1,02	0,22/1,72	0,39/2,92
Automatic control integrated		S300	S300	S300
Insulation of walls	[mm]	20	30	30
Exhaust air filter (class, dimensions LxWxH)	[mm]	MPL 185x168x25 Coarse 65%	6 MPL 225x195x25 Coarse 65%	MPL 225x195x25 Coarse 65%
Supply air filter (class, dimensions LxWxH)	[mm]	MPL 185x168x25 Coarse 65%	6 MPL 225x195x25 Coarse 65%	MPL 225x195x25 Coarse 65%
Device protection class		IP 34	IP 34	IP-34

According to EN 13141-7.

Acoustic data: check the product page on https://select.salda.lt



Not suitable for installation in living rooms: additional noise insulation required.

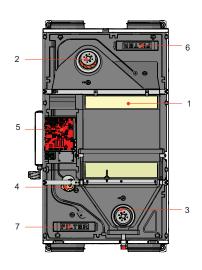
### 4.4. OPERATING CONDITIONS

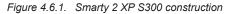
SMARTY	2X P	3X P	4X P
Outdoor air temp. without frost protection	-2 40 °C	-2 40 °C	-2 40 °C
Ambient air temp.	5 40 °C	5 40 °C	5 40 °C
Min extracted air temp	16 °C	16 °C	16 °C
Max extracted air humidity	70 %	70 %	70 %
Max. ambient air humidity	70 %	70 %	70 %
Operation environment	Indoors	Indoors	Indoors

### 4.5. STANDART PACKAGE OF COMPONENTS

SMARTY	2XP	3XP	4XP
Key M4 Z-type	1	1	1
Outlet pipe G3/8	1	1	1
Anti-vibration rubber 313508000	4	4	4
BFG bush caps	8	8	8

### 4.6. DESCRIPTION OF COMPONENTS





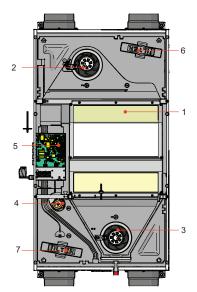


Figure 4.6.2. Smarty 3-4XP S300 construction

1 - Plate heat exchanger; 2 - Supply fan; 3 - Exhaust fan; 4 - By-pass damper; 5 - Control board; 6 - Extract air filters (panel); 7 - Supply air filter (panel).

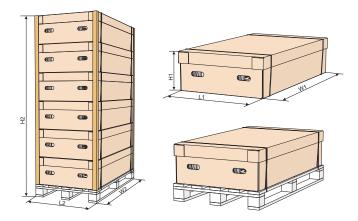
### 5. INSTALATION

### 5.1. RECEPTION OF GOODS

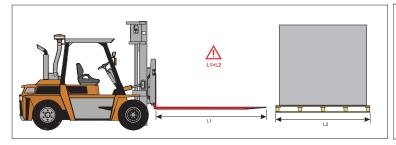
Each device is carefully checked before transportation. When receiving the goods, checking the devices for any damage made during transportation is recommended. If any damage to the unit is observed, immediately contact the representatives of a transport company. Please inform the representative of the manufacturer, if any deviation of the device is noticed.

### 5.2. TRANSPORTATION AND STORAGE

- All units are factory-packaged to withstand normal conditions of transportation.
- · When unpacking, check the unit for any damage made during transportation. Installing of damaged units is not allowed!
- · The packaging is used for protection purpose only!
- When unloading and storing the units, use suitable lifting equipment to avoid damage and injuries. Do not lift units by holding on power supply cables, connection boxes, air extract or exhaust flanges. Avoid hits and shock overloads. Before installation, the units must be stored in a dry room with the relative air humidity not exceeding 70% (at +20°C) and with an average ambient temperature ranging between +5 °C and +30 °C. The storage place must be protected against dirt and water.
- The units must be transported to the storage place or installation site using forklifts.
- The recommended storage i period should not be longer than one year. In case of storing the units for a period longer than one year, checking if the fan bearings and motor rotate without difficulty (turning the impeller by hand) and if the electric circuit insulation is not damaged or the moisture has not accumulated must be performed before the installation of the unit.



Unit	Dimensio	ns of a singl	e package	Dimensi	ons of multi-	-package	Max. number of transported packages
	H1 [mm]	L1 [mm]	W1 [mm]	H2 [mm]	L2 [mm]	W2 [mm]	[pcs.]
Smarty 2X P	260	680	1120	2240	800	1200	8
Smarty 3X P	325	780	1400	2175	800	1450	6
Smarty 4X P	325	780	1400	2175	800	1450	6



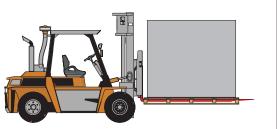


Figure 5.2.1. Lifting by forklift.

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In order to prevent damage to the casing, only a product placed on a pallet should be lifted.

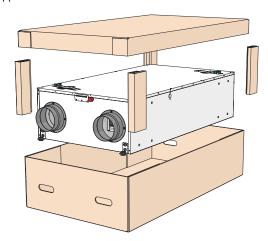
### 5.3. UNPACKING

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Accessories may be packed together with the product. Prior to transporting the unit, the accessories should be unpacked first.

- Remove the film from the unit.
- Remove the bracing packaging tape that keeps the protective profiles in place.
- Remove the protective profiles.
- · After unpacking the unit, examine it to make sure that no damage was made during transportation. Installing of damaged units is not allowed!

• Before commencing the installation of the unit, please check if all ordered equipment have been delivered. Any variation from the ordered equipment list must be reported to the product supplier.



## 5.4. PIPING AND INSTRUMENTATION DIAGRAM

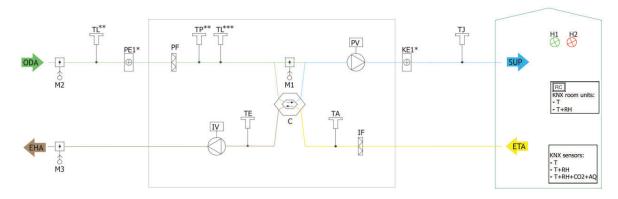


Figure 5.4.1. SMARTY XP S300 (\* Only heater or preheater can be connected at a time; \*\* Components connection only with PE1; \*\*\*

Components connection only without PE1)

#### THE LIST OF COMPONENTS

THEL	LIST OF COMPONENTS		
С	Plate heat exchanger	PV	Supply air fan
IF	Extract air filter	PF	Supply air filter
IV	Exhaust fan	TA	Extract air temperature sensor
TE	Exhaust air temperature sensor	TJ	Supply air temperature sensor
TL	Outdoor air temperature sensor	CO <sub>2</sub>	CO <sub>2</sub> sensor
RH	Air humidity sensor	PE1	Electric pre-heater
KE1	Electric heater	M2	Outdoor air damper actuator
M1	By-pass damper	RC	POS8.4420 or POS8.4440 remote control panel
М3	Exhaust air damper actuator	AQ	Air quality sensor
	Ventilated premises	т	Temperature sensor
TP	Air temperature after pre-heater sensor		
POSIE	BLE PCB INPUTS/OUTPUTS		
FA	Fire alarm	FPP	Fireplace protection
H1	Operation indication output	H2	Alarm indication output
	System mode switch		Fans speed switch

### 5.5. MOUNTING

- Installation should be carried out by qualified and trained staff only.
- When connecting air ducts, consider the labels on the casing of the unit.
- Before connecting to the air duct system, the connection openings of ventilation unit should be closed.
- When connecting the ducts, the air-flow direction indicated on the device housing should be observed.
- Do not connect the bends close to connection flanges of the unit. The minimum distance of the straight air duct between the unit and the first
- branch of the air duct in the supply air duct must be 1xD, in air exhaust duct 3xD, where D is the diameter of the air duct.
- It is recommended to use the brackets (accessories). This will reduce the vibration transmitted by the unit to the air duct system and environ-

### **XX SALDA**

ment.

- Sufficient space must be provided for opening of the manhole and filter covers.
- Ducts are connected to the unit in such way that they could be easily disassembled and the heater could be removed from the unit when carrying out maintenance, servicing and/or repairs



The protective film is used to protect the unit during transportation. It is recommended to remove the film; otherwise, oxidation signs may occur.



Before every heating season, the condensate tube must be filled with water as indicated during the first start-up!

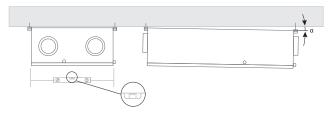


Figure 5.5.1. Ceiling-mounting positions ( $\alpha$ >1°)

### 5.6. UNIT PLACING AND MOUNTING POSITIONING REQUIREMENTS

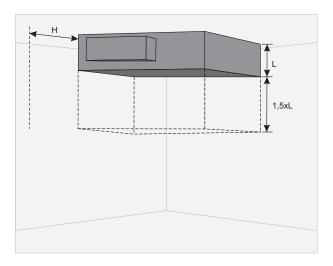


Figure 5.6.1. Min. distance to open the door - 1,5xL; Min. distance to open the control box door - H > 400 mm.

### 5.7. CEILING-MOUNTING OF THE UNIT

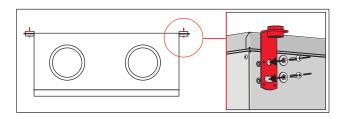


Figure 5.7.1. Ceiling-mounting of the unit

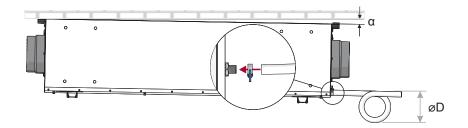
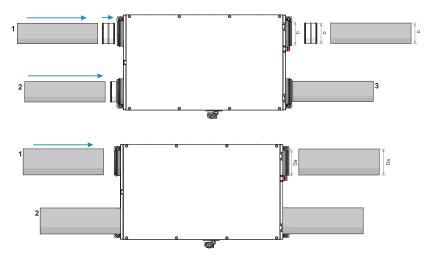


Figure 5.7.2. Drainage system installation (øD=150 mm)

Note. If the collector is located upstream, install the system with the condensate pump (offered as an accessory).

### 5.8. CONNECTION OF THE AIR DUCT



### /i\

### D or Da dimensions depend on unit.

- The connected air ducts must not be bent and have separate fixing.
- Make sure that the fans can not be accessed through air duct heads. Otherwise, protective grid should be installed. You may choose the grid from the range of products provided in our website.
- Do not reduce the diameter of the piping near air inlet or exhaust ducts. If you want to reduce the airflow speed in the system, drop of pressure and noise level, you can increase the diameter.
- In order to reduce the level of the noise in the air supply system, install dampers (see the chapter on air supply system installation).
- In order to reduce air loss in the system, the air ducts and profile components should be of class C and higher. The catalog on the above-mentioned items can be found in our website.
- External air and exhaust system piping should be isolated in order to prevent heat loss and condensation.
- Maintaining the distance of up to 8 meters between air intake and air exhaust ducts is recommended. Air supplying system should be installed away from potential air pollution sources.
- When installing air ducts next to the ventilation equipment, brackets must be used. They suppress vibration and assure secure installation of the various system parts. The necessary brackets can be found in our catalog or website.
- Air ducts are often mistakenly connected in inappropriate location. The ventilation units bear the labels indicating the correct air duct connection layout. Before starting up the system, carefully check if all related works have been performed properly.

For Smarty 2X P, air ducts of the following two sizes can be used: ø D - 125 mm (a), ø Da - 160 mm (b).

NOTE. In case air ducts of ø D - 125 mm are used, using of NPU 125 coupling is required.

For Smarty 3X P, air ducts of the following two sizes can be used: ø D - 160 mm or 150 mm (b).

### 5.9. CONNECTION OF THE UNIT TO ELECTRIC NETWORK

- Supply voltage to the unit must be connected by a qualified specialist following the manufacturer's instructions and applicable safety guidelines.
- The unit's power network voltage must correspond to electro technical specifications of the unit indicated in the technical decal.
- The unit's voltage, power and other technical specifications are provided in the unit's technical decal (on the unit casing). The unit must be connected to the voltage plug socket of the grounded power network in accordance with the applicable requirements.
- The unit must be earthed according to electrical equipment installation regulation.
- Using extension wires (cables) and power network plug socket distribution devices is not allowed.
- Prior to carrying out any ventilation unit installation and connection works (before the unit is commissioned), the unit must be disconnected from the power network.
- After installation of the ventilation unit, the power network plug socket must be accessible at any time and disconnection from the power network must be performed through the two-pole circuit breaker (by disconnecting phase pole and neutral).
- Before it is connected to the power network, the unit must be carefully checked for any damage (execution, control, and measurement nodes) made during transportation.
- The power cable can be replaced only by a qualified technician, having evaluated the rated power and current.



The manufacturer does not assume any liability for personal injuries and property damage due to nonconformance with the provided instructions.

### 5.10. START-UP RECOMMENDATIONS

### 5.10.1. SYSTEM PROTECTION

All units must be used with external protection device

SMARTY	2XP S300	3XP S300	4XP S300
Mains Fuse	16A	16A	16A



To ensure safe maintenance of the unit, it is necessary to turn off main switch and/or external protection device.

### 5.10.2. PRE-STARTUP RECOMENDATIONS OF THE UNIT (IN THE PRESENCE OF THE ENDUSER)

Prior to start-up, the system must be carefully cleaned. Check for the following:

- operation systems and unit elements as well as automation and automation devices were not damaged during installation,
- all electrical devices are connected to power supply and fit for service,
- all necessary automation elements are installed and connected to power supply and S300 controller's terminal blocks,
- cable and wire connection to S300 controller's terminal blocks comply with the existing wiring diagrams,
- all electrical equipment protection components are properly connected (if they are additionally used),
- cables and wires correspond to all applicable safety and functional requirements, diameters, etc.,
- earthling and protection systems are properly installed,
- condition of all seals and sealing surfaces is proper.

### 6. MAINTENANCE

### 6.1. SAFETY INSTRUCTION



Unplug the unit from the mains before opening the door (disconnect the power plug from the outlet or in case a two-pole automatic circuit breaker installed, disconnect it as well. Make sure that it cannot be turned on by third parties) and wait until the fans completely stop (for about 2 min.).

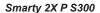
### 6.2. GENERAL RECOMMENDATIONS FOR THE MAINTENANCE OF VENTILATION SYSTEM

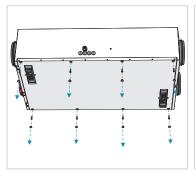
In order to ensure proper functioning of the system, maintenance requirements and its periods should be observed. Otherwise, the warranty shall be void. Some recommendations are provided in the table below, but they are just advisory, as the need for system maintenance depends on the location of the unit installation, the pollution of atmosphere, population, working hours, etc.

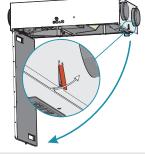
COMPONENT	DURING START-UP	AT LEAST EVERY 6 MONTHS
Filters	Check the cleanliness of the filters	Replace filters every 3 to 4 months or according to the control device indications.
		Check cleanliness. Clean, if necessary
		Make sure that the impellers are not unbalanced.
Fans	Check the connections and the	Make sure that the impellers do not cause noise when rotated by hand.
Tano	direction of rotation	Make sure that the fastening screws are not loose and free of mechanical damage.
		Check electrical connections and make sure that these are secured properly and are free of signs of corrosion.
Plate Heat exchanger	Check the cleanliness of the heat exchanger	Check cleanliness and clean, if necessary
Control panel	Check the connections	Check the connections
Electric heater	Check the connections	Clean off dust, and check the electrical components and connections of the heater
Presure sensor	Check electrical connections	Check the operation
Temperature sensor	Check electrical connections	Check the operation
Air supply and extract system	Check the connections	Clean
Air duct system	Check the tightness	Clean
Dampers, diffusers, grid	Check the tightness of connections	Clean
Switching unit (contactor)		Every 3 to 4 months, visually assess the functioning of the switching unit (contactor), i.e. make sure that its casing has no signs of melting or is not thermally damaged in any way and does not produce any unusual sounds. All the contactors in the product or in its accessories must be checked.
Condensate trap and discharge assembly	Check the condensate discharge assembly and make sure that water runs from the drip tray properly.	Clean

### 6.3. COVER OPENING

### A1:



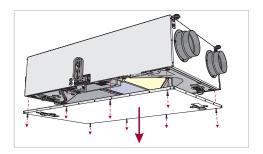






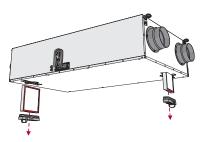
A2:

### Smarty 3-4XP S300



### 6.4. FILTERS MAINTENANCE

- In order to remove the filters, open filter cover by pulling the strap and take out the filters. Use Coarse 65% filters or optionally the ePM1 70% filter for outdoor air filtration and the Coarse 65% filter for the exhaust air filtration.
- Dirty filters increase air resistance, this decreases the airflow into the rooms.



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After changing the filters, please reset the filter timer. The instruction on reloading can be found on particular unit's contol environment's documentation.

Operation of the unit without filters is not allowed.



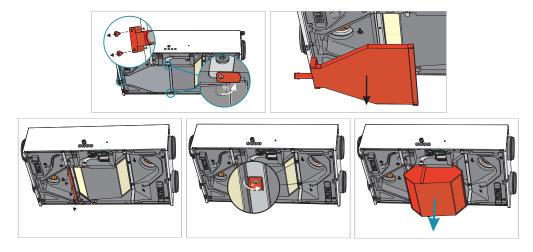
Change the filters every 3-4 months or according to the notification on the control device.

### 6.5. HEAT EXCHANGER MAINTENANCE

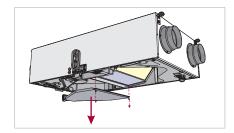
- Proceed to maintenance and repair every time the fan rotation is stopped. Clean the heat exchanger once per year.
- Prior to any maintenance, carefully remove the heat exchanger cassette. Submerge it in a bath and wash with warm soapy water (do not use soda). Then flush it under a small jet of hot water (too fast jet of water may cause folding of the plates). Install the heat exchanger back only when it is completely dry.

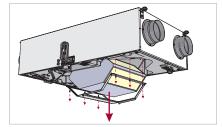
Smarty 2X P S300

B1:



NOTE. Prior to performing step B1, steps A1 (1-3) should be carried out.





#### 6.6. FAN MAINTENANCE

- Fan maintenance should be performed by experienced and trained staff only.
- The fan should be inspected and cleaned at least once per year.
- Observe staff safety regulations during maintenance and repairs.
- The fans features a heavy-duty ball bearing design. The motor is completely sealed and free of maintenance.
- · Detach the fan from the unit.
- The impeller should be particularly checked for built-up material or debris that may cause an imbalance. Excessive imbalance may lead to accelerated wear on motor bearings and vibration.
- Clean the impeller and inside housing with a mild detergent, water and damp, soft cloth.
- Do not use high-pressure cleaner, abrasives, sharp tools or caustic solvents that may scratch or damage the housing and impeller.
- Do not plunge the motor into any fluid while cleaning the impeller. Make sure the impeller's balance weights are not moved.
- Make sure the impeller is free of any obstacles.
- Install the fan back into the unit. Connect fan power and control signals.
- In case the fan after maintenance does not automatically start up or stop, contact the manufacturer. In case of any fault in the fan motor, a notice will appear on the control panel.



Prior to commencing any maintenance or repairs, make sure the ventilation units is disconnected from the power source.

#### Smarty XP units:

- Disconnect cable wires of supply and extract air fans from control board. Fans control signals connect to T2 and T18 controller terminals. Fans power signals connect to XP1 terminal blocks.
- Reassembling must be executed in the reverse order. Make sure to connect cable wires of the fans to exact terminals they were disconnected from.

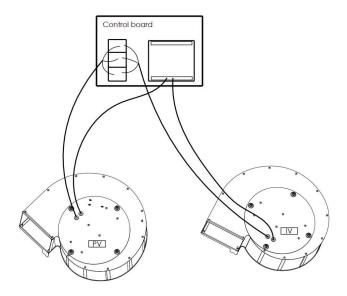
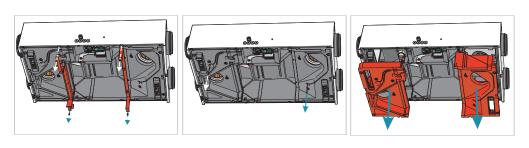
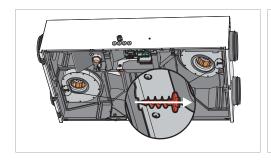


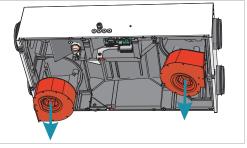
Figure 6.6.1. Smarty XP S300 fans

### Smarty 2X P S300

C1:



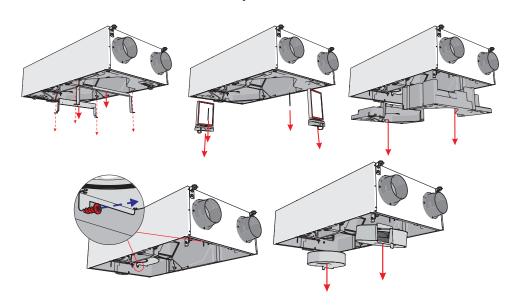




NOTE. Prior to performing step C1, steps A1 (1-3) and B1 (1-5) should be carried out.

### Smarty 3-4XP S300

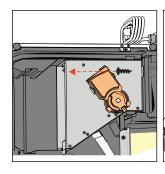
C2:

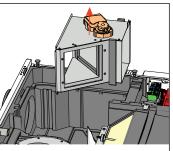


NOTE. Prior to performing step C2, steps A2 and B2 (1-3) should be carried out.

### 6.7. BYPASS DAMPERS MAINTENANCE

- Bypass damper must be disconnected from control board (connection X4).
- When removing the damper, steps A1 (1-3), B1 (1-3), C1 (1-3) should be performed for Smarty 2X P, and steps A2, B2 (1-3), C2 (1-2) for Smarty 3-4X P.
- Having removed the damper, loosen the screw supporting lugs.
- Remove sealant with the wires and connector.
- · Remove the screws.
- Remove the actuator with all the wires.
- Reassembling must be executed in the reverse order: insert the wires through a hole, install back the sealant, insert the actuator lug into the damper axis (the milled plate of the drive lug must be parallel to the damper axis plate, where the tightening screw hole is located).
- Reconnect X4 connector to the control board.



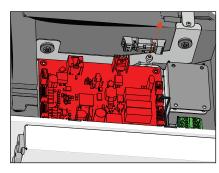


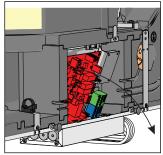
### 6.8. CONTROL BOARD MAINTENANCE

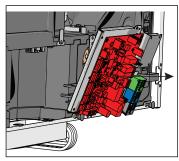
- Loosen the front screw that tightens the automation sole to the housing of the device.
- Disconnect all necessary cables, wires and connectors for control board removal.
- Remove the control board through the front part of the device.
- To reassemble, follow all maintenance steps in reverse order. When re-connecting cables, wires and connectors, make sure to match each wire and connector to corresponding connection terminal and connector.

### Smarty 2X P S300

E1:

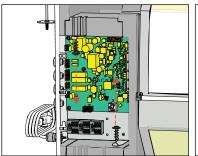


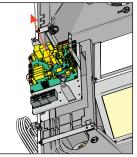




Smarty 3-4XP S300

E2:





### 7. CONTROL

### 7.1. DEVICE CONTROL

Ventilation unit equipped with S300 control board can be controlled with remote control panel, mobile app via WIFI and BMS (Building Management System). More information provided in the table below

With MB-GATEWAY	Remote control panels	BMS direct connection	Wireless communication
BMS over Modbus TCP/IP	POS8.4420 POS8.4440	Modbus RTU (485) BACnet IP	WIFI stick + mobile app

### 7.2. DEVICE FUNCTIONS

Smarty XP S300 units have integrated efficient microprocessor-based Siemens S300 controller (full controller's function list and description you can find on the Siemens S300 technical manual). All unit's active components are controlled by Siemens controller. It has a lot of functions that can efficiently operate air handling unit. Users have access to the controller configuration where the control settings can be changed or new controllable devices can be added to the air control system. Users can also connect to the controller and monitor unit's status or change preffered environment settings.

Operation and control of the device depends on the following factors:

- 1. Selected control interface. The selected interface affects access to the information and settings, however, it does not affect the logic of the control. Remote controller have access of only basic user functions. Full access to the unit's configuration settings is available on ABT Go mobile application for installer and service users.
- 2. Unit configuration (internal/external components, sensors and controller settings).



For unit control instructions, refer to the operation manual of the existing control device.

### 8. CONNECTION OF ACCESSORIES

### **HEATER AND PRE-HEATER**

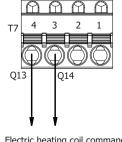
SMARTY XP air handling units are able to control one heater or preheater coil at a time. When the preheater is used, one more temperature sensor has to be installed to the system. After connection, configuration has to be performed. For more information see section ACCESSORIES SETUP.

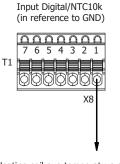
#### 8.1.1. **HEATER**

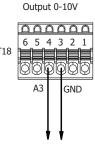
In order to use a heating coil, following signals are required to be connected to the control board:

- 1. Electric heating coil command;
- 2. Heating coil overtemperature detector;
- 3. Heating coil position signal.

Output digital relays 24-230 V AC, max 6.3A, normally open/closed







Electric heating coil command

Heating coil overtemperature detector

Heating coil position

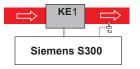
Figure 8.1.1.1. Signals for electrical heater



NOTE: Power supply for the heater is not shown.

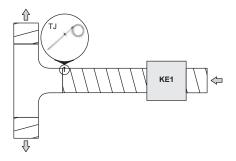
#### **Heater Installation Diagram**

Electric heater must be installed inside the air duct. The layout is based on airflow direction ELECTRIC HEATER > SUPPLY AIR SENSOR (TJ).





When using the supply air heater, the supply air sensor (TJ) must be installed downstream the heater (or cooler) at the length of sensor cable allows or up to the first branching or bend of air transportation system.



#### 8.1.2. **PREHEATER**

In order to use a preheating coil, following signals are required to be connected to the control board:

- 1. Electric preheating coil command;
- 2. Air temperature after preheating coil;
- 3. Preheating coil overtemperature detector;
- 4. Preheating coil position signal.

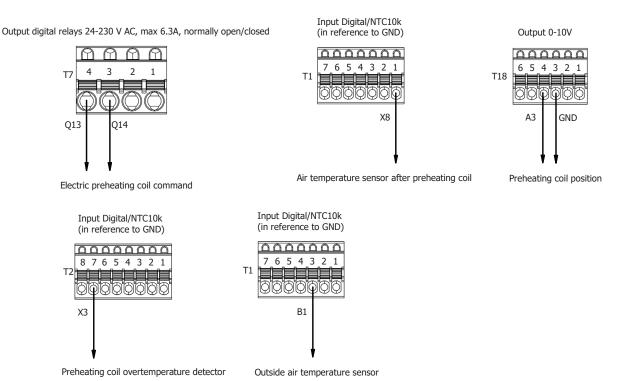


Figure 8.1.2.1. Signals for electrical preheater

Air temperature after preheater can be measured by TL sensor, which is already installed in AHU. For this purpose, its signal has to be switched to T1:1 (X8 analog input) from T1:3 (B1). This sensor then is called TP, see the piping and instrumentation diagram. Additionally, temperature sensor before preheater must be installed and connected to T1:3 (B1 analog input). It will become TL (Outside air temperature) sensor.

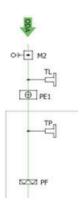


Figure 8.1.2.2. Temperature sensors when preheater is used

### 8.2. OUTSIDE AIR DAMPERS

Outside air dampers can be used with Smarty XP products. Dampers should be controlled by On/Off or Spring-return actuators. Upon activation of output Q34 (T14:1), dampers shall open. Upon deactivation of output, dampers shall close. When activated, 230V voltage is applied to Q34 output. By default, damper control output is already activated in configuration.

Output digital relay 24-230 V AC, max 6.3A, normally open/closed

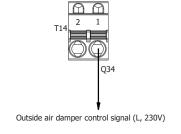


Figure 8.2.1. Connection for outside dampers

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WARNING: High voltage on output.

### 8.3. SMOKE DETECTOR

For fire safety function it is available to connect smoke detector to T3 connector by principle, shown in the figure below.

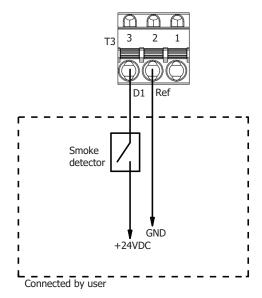


Figure 8.3.1. Connection of smoke detector

By default, D1 digital input is configured as Smoke detector input and set to NO, if needed NC contact type, then it must be reconfigured. See section *ACCESSORIES SETUP*.

### 8.4. FIREPLACE PROTECTION/SYSTEM MODE SWITCH/RAPID VENTILATION SWITCH INPUT

T3 connector can be used for connecting one of the following function to D2 digital input:

- 1. Fireplace protection;
- 2. System mode switch;
- 3. Rapid ventilation switch.

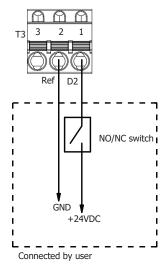


Figure 8.4.1. D2 digital input connection

After connection, configuration has to be performed. For more information see section ACCESSORIES SETUP.

### 8.5. OPERATION INDICATION OUTPUT

If indication about the status of the air handling unit is needed, it can be connected to dedicated Q24 signal on T7:1. When AHU is ON, indication output will provide voltage for indicating device.

Output digital relays 24-230 V AC, max 6.3A, normally open/closed

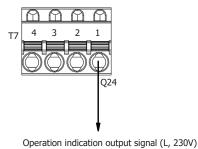


Figure 8.5.1. Operation indication output connection

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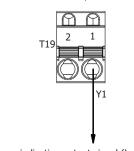
WARNING: High voltage on output.

After connection, configuration has to be performed. For more information see section ACCESSORIES SETUP.

### 8.6. ALARM INDICATION OUTPUT

In the same way as operation indication, alarm indication signal can be provided by the control board. Indicator has to be connected to Y1 output on T19:1.

Output triac, 230V AC, max. 10A (<1s), nominal current: 0,05-1A.



Alarm indication output signal (L, 230V)

Figure 8.6.1. Alarm indication output connection

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WARNING: High voltage on output.



NOTE: lower than 0,05A loads can operate incorrectly.

### 8.7. REMOTE CONTROLLER, KNX ROOM SENSORS AND MODBUS

Air Handling unit can be controlled with remote control panel POS8. Remote controller connects with S300 controller via KNX PL-Link interface. T15:1;2 – terminals of AHU's controller for KNX devices.

Same interface and controller terminals are used for QMX3 room sensors P30, P40 and P70 connection.

Air Handling unit can be connected to the Building Management System via BACnet IP or Modbus (RS485).

BACnet is connected to the T5 connector (RJ45) of S300 controller which has default BACnet settings:

BACnet Vendor Identifier: 7

BACnet Vendor Name: Siemens Building Technologies

Default BACnet/IP port: 47808 (0xBAC0)
Default Device Object Instance number: 1



All S300 devices of the same BACnet system must have different device object instance numbers.

Modbus RTU connects to the T12:1;2;3 terminals (Modbus Slave Port1) of the S300 controller which has default RS485 port1 settings:

Baudrate: 19200 bps

Data: 8 Bit Parity: Even Stop bit: 1 Slave address: 1

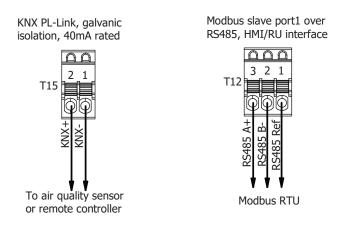


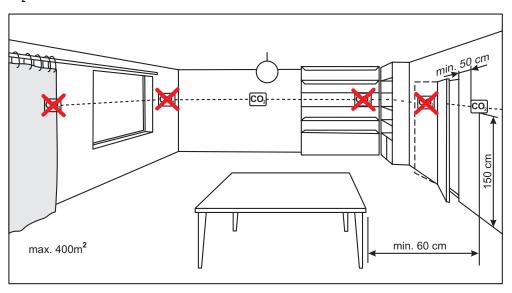
Figure 8.7.1. Air quality sensor, remote controller and BMS connection to the S300 controller

After connection of air quality sensor or remote controller, configuration has to be performed. For more information see section **ACCESSORIES SETUP**.

Modbus TCP/IP connection can only be implemented via additional device - MB-Gateway. Controller's Modbus Slave Port1 or Port2 can be used for Modbus TCP/IP connection (see section *PINOUT OF THE CONTROLLER* for location of the Port2).

USB connector for S300 controller is used to connect WIFI stick and make controller as WIFI access point to control the unit with smartphone or tablet using ABT Go application. USB connector can also be used for S300 controller firmware updates.

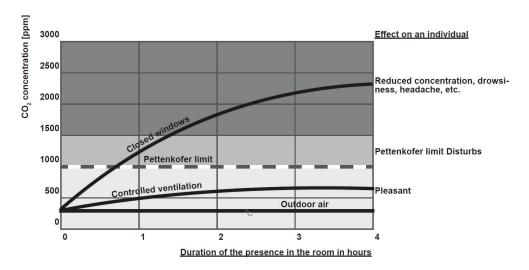
## 8.8. ROOM CO<sub>2</sub> TRANSMITTER INSTALLATION RECOMMENDATION



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If the duct  $CO_2$  transmitter is used, it must be installed in the extract air duct. To install duct transmitters, hole drilling tools are required.

# 8.9. $CO_2$ CONCENTRATION ACCORDING TO PETTENKOFER LIMIT



## 9. PINOUT OF THE CONTROLLER

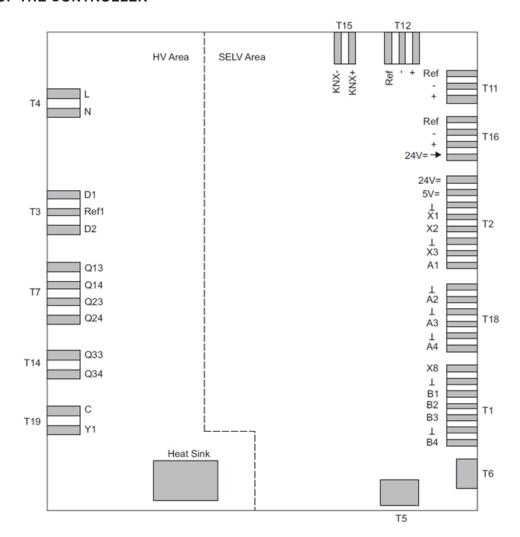


Figure. 9.1. S300 controller

### **10.ACCESSORIES SETUP**

Some accessories or functions of connected external components must be additionally configured to work properly in the Air Handling unit's system.

Configuration is performed via ABT Go application which can be found on <u>play.google.com/store/apps.</u>

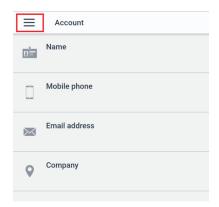
### 10.1. ACCESS OF CONFIGURATION PARAMETERS

To access configuration parameters follow these steps:

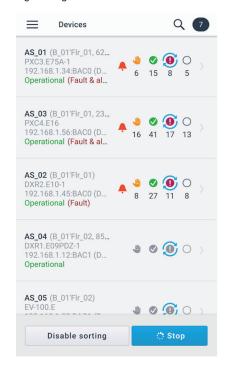
- Connect Siemens WLAN stick (POL903.00/100) to the Air Handling unit's controller's USB connector T6 or connect wifi router to the Air Handling unit's controller's RJ45 connector T5 using UTP cable.
- Download and install ABT Go application on smartphone or tablet.



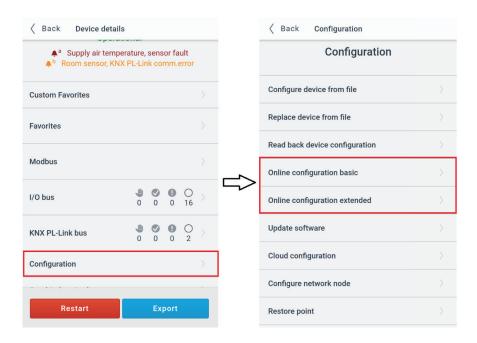
- Turn on the unit.
- Connect to the WLAN stick's or router's wifi network (default password of Siemens WLAN stick is SIBPAdmin).
- Start ABT Go application and open menu.



• Open Devices and select product you want to change configuration for.



- Log in to access the device (by default: user name is Administrator, password is OneBT). It is required to change password when you connect to the device for the first time.
- Go to CONFIGURATION window. All necessary parameters for setting up accessories are located in ONLINE CONFIGURATION BASIC and ONLINE CONFIGURATION EXTENDED.



### 10.2. HEATER

In order to control electrical heater, it has to be configured by following steps:

- In CONFIGURATION window select ONLINE CONFIGURATION BASIC and press OK on warning. Wait for the device to switch in configuration mode.
- Set **HEATING COIL** parameter to **ELECTRIC HEATING COIL 21Y**.
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation, press DONE.
- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select Q1 as ELECRIC HEATING COIL COMMAND, X8 as HEATING COIL OVERTEMPERATURE DETECTOR and A3 as HEATING COIL ELECTRIC POSITION.
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation press DONE.

### 10.3. PREHEATER

In order to control electrical preheater, which has been connected as required in section *PREHEATER*, it has to be configured by following steps:

- In CONFIGURATION window select ONLINE CONFIGURATION BASIC and press OK on warning. Wait for the device to switch in configuration mode.
- Set PREHEATING COIL parameter to ELECTRIC PREHEATING COIL 21Y.
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation, press DONE.
- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select Q1 as ELECRIC PREHEATING COIL COMMAND, X8 as SUPPLY AIR TEMP. AFTER PREHEATING COIL, B1 as OUTSIDE AIR TEMPERATURE, A3 as PREHEATING COIL ELECTRIC POSITION and X3 as PREHEATING COIL OVER-TEMPERATURE DETECTOR.
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation press DONE.

### 10.4. SMOKE DETECTOR

By default, smoke detector input is activated and configured as NO input. In order to use a NC switch, input must be reconfigured to NC by following steps:

- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select D1 as SMOKE EXTRACTION NORMALLY CLOSED.

### 10.5. FIREPLACE PROTECTION, SYSTEM MODE SWITCH OR RAPID VENTILATION SWITCH INPUT

In order to configure D2 input as Fire place protection:

- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select D2 as FIREPLACE VENTILATION INPUT.

System mode switch function can be used to enable one pre-selected system mode. System mode for this switch can be set by following steps:

- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select **D2** as one of the selections available:
- 1. INPUT ROOM OPERATING MODE COMFORT;
- 2. INPUT ROOM OPERATING MODE ECONOMY;
- 3. INPUT ROOM OPERATING MODE UNOCCUPIED;
- 4. INPUT ROOM OPERATING MODE PROTECTION.

Rapid ventilation switch function can be used to boost fan speed. In order to configure D2 input as Rapid ventilation switch:

- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Select D2 as RAPID VENTILATION INPUT.

After D2 input is configured press APPLY – RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation press DONE.

### 10.6. ALARM INDICATION OUTPUT

By default, indication output is configured to indicate if any type of unit's alarm (A or B) is triggered. It is possible to reconfigure output to indicate triggered only B type alarm, only:

- In CONFIGURATION window select ONLINE CONFIGURATION EXTENDED and press OK on warning. Wait for the device to switch in configuration mode.
- Change Y1 with value A-ALARM INDICATION OUTPUT, B-ALARM INDICATION OUTPUT (depending on preferred indication function).
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation press DONE.

### 10.7. REMOTE CONTROLLER AND KNX ROOM SENSORS

• In CONFIGURATION window select ONLINE CONFIGURATION BASIC and press OK on warning. Wait for the device to switch in configuration mode.

#### To configure remote controller:

• Set SELECTION FOR ROOM OPERATOR UNIT POS8 parameter with value POS8.4420 or POS8.4440 (depending on remote controller type).

### To configure QMX3.P30 room sensor:

• Set SELECTION FOR ROOM SENSOR QMX3.P30 as ACTIVE.

### To configure QMX3.P40 room sensor:

Set SELECTION FOR ROOM SENSOR QMX3.P40 as ACTIVE.

#### To configure QMX3.P70 room sensor:

- Set SELECTION FOR ROOM SENSOR QMX3.P70 as ACTIVE.
- Press APPLY RESTART DEVICE button and wait for configuration to be applied. After confirmation of successful device activation, press DONE.

### 11.OPERATING THE UNIT

The air handling unit can be controlled via POS8 remote control panel or ABT Go application. The unit have three different control modes:

- Auto operating modes are controlled via time switch program which changes between operating modes. Time switch program can be set by user
- Manual operating modes are switched manually by user.
- Temporary control mode used for special operating modes (Fan boost, Fire place). These operating modes can be activated for a limited, configurable time.

Four different operating modes can be selected when unit is in MANUAL control mode:

- Comfort used when building is occupied and the system operates to the needs of the user.
- Economy used when the building is occupied but the system operates saving energy.
- Unoccupied used when building is unoccupied and only with the needed most essential settings of the system.
- **Protection** this mode switches the system into off where the fans no longer run.



More advanced details of operating and control modes can be found in Air Handling unit's controller (\$300) manual, section APPLICATION FUNCTIONALITIES. Follow the link on the last page of this document.



If the unit is going to be started for the first time be aware to follow instructions on section *PRE-STARTUP RECOMMENDA- TIONS OF THE UNIT (IN PRESENCE OF THE ENDUSER)*.

### 12.ELECTRICAL WIRING DIAGRAMS

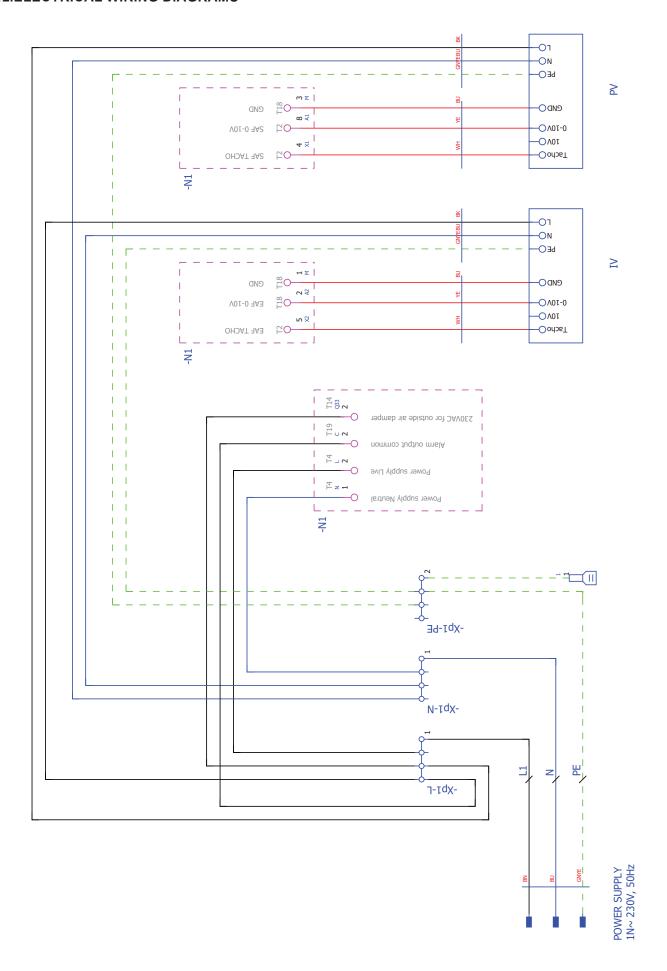


Figure. 12.1. Smarty power supply and fans

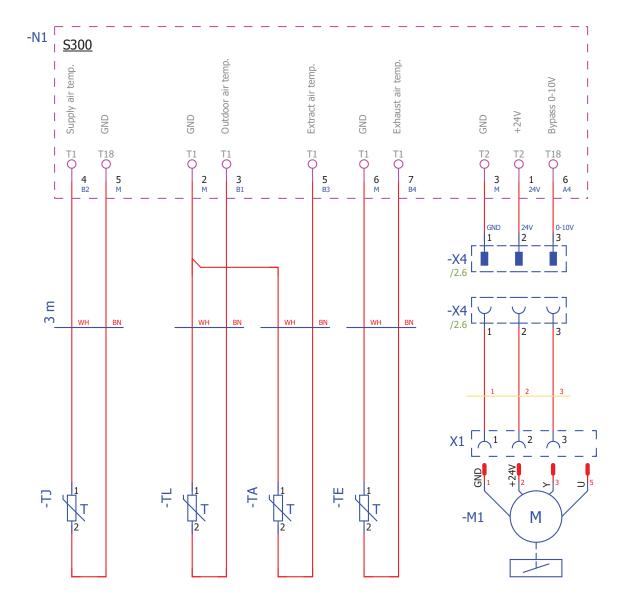


Figure. 12.2. Smarty temperature sensors and bypass

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## 13.POSSIBLE FAULTS AND TROUBLESHOOTING

FAILURE	CAUSE	EXPLANATION / CORRECTIVE ACTIONS	
	No supply voltage	Check whether the device is connected to the power network	
Unit is not operating	Protection device is off or the current leakage relay is active (if installed by the installer)	Switch on only if the unit condition has been evaluated by a qualified electrician. If the system failed, the failure MUST BE rectified prior to switching it on	
Air summly beater or are beater is not approx	Too low airflow in air ducts activates automatic protection	Check if air filters are not clogged Check if fans are rotating	
Air supply heater or pre-heater is not operating or malfunctioning (if installed)	Manual safety device is activated	Possible heater or unit failure. Service staff MUST be contacted to identify and eliminate the failure.	
Too low air flow at rated fan speed	Clogged supply and/or extract air filter(s)	Filter replacement needed	
Filters are clogged and no message is shown on the remote control panel	Wrong time on filter timers or their switch is broken, or its pressure is set improperly.	Shorten filter timer time to the message of clogged filters or replace the pressure switch of the filters, or set their proper pressure.	

### **14.ECODESIGN DATA TABLE**

MODEL			SMARTY 2XP S300				
Climate zone	Control typology	Control factor	Specific energy consumption (SEC)	SEC Class	AEC	AHS	
			[ kWh/m²/a ]		[ kWh/a ]	[ kWh/a ]	
Avorago	Clock control (standard)	0,95	-35,1	А	418	4486	
Average	Central demand control (opt. with 1 sensor)	0,85	-37,4	Α	344	4530	
Cold	Clock control (standard)	0,95	-72,6	A+	955	8776	
Cold	Central demand control (opt. with 1 sensor)	0,85	-75,3	A+	881	8861	
Warm	Clock control (standard)	0,95	-11,0	E	373	2028	
vvarm	Central demand control (opt. with 1 sensor)	0,85	-13,0	Е	299	2048	
Declared ty	ypology			Bidirectional			
Type of dri	ve installed (fan)		Variable				
Type of heat recovery system			Recuperative				
Thermal efficiency of heat recovery		[%]	86,3				
Maximum flow rate		[ m³/h ]	218				
Electric power input of the fan drive at maximum flow rate		[ W ]	104				
Sound power level (Lwa)		[ dB(A) ]	49				
Reference	flow	[ m³/s ]	0,042				
Reference pressure difference		[ Pa ]	50				
SPI		[ W/(m <sup>3</sup> /h) ]	0,33				
Declared maximum internal leakage rates		[%]	1,2				
Declared maximum external leakage rates		[%]	1,2				
Possition and description of visual filter warning for RVU's			Timer			<u> </u>	
ErP Compliance			2018				
Internet address for disassembly instructions			https://select.salda.lt				

MODEL			SMARTY 3XP S300			
Climate zone	Control typology	Control factor	Specific energy consumption (SEC)	SEC Class	AEC	AHS
			[ kWh/m²/a ]		[kWh/a]	[ kWh/a ]
Average	Clock control (standard)	0,95	-36,1	Α	362	4447
Average	Central demand control (opt. with 1 sensor)	0,85	-38,2	Α	298	4494
Cold	Clock control (standard)	0,95	-73,3	A+	899	8699
Cold	Central demand control (opt. with 1 sensor)	0,85	-75,8	A+	835	8792
Warm	Clock control (standard)	0,95	-12,2	E	317	2011
vvarm	Central demand control (opt. with 1 sensor)	0,85	-14,0	Е	253	2032
Declared t	ypology		Bidirectional			
Type of dr	ive installed (fan)		Variable			
Type of heat recovery system			Recuperative			
Thermal efficiency of heat recovery		[%]	85			
Maximum flow rate		[ m³/h ]	395			
Electric power input of the fan drive at maximum flow rate		[ W ]	174			
Sound power level (Lwa)		[ dB(A) ]	45			
Reference	flow	[ m <sup>3</sup> /s ]	0,077			
Reference	pressure difference	[ Pa ]	50			
SPI		[ W/(m <sup>3</sup> /h) ]	0,28			
Declared maximum internal leakage rates		[ % ]	1,2			
Declared maximum external leakage rates		[%]	1,2			
Possition and description of visual filter warning for RVU's			Timer			
ErP Compliance			2018			
Internet address for disassembly instructions			https://select.salda.lt			

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MODEL			SMARTY 4XP S300				
Climate zone	Control typology	Control factor	Specific energy consumption (SEC)	SEC Class	AEC	AHS	
			[ kWh/m²/a ]		[ kWh/a ]	[ kWh/a ]	
Average	Clock control (standard)	0,95	-33,0	В	464	4389	
Average	Central demand control (opt. with 1 sensor)	0,85	-35,6	Α	381	4443	
Cold	Clock control (standard)	0,95	-69,6	A+	1001	8691	
Colu	Central demand control (opt. with 1 sensor)	0,85	-72,7	A+	918	8902	
Warm	Clock control (standard)	0,95	-9,4	F	419	1985	
vvarm	Central demand control (opt. with 1 sensor)	0,85	-11,7	E	336	2009	
Declared t	ypology		Bidirectional				
Type of dri	ive installed (fan)		Variable				
Type of heat recovery system			Recuperative				
Thermal efficiency of heat recovery		[%]	83,1				
Maximum flow rate		[ m³/h ]	570				
Electric power input of the fan drive at maximum flow rate		[W]	350				
Sound pov	ver level (Lwa)	[ dB(A) ]	55				
Reference	flow	[ m³/s ]	0,11				
Reference	pressure difference	[ Pa ]	50				
SPI		[ W/(m <sup>3</sup> /h) ]	0,37				
Declared maximum internal leakage rates		[%]	1,2				
Declared maximum external leakage rates		[%]	1,2				
Possition and description of visual filter warning for RVU's			Timer				
ErP Compliance			2018				
Internet address for disassembly instructions			https://select.salda.lt				

### **15.DECLARATION OF CONFIMITY**

Manufacturer

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

Hereby confirms that the following products - Air handling units:

Smartv XP\*

(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:

Machinery Directive 2006/42/EC EMC Directive 2014/30/EU Low Voltage Directive 2014/35/EU Ecodesign Directive 2009/125/EC RoHS 2 Directive 2011/65/EU

The following regulations are applied in applicable parts:

Ecodesign requirements for ventilation units Nr. 1253/2014 Energy labeling of residential units Nr. 1254/2014

The following harmonized standards are applied in applicable parts:

EN 13141-7:2010 - Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 7: Performance testing of a mechanical supply and exhaust ventilation units (including heat recovery) for mechanical ventilation systems intended for single family dwellings.

EN ISO 12100:2012 - Safety of machinery - General principles for design - Risk assessment and risk reduction.

EN 60204-1:2018 - Safety of machinery - Electrical equipment of machines - Part 1: General requirements.

EN 60335-1:2012 - Household and similar electrical appliances. Safety. Part 1: General requirements.

EN 60529:1999/A2:2014/AC:2019 - Degrees of protection provided by enclosures (IP code).

EN IEC 61000-6-1:2019-03 - Electromagnetic compatibility (EMC) -- Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments.

LST EN 61000-6-3:2008 - Electromagnetic compatibility (EMC) -- Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.

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

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

Date 2020-10-23

Jan

Giedrius Taujenis

Director product development

#### 16. WARRANTY

- 1. All equipment manufactured in our factory is checked in operating conditions and tested before delivery. Test protocol is supplied together with the unit. The equipment is shipped in good working condition to the end-client. The unit is warrantied for the period of two years from the invoice date
- 2. If equipment is found to have been damaged during transportation, a claim should be made against carrier, as we assume no responsibility for such damage.
- 3. This warranty does not apply:
- 3.1. when transportation, storage, installation and maintenance instructions of the unit are violated;
- 3.2. when the equipment is improperly maintained, mounted inadequate maintenance;
- 3.3. when the equipment without our knowledge and permission has been upgraded or unskilled repairs were made;
- 3.4. when the unit was used not for its original purpose.
- 3.5. Company SALDA UAB is not responsible for potential loss of property or personal injury in cases where AHU is manufactured without a control system and the control system will be installed by the client or third parties. The manufacturer's warranty does not cover devices that will be damaged by installing the control system.
- 4. This warranty does not apply at these malfunction cases:
- 4.1. mechanical damage;
- 4.2. damage caused by entering outside objects, materials, liquids;
- 4.3. damage caused by natural disaster, accident (voltage change in the electricity network, lightning, etc..).
- 5. The company assumes no liability for its products either directly or indirectly damage, if the damage is caused by failure to comply with installation and mounting regulations, deliberate or careless users or third-party behavior.

These conditions are readily discernable when the equipment is returned to our factory for inspection.

If the direct client determines that equipment is found to be faulty, or a breakdown occurred, he should inform the manufacturer within five working days and deliver the equipment to manufacturer. Delivery costs should be covered by customer.



Manufacturer reserves the right to change this technical passport any time without prior notice, if some typographic errors or inaccurate information is found, as well as after improving the apps and/or the devices. Such changes will be included in the new issues of the technical passport. All illustrations are just for information and thus may differ from the original device.

### 16.1. LIMITED WARRANTY COUPON

Warranty term

### 24 months\*

I received complete package and technical manual of the product ready for use. I have read and agreed with the warranty terms and conditions:

Customer's signature

\*Refer to the WARRANTY CONDITIONS

Dear User, we appreciate your choice and do hereby guarantee that all ventilation equipment manufactured by our Company is inspected and thoroughly tested. An operational and high-quality product is sold to the direct buyer and shipped from the territory of the factory. It is provided with a 24-month warranty since invoice issue date.

Your opinion is important to us, thus we always look forward to hearing your comments, feedback, or suggestions regarding technical and operational characteristics of the Products.

In order to avoid any misunderstandings, please read the instructions for installation and operation of the product as well as other technical documents of the product carefully. The number of the Limited Warranty Coupon and serial number of the product specified on the silver identification sticker attached to the housing must match.

The Limited Warranty Coupon shall be valid provided that the seller's stamps and records are clear. It is not allowed to change, delete, or rewrite

the data specified on it in any manner – such a coupon shall be invalid.

With this Limited Warranty Coupon the manufacturer confirms one's obligations to implement the imperative requirements established by effective laws on protection of consumer rights in the event of identification of any defects of the products.

The manufacturer reserves the right to refuse provision of free warranty servicing in cases when the warranty conditions listed below are disregarded.

### **PRODUCT MAINTENANCE TABLE**

Product name*		
SERIAL number*		
installation	interval	Date
Fan cleaning	Once per year**	
Heat-exchanger cleaning	Once per year**	
Filter replacement	Every 3-4	
Filter replacement	months**	

NOTE. The customer shall be required to complete the Product Maintenance Table.

### LINKS TO OTHER DOCUMENTS

AHU'S CONTROLLER (\$300) ROOM OPERATOR UNIT POS8 LT MANUAL



https://select.salda.lt/file/siemens-climatix-s300en



https://select.salda.lt/file/ siemens-room-operator-unit-pos8en



https://select.salda.lt/file/ smartyxps300lt



MAN000377



<sup>\* -</sup> Look at the product label.

<sup>\*\* -</sup> At least.