

DUPLEX Pro, Pro-V

Compact ventilation units with heat recovery

Purpose

Compact ventilation units with heat recovery designed for central equal-pressure ventilation of family houses or apartments.

Units description

The units are available in under-ceiling (Pro) and wall-mounted (Pro-V) versions. Each variant is available in three power versions. The heart of the unit is a plate heat recovery exchanger with high efficiency. Airflow is provided by high efficiency EBM radial fans. The unit includes pull-out filters for filtration of fresh and exhaust air. The unit is equipped with a by-pass damper that allows to bypass the heat recovery exchanger during the summer period.

Advantages of the units

- Very low ambient noise
- Under-ceiling variants with very low building height
- Filters exchange without opening the door
- Meeting the energy class **A+**
- Connection ports without thermal bridges
- Integrated by-pass damper with actuator
- Variable connection ports placing for the DUPLEX PRO under-ceiling variant



The units meet:

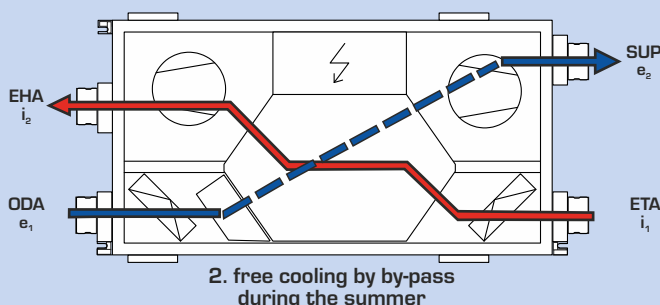
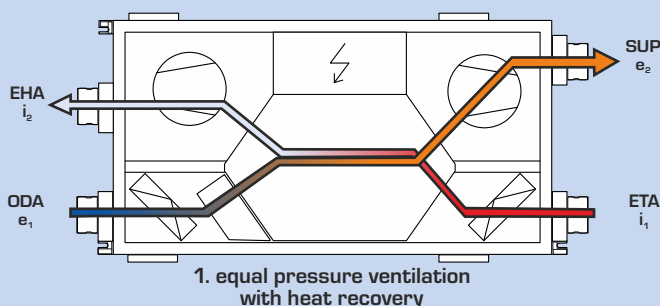
- EU Commission Regulation 1253/2014 (Ecodesign) applicable from 2018
- Energy class of the units according to EU Commission Regulation 1253/2014 **A+** (for average climate zone)

A+

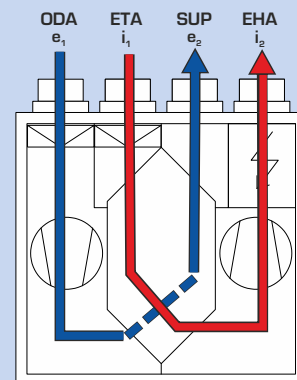
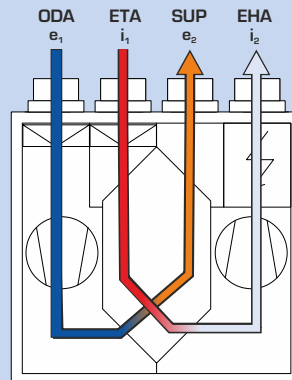


OPERATING MODES

DUPLEX Pro



DUPLEX Pro-V



Key:

- ➡ ODA (e₁) fresh outdoor air intake
- ➡ SUP (e₂) fresh heated air outlet
- ➡ ETA (i₁) extract air inlet
- ➡ EHA (i₂) exhaust air outlet

SELECTION SOFTWARE



For detailed selection of the DUPLEX series units, accessories and controls, we recommend using a specialized selection program. You can find it at our website www.atrea.eu.

Altea®

VENTILATION UNITS WITH HEAT RECOVERY

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UNITS DUPLEX Pro, Pro-V

BASIC DESCRIPTION OF DUPLEX Pro AND DUPLEX Pro-V UNITS

The units are used in systems for comfortable ventilation of family houses, apartments, offices or smaller commercial premises.

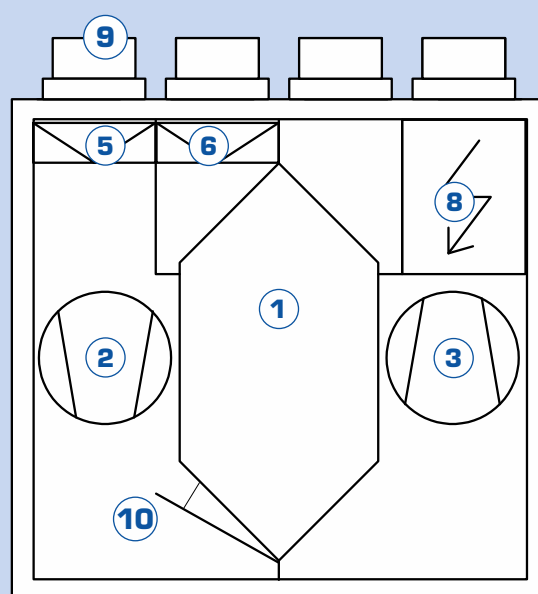
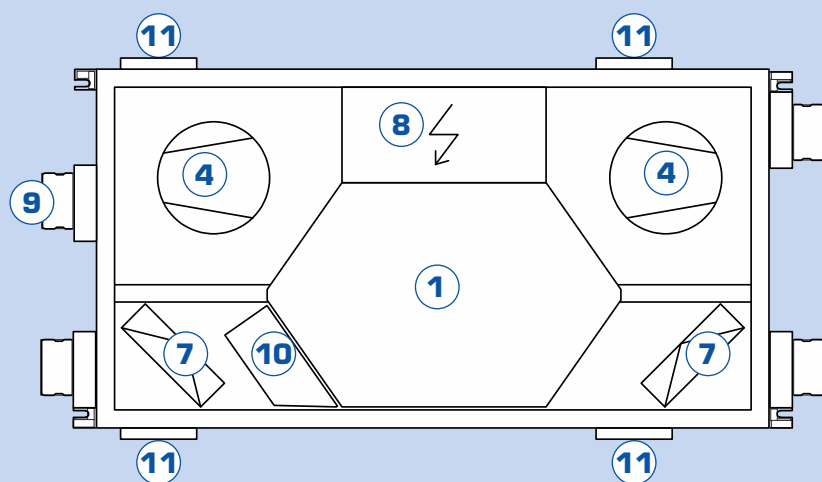
They are available in the under-ceiling version (DUPLEX Pro) and in the wall-mounted version (DUPLEX Pro-V). The casing of the unit is designed as a sandwich construction in the composition of external painted zinc galvanized sheet (RAL 9010) – thermal and acoustic insulation – (mineral wool 30 mm thick, reaction to fire class A2/A1) – internal galvanised sheet.(mineral wool 30 mm thick, reaction to fire class A2/A1) – internal zinc galvanised sheet.

The units are equipped with two radial fans, counter flow plastic heat recovery exchanger for heat recovery, air filtration on the supply and exhaust air with filtration class Coarse 90% (G4) or ePM1 55% (F7), automatically controlled by-pass damper with servo drive and a control module with junction box.

The unit has a outlet for condensate drainage, variable connection ports with thermal bridge suppression, filter exchange through a separate door, access for service, maintenance and to the heat exchanger through a fully opening door.

Delivery is possible with several types of control modules:

- The basic controls **.CP** type allows full control by touchpad, power setting according to the calendar and control according to the air quality sensor (usually CO₂).
- The advanced controls **.aM** type allows control via touch controls, mobile app or PC. It allows connection of a wide range of accessories such as zone dampers, air quality sensors, heaters and more...



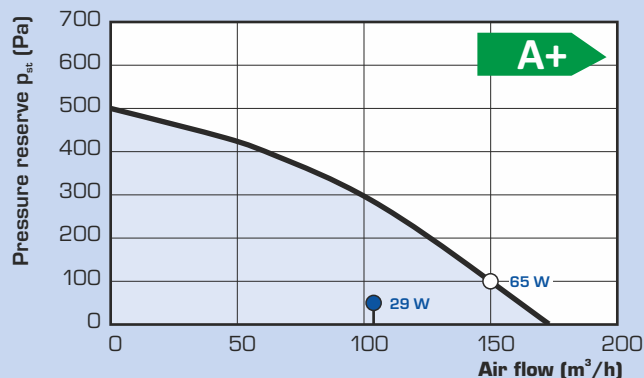
Key:

- 1 Counterflow plate heat recovery exchanger
- 2 Supply air fan
- 3 Exhaust air fan
- 4 Supply or extract air fan (according to the specific orientation)
- 5 Fresh air filter
- 6 Exhaust air filter
- 7 Fresh or exhaust air filter (according to the specific orientation)
- 8 Controls with junction box
- 9 Connection ports with special flange to avoid the thermal bridges
- 10 By-pass damper with servo drive
- 11 Alternative ports

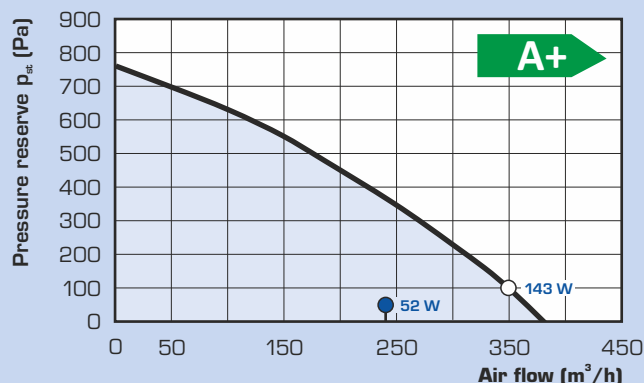
DUPLEX Pro- TECHNICAL DATA

DUPLEX Pro PERFORMANCE PARAMETERS

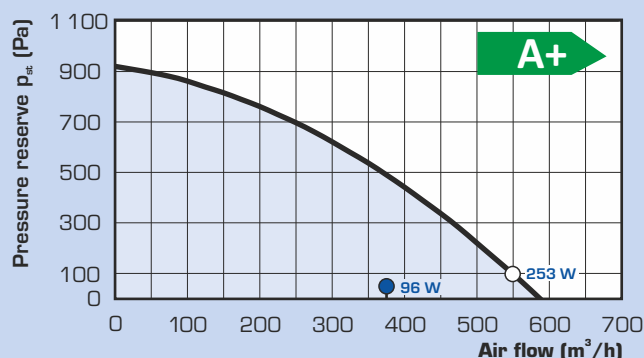
DUPLEX 150 Pro



DUPLEX 350 Pro



DUPLEX 550 Pro



Key:

Pressure reserve with ISO Coarse 90% filter (G4)*
Q_{ref} reference flow (70% Q_{max}, 50 Pa)
Q_{max} maximum flow (100Pa)

* max. pressure reserve curve is listed
* the electrical input of the whole unit (both fans including controls) is listed

DUPLEX Pro TECHNICAL DATA

DUPLEX Pro		150	350	550
energy class ¹⁾	-	A+	A+	A+
maximum flow rate ²⁾	m³/h	150	350	550
sound power to ambient ³⁾	dB (A)	35	37	44
max. heat recovery efficiency	%	93	93	93
diameter of the connection ports	mm	ø 100	ø 160	ø 200
weight	kg	46	72	86
by-pass	-	yes		
ower supply, fuses	-	230 V / 50 Hz, 16A char. C		
supply air filtration class	-	ISO Coarse 90% (G4) alternatively ISO ePM1 55% (F7)		
condensate drainage	mm	ø 16 (2 m hose included)		

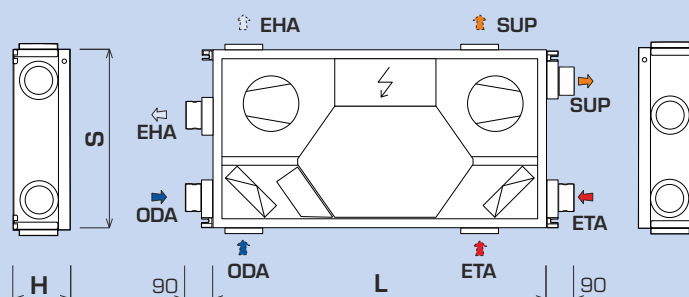
¹⁾ All types of controls built into the unit normally include a minimum of two inputs to connect the electrical signals that result from human manipulation of the light or other devices that automatically control the unit's output. These inputs must always be connected, or other types of sensors (e.g. CO₂, VOC, rH, etc.) must be connected instead.

²⁾ The maximum flow rate is set at a pressure loss of 100 Pa

³⁾ The listed value refers to the reference flow rate i.e. 70% of the maximum flow rate and a pressure loss of 50 Pa

DUPLEX Pro DIMENSIONAL DIAGRAM

UNDER-CEILING POSITION

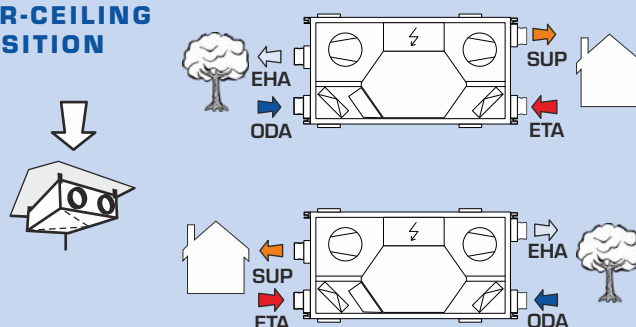


DUPLEX Pro		150	350	550
height H	mm	200	257	350
width S	mm	640	840	840
Length (without connection port) L	mm	1 200	1 420	1 500

For detailed information and for 2D or 3D blocks in format DXF / IFC / RFA please use our selection software.

DUPLEX Pro DESIGN

UNDER-CEILING POSITION



The DUPLEX Pro units are delivered in universal design, i.e. the choice between "right" and "left" orientation, as shown above, is made for the .aMotion controls by changing a parameter in the control system, for the .CP controls by reconnecting the fans, relocating the by-pass thermostat and relocating the thermostat for frost protection of the heat recovery core.

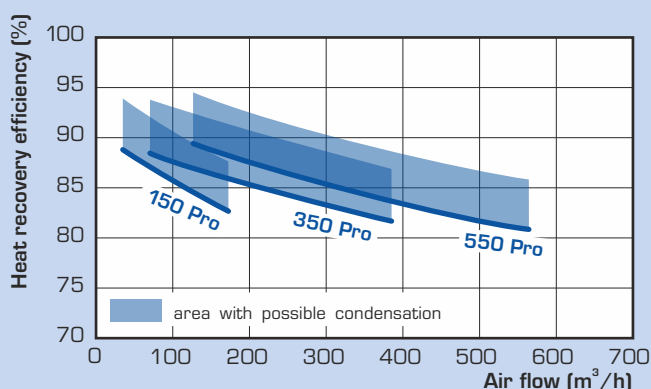
DUPLEX Pro NOISE PARAMETERS

Sound power levels for specific unit of DUPLEX Pro and the selected operation point to be found in the ATREA selection software.

KEY

- ODA (e₁) fresh outdoor air intake
- SUP (e₂) fresh heated air outlet
- ETA (i₁) extract air inlet
- EHA (i₂) exhaust air outlet

DUPLEX Pro HEAT RECOVERY EFFICIENCY



*valid for balanced supply and extract air flow

DUPLEX Pro-V – TECHNICAL DATA

DUPLEX Pro-V – TECHNICAL DATA

DUPLEX Pro-V		160	360	560
energy class ¹⁾	-	A+	A+	A+
maximum flow rate ²⁾	m ³ /h	150	350	550
sound power to ambient ³⁾	dB (A)	37	36	40
max. heat recovery efficiency	%	90	90	93
diameter of the connection ports	mm	ø 125	ø 160	ø 200
weight	kg	53	76	100
by-pass	-	yes		
ower supply, fuses	-	230 V / 50 Hz, 16A char. C		
supply air filtration class	-	ISO Coarse 90% (G4) alternatively ISO ePM1 55% (F7)		
condensate drainage	mm	G 5/4" x ø 32/40 (hadice 0,7 m)		

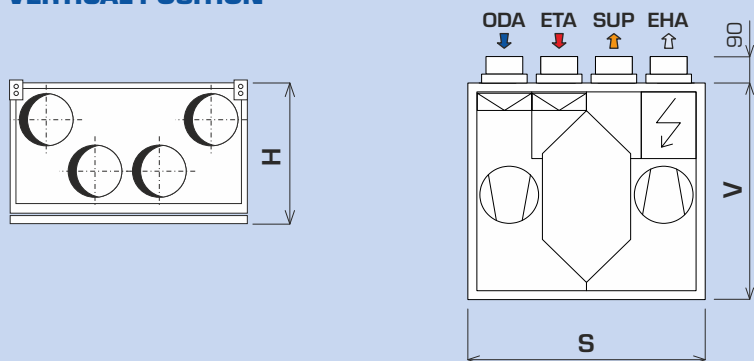
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²⁾ The maximum flow rate is set at a pressure loss of 100 Pa

³⁾ The listed value refers to the reference flow rate i.e. 70% of the maximum flow rate and a pressure loss of 50 Pa

DUPLEX Pro-V DIMENSIONAL DIAGRAM

VERTICAL POSITION

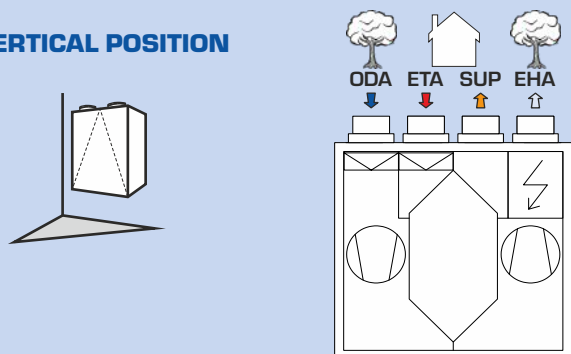


DUPLEX Pro-V		160	360	560
height (bez hrdel) V	mm	807	900	1000
width S	mm	757	930	1070
hloubka H	mm	361	485	526

For detailed information and for 2D or 3D blocks in format DXF / IFC / RFA please use our selection software.

DUPLEX Pro-V DESIGN

VERTICAL POSITION



DUPLEX Pro-V NOISE PARAMETERS

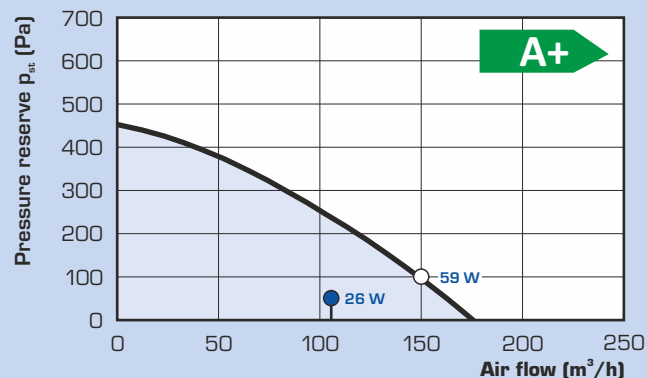
Sound power levels for specific unit of DUPLEX Pro-V and the selected operation point to be found in the ATREA selection software.

KEY

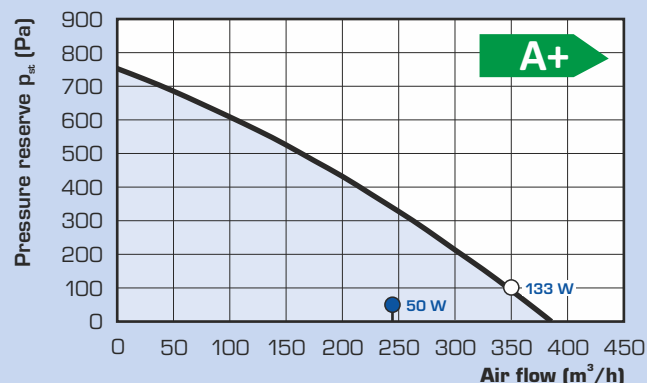
- ➔ **ODA** (e₁) fresh outdoor air intake
- ➔ **SUP** (e₂) fresh heated air outlet
- ➔ **ETA** (i₁) extract air inlet
- ➔ **EHA** (i₂) exhaust air outlet

DUPLEX Pro-V PERFORMANCE PARAMETERS

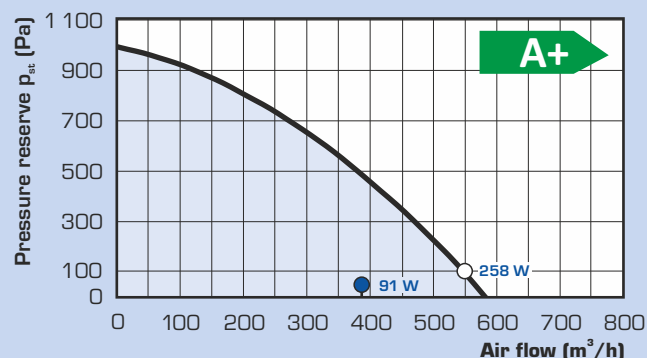
DUPLEX 160 Pro-V



DUPLEX 360 Pro-V



DUPLEX 560 Pro-V

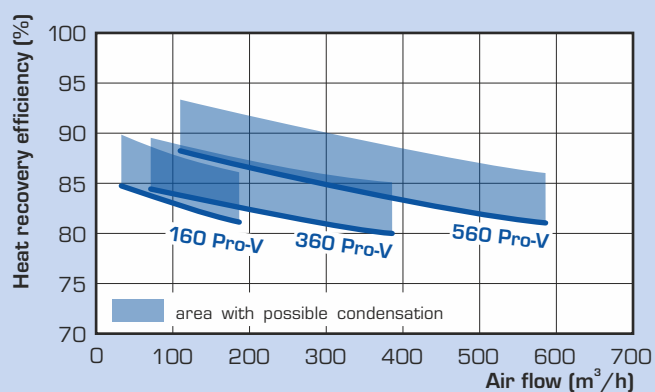


Key:

● Pressure reserve with ISO Coarse 90% filter (G4)*
○ Q_{ref} reference flow (70% Q_{max}, 50 Pa)
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* max. pressure reserve curve is listed
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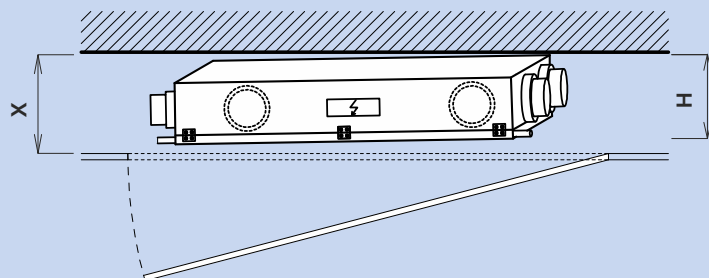
HEAT RECOVERY EFFICIENCY DUPLEX Pro-V



*valid for balanced supply and extract air flow

DUPLEX Pro INSTALLATION OF THE UNITS

The new **DUPLEX Pro** units feature a very flat design that allows the units to be installed in very low ceilings. The minimum requirements for the space in the ceiling are listed in the table. A plasterboard hatch can be fitted under the unit. In bathrooms there is necessary to ensure that the ceiling, including the inspection door, is vapour-tight.

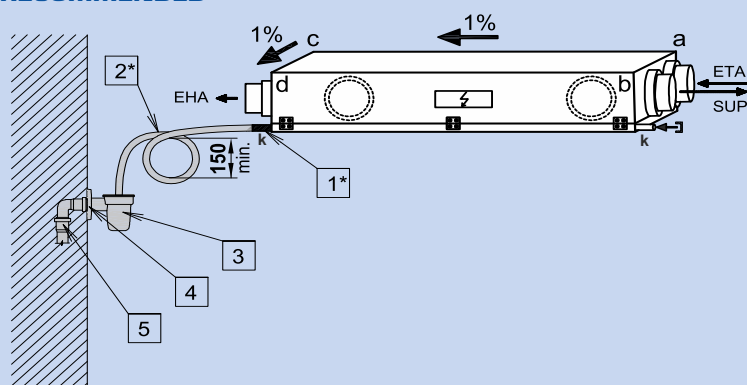


PLACEMENT OF THE UNIT IN THE SUSPENDED CEILING

DUPLEX Pro		150	350	550
unit height H	mm	200	257	350
min. ceiling height X	mm	225	286	379

DUPLEX Pro CONDENSATE DRAINAGE

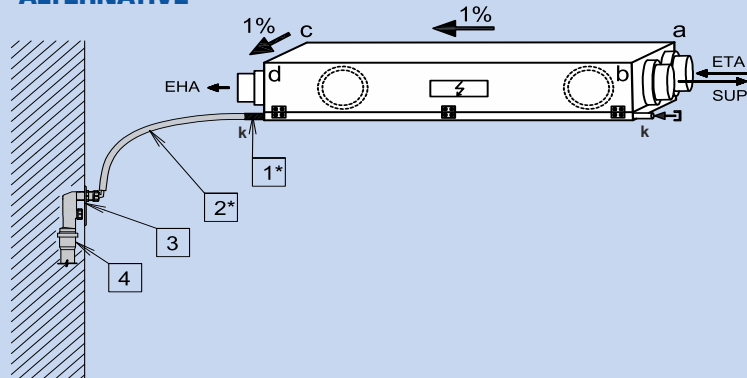
RECOMMENDED



1 *	Outlet sleeve 16 mm.
2 *	Flexible hose, inner diameter 16 mm, length 2 m. To make a siphon loop of min. 150 mm.
3	Ball funnel (e.g. AKS1Z).
4	An elbow (e.g. HT DN 32).
5	Connection to sewer DN 32.

*included in the unit delivery

ALTERNATIVE



1 *	Outlet sleeve 16 mm.
2 *	Flexible hose, inner diameter 16 mm, length 2 m.
3	Odour stopper (e.g. AKS7).
4	Connection to sewer DN 40.

*included in the unit delivery

Unit incline and condensate drainage

During the heat recovery process, when the exhaust air is cooled, an air humidity condenses and precipitates on the walls of the heat exchanger, further increasing the efficiency of the recovery. The condensate drains out of the heat exchanger in the direction of the exhaust air flow and is discharged from the DUPLEX unit to the sewer.

For the condensate drainage function, the unit must be properly inclined towards the outlet i_2 (EHA). The following table shows the minimum slope. It is necessary to separate the unit and the sewer using a **siphon loop with a minimum height of 150 mm** or a "dry" ball siphon. Small condensate pumps may be used where the recommended connection to the sewer cannot be made.

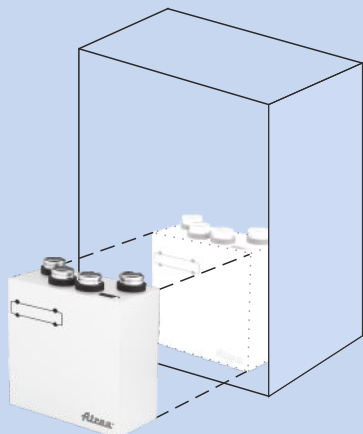
INCLINE OF THE UNIT FOR CONDENSATE DRAIN

DUPLEX Pro		150	350	550
Distance from the corner of the unit to the horizontal ceiling structure (mm)	a	±0	±0	±0
	b	7	9	9
	c	12	15	15
	d	19	24	24

DUPLEX Pro-V

DUPLEX Pro-V INSTALLATION OF THE UNITS

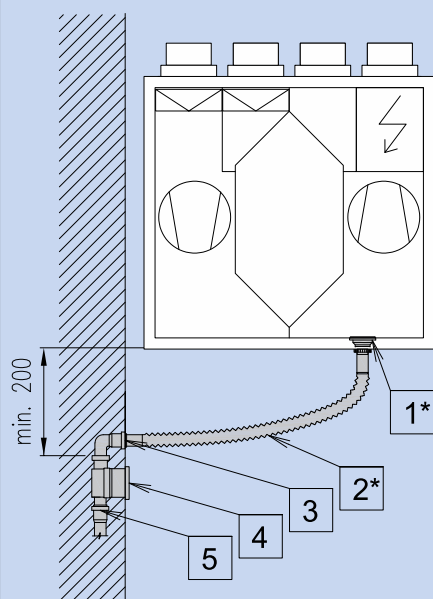
DUPLEX Pro-V wall-mounted units can be installed directly on the wall or in built-in cabinets. The following table shows the minimum internal width and depth of the cabinet for the placement of the units.



PLACING THE UNIT IN A BUILT-IN CABINET

DUPLEX Pro-V		160	360	560
unit width	mm	757	930	1070
min. internal width of the cabinet	mm	797	970	1110
min. cabinet depth	mm	381	505	546

DUPLEX Pro-V CONDENSATE DRAINAGE



During the heat recovery process, when the exhaust air is cooled, an air humidity condenses and precipitates on the walls of the heat exchanger, further increasing the efficiency of the recovery. The condensate drains out of the heat exchanger in the direction of the exhaust air flow and is discharged from the DUPLEX unit to the sewer.

1 *	Outlet G5/4".
2 *	Flexi connection G5/4"×32/40 (length 300 to 700 mm).
3	Elbow (e.g. HT DN 32).
4	Odour stop (e.g. HL138).
5	Connection to sewer DN 32.

*included in the unit delivery

CONTROL SYSTEM – BASIC CP

CONTROL SYSTEMS – GENERAL DISTRIBUTION

type of the control system	power adjustment range	constant flow control	automatic by-pass	webserver	external inputs		control of external elements						
					delay + (timeout)	input 0–10 V	closing dampers	electric reheater / preheater	weekly program	water heater	water cooler	zone dampers 2x	kitchen damper
CP + CPA	10–100 %		●		1+n*	1	●	●	●				
CP + CPB													
aMotion	10–100 %		●	●	4	2	●	●	●	●	●	●	●
aMotion.CF		●											

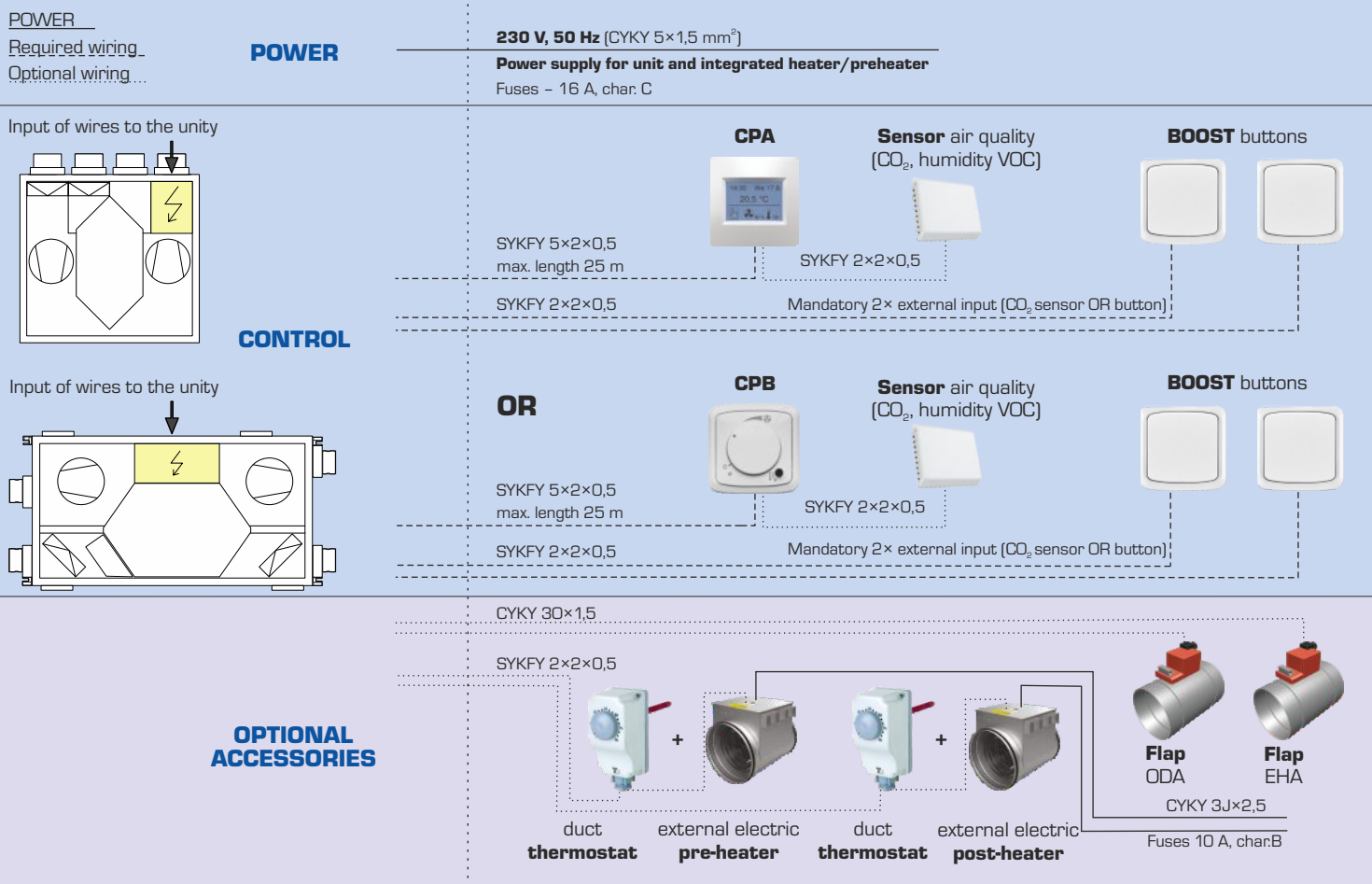
*possible to connect the external inputs

CP CONTROLS – BASIC CONTROL MODULE

Comfort controls offers an intuitive operation and a wide range of adjustable parameters. The system allows connection of an external input to increase ventilation performance (signals from rooms, e.g. toilet, bathroom, for controlling the output according to air quality sensors (CO₂, rH). It is also possible to connect an integrated or external electric preheater

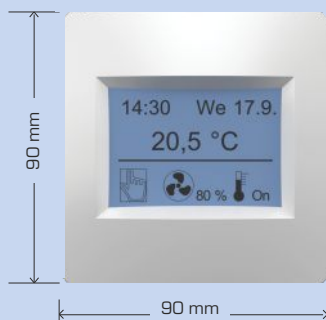
(for protectionkitchen), 0–10 V input The standard control also provides the possibility of controlling the shut-off dampers on the supply and extract air. The uniqueness of the system is underlined by the **CPA wall-mounted digital touch controller**. As an alternative to the touch controller, a simple **mechanical CPB controller** can be used.

CP CONTROL WIRING DIAGRAM

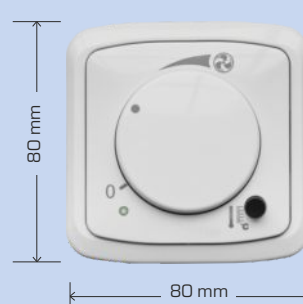


CONTROLLERS FOR CP CONTROLS

CPA controller



CPB controller



CONTROL SYSTEM – aMOTION

aMOTION CONTROLS - ADVANCED CONTROL SYSTEM MODULE

Main functions of the aMotion control module:

- Possibility to adjust ventilation power and other parameters according to weekly program
- Continuous control of the EC fans with the possibility to control the power based on the air flow measurement directly in the unit (CF – constant flow option)
- Automatic control of the by-pass damper (the bypass of the heat recovery exchanger) based on the user's desired temperature
- Autonomous frost protection of the heat exchanger
- BOOST based on push-button signal (kitchen, bathroom or toilet) with selectable delay
- Continuous control of electric preheater and electric or water heater
- Control of shut-off dampers on the fresh water supply pipe and exhaust air
- Control of zone dampers on supply and extract air (priority kitchen extraction)

CONTROL WITH aMOTION MODULE

Units with the aMotion control module can be controlled in several ways:

- a) **aTouch** controller – this is a wall-mounted controller with a size 4,3" touch screen. The controller allows you to perform all user settings.
- b) **aDot** controller – this is a simplified wall-mounted touch controller. The controller allows you to perform the most important user settings.
- c) Without the controller, use **a computer** or **mobile phone** via the built-in webserver or via the aSpace cloud service.
- d) Without the controller, the control based on the measured value from the air quality sensors (CO₂, humidity, VOC) or based on the detection of one of the BOOST buttons.
- e) Using a superior control system, by default using the Modbus TCP protocol.

The individual control options a) to e) can be combined with each other.

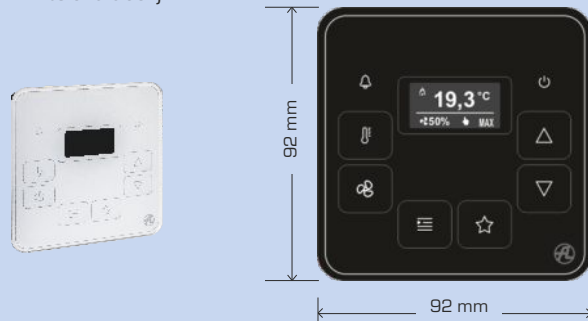
aMOTION controllers

aTouch controller

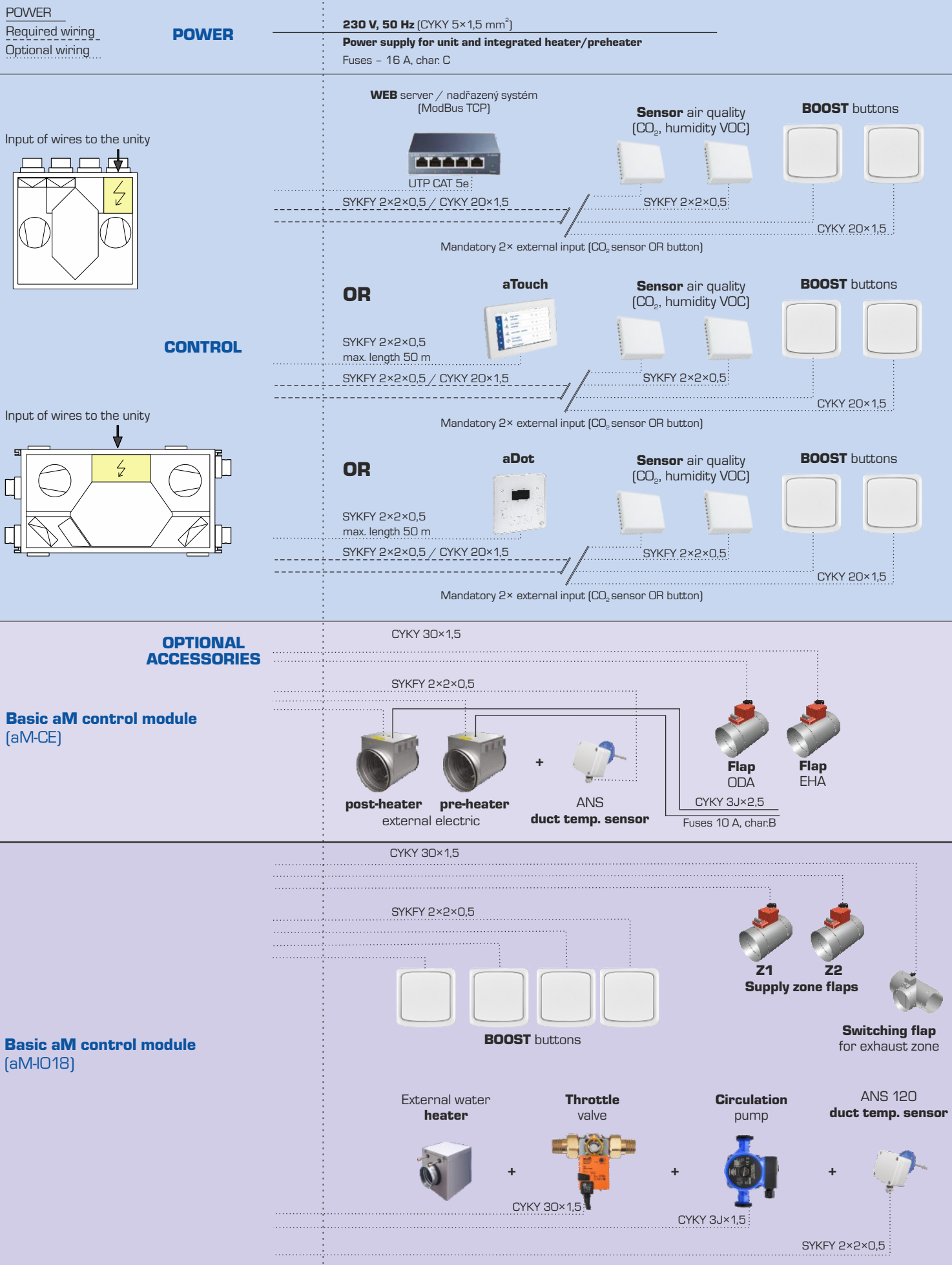


aDot controller

(in white and black)



aMOTION CONTROL WIRING DIAGRAM



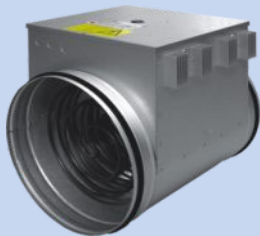
OPTIONAL ACCESSORIES

BUILT-IN ELECTRIC HEATERS EDO



- when used as a **pre-heater** it also works as one of the frost protection of the heat recovery core
- when used as a **post-heater** it increases the comfort
- designed for to be **built-in into the unit**, installation at a predetermined place inside the unit incl. the installation frame
- according to the output and the indication, the heater is designed for the supply air preheating or reheating
- operating temperature control is ensured by the unit control system
- the element is prepared for the easy installation into the unit incl. the cables
- the heater is equipped with SSR switch
- iBuilt-in EDO heaters don't reduce the pressure reserve of the unit
- it is equipped with two safety reverse acting thermostats (60 °C reversible and 90 °C manual reset)

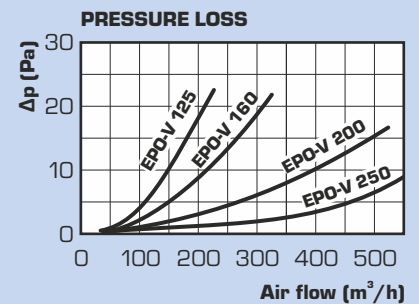
DUCT ELECTRIC HEATER EPO-V



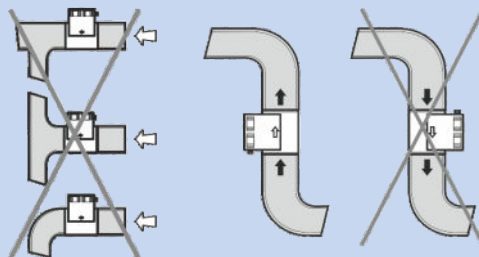
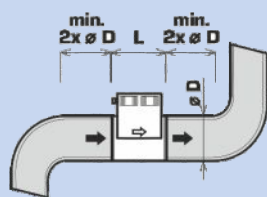
- used for the fresh air **preheating**, installing in the duct at the fresh air inlet
- to be used for the supply air **reheating**, installing in the duct downstream the unit
- it is required to be used a thermostat in the duct behind the heater together with CP controls
- it is required an installation of the ADS 120 duct sensor in the duct downstream the heater together with aMotion controls
- the casing is made of galvanized metal sheet
- the casing includes the terminal board
- IP44 protection, to be installed only in normal environment
- it is equipped with two safety thermostats reversible (60°C returnable and 120°C manual reset)
- the heater is equipped with SSR switch
- the safety reset button is located on the heater cabinet casing, during the assembly the heater must be located with regard to access and must not be fitted with a cover downward
- minimum airflow in the heater is 1,5 m³/s

typ	power input (kW)	voltage (V)	min. air. flowrate (m ³ /h)	ø D (mm)
EPO-V 125/0,9	0,9	230	45*	125
EPO-V 160/1,6	1,6	230	110*	160
EPO-V 200/2,0	2,0	230	170*	200
EPO-V 250/3,0	3,0	400	260*	250

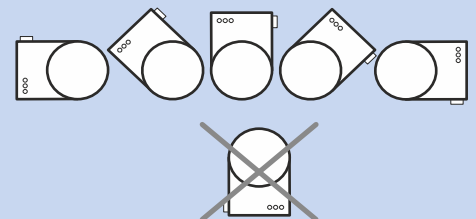
* If requested lower flowrate than shown here, please use the built-in EDO integrated heaters.



Heater placement diagram



Permitted terminal board positions



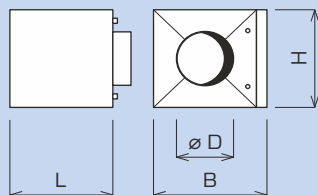
OPTION OF HEATERS

Units with CP controls						
DUPLEX	150 Pro	350 Pro	550 Pro	160 Pro-V	360 Pro-V	560 Pro-V
integrated electric preheater	EDO – 1,1 – CP (Pro,850I) A160664	EDO – 2,2 – CP (Pro,850I) A160665		EDO – 1,1 – CP (Pro-V, Easy2, Slim) A160660	EDO – 2,2 – CP (Pro-V) A160661	
integrated electric reheater	cannot be integrated into these units			EDO – 1,1 – CP (Pro-V, Easy2, Slim) A160660		
external electric preheating	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103
	+					
	Duct thermostat for EPO-V A150199					
external electric preheat	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103
	+					
	Duct thermostat for EPO-V A150199					

Units with aM controls						
DUPLEX	150 Pro	350 Pro	550 Pro	160 Pro-V	360 Pro-V	560 Pro-V
integrated electric preheater	EDO – 1,1 – aM (Pro,850I) A160666	EDO – 2,2 – aM (Pro,850I) A160667		EDO – 1,1 – aM (Pro-V, Easy2, Slim) A160662	EDO – 2,2 – aM (Pro-V) A160663	
integrated electric reheater	cannot be integrated into these units			EDO – 1,1 – aM (Pro-V, Easy2, Slim) A160662		
external electric preheating	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103
	+					
	* ANS 120 (duct temperature sensor) A145620					
external electric preheat	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103	EPO-V 125/0,9 A150101	EPO-V 160/1,6 A150102	EPO-V 200/2,0 A150103
	+					
	ANS 120 (duct temperature sensor) A145620					

A wider range of electric preheaters and reheaters is configurable in the ATREA selection software.
*Optional duct temperature sensor for cases with long distance between the preheater and the unit.

HOT WATER AIR HEATERS TPO EC THV



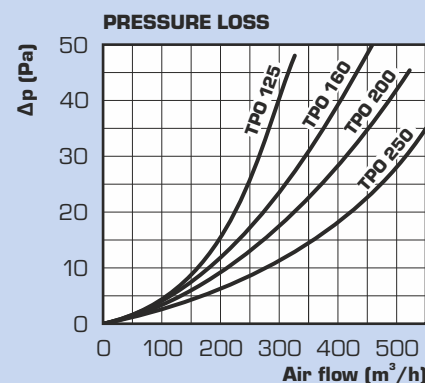
- to be used to reheat the air; to be installed in ducts (can be used only with aMotion control system)
- ANS 120 sensor required (to be installed in the duct downstream the heater)
- painted metal sheet casing

- aluminium lamellas on copper tubes
- maximum operating pressure 10 bar
- maximum operating temperature 70 °C
- as a standard the heater is supplied included the throttle valve equipped with servo drive (24V power supply, 0-10V control)

air flow rate (m ³ /h)	water flow rate (l/h)	pressure loss (kPa)	heating power* (kW)
100	30	0,1	0,3
150	40	0,2	0,5
200	60	0,3	0,8
300	80	0,6	1,3
400	100	0,9	1,9
500	120	1,3	2,5

* The table applies for heating water temperature 55 / 35 °C, supply air after heat recovery 15-20 °C, exhaust air min. 30 °C. Parameters for different conditions can be found in the ATREA selection software.

typ	ø D (mm)	B (mm)	H (mm)	L (mm)	připojení ["]	recommended for DUPLEX
TPO 125 EC THV	125	418	348	350	1/2" [e]	150 Pro, 160 Pro-V
TPO 160 EC THV	160	418	348	350	1/2" [e]	350 Pro, 360 Pro-V
TPO 200 EC THV	200	418	348	350	1/2" [e]	550 Pro, 560 Pro-V
TPO 250 EC THV	250	418	348	350	1/2" [e]	550 Pro, 560 Pro-V



MODULAR AIR HANDLING SYSTEM OF ATREA

UNITS DUPLEX Pro, Pro-V

	DUPLEX 150 Pro.CP	Order no. A160600
	DUPLEX 150 Pro.aM	Order no. A160610
	DUPLEX 150 Pro.aM.CF	Order no. A160620
	DUPLEX 350 Pro.CP	Order no. A160601
	DUPLEX 350 Pro.aM	Order no. A160611
	DUPLEX 350 Pro.aM.CF	Order no. A160621
	DUPLEX 550 Pro.CP	Order no. A160602
	DUPLEX 550 Pro.aM	Order no. A160612
	DUPLEX 550 Pro.aM.CF	Order no. A160622
	DUPLEX 160 Pro-V.CP	Order no. A160603
	DUPLEX 160 Pro-V.aM	Order no. A160613
	DUPLEX 160 Pro-V.aM.CF	Order no. A160623
	DUPLEX 360 Pro-V.CP	Order no. A160604
	DUPLEX 360 Pro-V.aM	Order no. A160614
	DUPLEX 360 Pro-V.aM.CF	Order no. A160624
	DUPLEX 560 Pro-V.CP	Order no. A160605
	DUPLEX 560 Pro-V.aM	Order no. A160615
	DUPLEX 560 Pro-V.aM.CF	Order no. A160625

A+

A+

SPARE FILTER CASSETTES

	FK 150 Pro - G4	Order no. A160685
	FK 150 Pro - F7	Order no. A160688
	FK 350 Pro - G4	Order no. A160686
	FK 350 Pro - F7	Order no. A160689
	FK 550 Pro - G4	Order no. A160687
	FK 550 Pro - F7	Order no. A160690
	FK 160 Pro-V - G4	Order no. A160691
	FK 160 Pro-V - F7	Order no. A160694
	FK 360 Pro-V - G4	Order no. A160692
	FK 360 Pro-V - F7	Order no. A160695
	FK 560 Pro-V - G4	Order no. A160693
	FK 560 Pro-V - F7	Order no. A160696

Spare air filters are delivered in package of 1 pc.

OPTIONAL ACCESSORIES - SENSORS

	ADS SMOKE 24 room sensor for cigarette smoke and air quality	Order no. A142311
	ADS RH 24 room humidity sensor - relative humidity sensor	Order no. A142318
	ADS CO₂ 24 room sensor continuously controlling the ventilation power according to the current CO ₂ value	Order no. A142319
	ADS VOC 24 room air quality sensor	Order no. A142331
	ADS CO₂ D duct sensor continuously controlling the ventilation power according to the current CO ₂ value	Order no. A142330
	SI2504 movement sensor	Order no.
	HYG 6001 room hygrometer - relative humidity sensor	Order no.
	ANS 100 ABB room temperature sensor design ABB, (white colour)	Order no. A145601
	ANS 110 outdoor temperature sensor	Order no. A145610

OPTIONAL ACCESSORIES - FLEXIBLE FITTING

	SB5 - silent block set	Order no. A160530
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CONTROLLERS

	Controller aTouch 4,3 4,3" colour touchscreen remote control	Order no. A145500
	Controller aDot (B) design controller with display - basic print - black	Order no. A145550
	Controller aDot (W) design controller with display - basic print - white	Order no. A145551
	Controller CPA - cover colour changeable - touch	Order no. A144100 coloured covers see price list
	Controller CPB - color white	Order no. A144110
	aM-I018 unmounted aMotion Input/Output board with 18 terminals	Order no. A145310
	aM-D4 aMotion control expansion module for 4 inputs of 230V	Order no. A145353
	RD-BACnet/KNX aMotion control expansion module	Order no. A170288

OPTIONAL ACCESSORIES - AIR HEATERS

	EDO - 1,1 - CP (150 Pro)	Order no. A160664
	EDO - 2,2 - CP (350 - 550 Pro)	Order no. A160665
	EDO - 1,1 - CP (160 - 560 Pro-V)	Order no. A160660
	EDO - 2,2 - CP (360 - 560 Pro-V)	Order no. A160661
	EDO - 1,1 - aM (150 Pro)	Order no. A160666
	EDO - 2,2 - aM (350 - 550 Pro)	Order no. A160667
	EDO - 1,1 - aM (160 - 560 Pro-V)	Order no. A160662
	EDO - 2,2 - aM (360 - 560 Pro-V)	Order no. A160663
	EPO-V 125/0,9	Order no. A150101
	EPO-V 160/1,6	Order no. A150102
	EPO-V 200/2,0	Order no. A150103
	EPO-V 250/2,0	Order no. A150116
	EPO-V 250/3,0	Order no. A150105
	TPO 125 EC THV	Order no. A160212
	TPO 160 EC THV	Order no. A160213
	TPO 200 EC THV	Order no. A160214
	TPO 250 EC THV	Order no. A160215
	ANS 120 Duct temp. sensor ANS 120 required for EPO-V heaters or TPO EC THV heaters (aMotion controls)	Order no. A145620
	Termostat potrubni pro EPO-V Duct thermostat required for EPO-V pre-heaters or EPO-V post-heaters (CP controls)	Order no. A150199

OPTIONAL ACCESSORIES - CLOSING FLAPS

	K.D125.LM24A closing flap with actuator circular (diameter 125)	Order no. A130191
	K.D160.LM24A closing flap with actuator circular (diameter 160)	Order no. A130190
	K.D200.LM24A closing flap with actuator circular (diameter 200)	Order no. A130192

OPTIONAL ACCESSORIES - FLEXIBLE CUFFS

	H.D125.P flexible circular cuff (diameter 125)	Order no. A131163
	H.D160.P flexible circular cuff (diameter 160)	Order no. A131161
	H.D200.P flexible circular cuff (diameter 200)	Order no. A131160