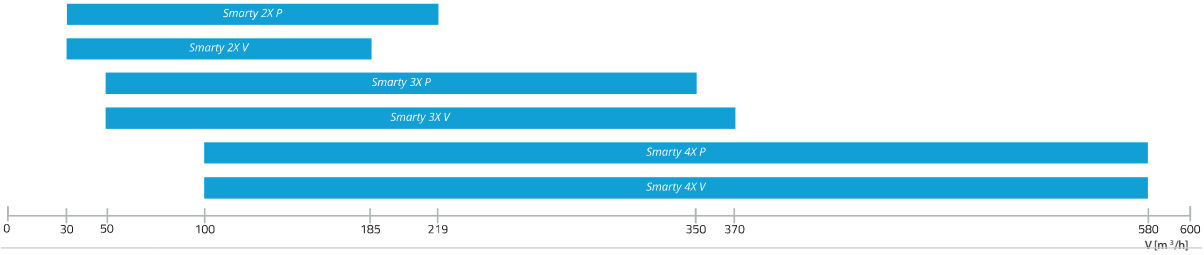
SMARTY X

ErP READY

A1

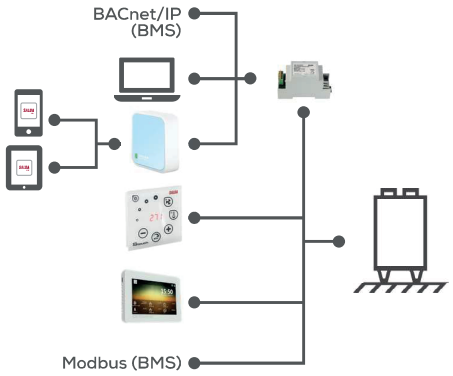


Application	Apartments, private houses, villas, passive houses.
Description	Residential air handling units Smarty X with EPP casing are characteristic of the highest energy efficiency (heat recovery rate – up to 94%) and user-friendly control. Universal positioning of Smarty XP units and the lowest height enable to find a place for them even in tight spaces. Due to compact sizing Smarty 2XV ideally fits in a place of a kitchen cabinet, meanwhile Smarty 3XV/4XV could fit above a regular washing machine. Every Smarty unit is tested for airtightness in order to assure exceptional quality of assembly. All internal components (fans, actuators, heat exchanger) are produced by top European manufacturers, which guarantees a long service life. Smart control board enables controlling all components of the ventilation system. The main features: › Class A+/A efficiency*; › EC fans with high-efficiency counter-flow heat exchangers; › High quality: Class A1 airtightness; › Smart and user-friendly handling by using SALDA AIR mobile app (via optional MB-Gateway); › Certified by Passivhaus Institute (Smarty 2X and 3X). *- depends on the unit.
Construction	Top class casing: › Thermal and acoustic insulation: EPP of 20-30 mm; › Galvanized steel plate; › The external side is powder-coated – corrosion class C3. Heat exchanger: › Plastic plate heat exchanger; › Efficiency up to 91% (EU 1253/2014) / 85% (Passivhaus). Fans: › EC type; › Specific fan input (SPI) from 0.26 W/(m3/h); › Long lifetime – fans last for more than 10 years. Motorized bypass damper: › 100% summer bypass (night cooling); Integrated pre-heater (Smarty 2XV/3XV/4XV version 1.1 only). Filters: › Low pressure drop Coarse 65%/Coarse 65% (G4/G4) filters (effective filtration of dust, pollens); › Optional supply of ePM1 70% (F7) filter for more efficient filtration (moulds, spores, microscopic allergens, fine particles, bacteria). Integrated control board [2]: › Control of external components: pre-heater, heater, dampers, etc.; › Connection for demand control sensors (CO2, RH, presence); › Intelligent frost protection; › Smart el.heater control 0-10V; › Extensive control options: 3 manual modes, boost, calendar, night cooling, fireplace mode and etc. [1] ~40000 working hours [2] Functionality depends on the unit

The company reserves the right to make changes of technical data without prior notice

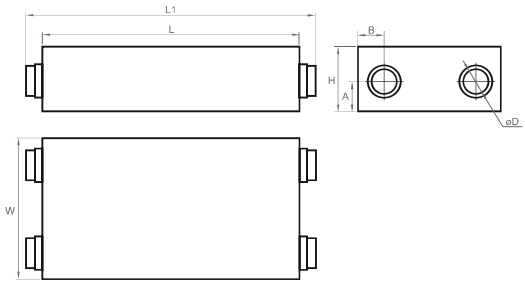
Air temperature sensors	Extract, Supply, Outdoor.
Relative humidity sensor	Extract air (Smarty 3XV/4XV V 1.1)

Control options

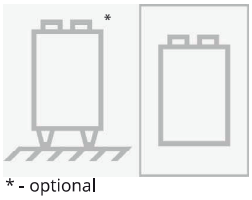


CONSTRUCTION

Smarty 2X P - 4X P

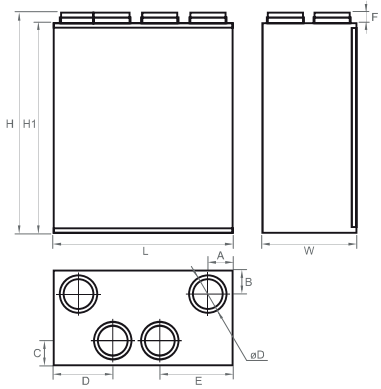


	Dimensions [mm]						
Unit	L	L1	W	H	A	B	**øD**
Smarty 2X P	1009	1085	590	250	113	115	125/160
Smarty 3X P	1225	1381	685	324	150	128	150/160
Smarty 4X P	1225	1381	685	324	150	128	150/160

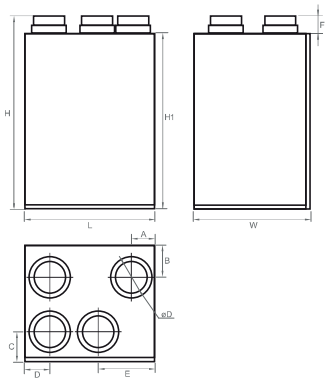


* - optional

Smarty 2X V



Smarty 3X V - 4X V



	Dimensions [mm]										
Unit	L	W	H	H1	F	A	B	C	D	E	**øD**
Smarty 2X V	595	316	732	697	35	82	79	82	195	242	125/100
Smarty 3X V	599	538	900	810	80	100	145	138	112	265	150/160
Smarty 4X V	599	538	900	810	80	100	145	138	112	265	150/160

SMARTY X

ACCESSORIES

	Optional accessories						
Unit	EKA/EKA NIS	WSG	ALU	NPU	AP	MUTE	SKG
Smarty 2X P	125	-	125	125	125	125	125
Smarty 3X P	160	160	160	160	160	160	160
Smarty 4X P	160	160	160	160	160	-	160
Smarty 2X V	125	-	125	125	125	125	125
Smarty 3X V	160	160	160	160	160	160	160
Smarty 4X V	160	160	160	160	160	160	160

Network Module

MB-Gateway

Control panel

STOUCH

Control panel

ST-SA-Control

Electrical preheater / heater

EKA NIS

CO_2 sensors

S-RCO2-F2
S-KCO2

Humidity transmitter

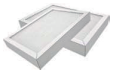
S-RFF-U-D-F2
S-KFF-U

Nano Router

TL-WR802N

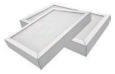
Smarty legs

Panel filters



MPL
Coarse 65% (G4)

Panel filters



MPL
ePM1 70% (F7)

Actuators for dampers

CM230-F-L

Shut-off damper

SKG-A

Silencer

MUTE

AIR HANDLING UNI

VERSIONS

Product name	Smarty 2X V 1.1	Smarty 2X V 1.2	Smarty 3X V 1.1	Smarty 3X V 1.2	Smarty 4X V 1.1	Smarty 4X V 1.2	Smarty 2X P 1.1	Smarty 2X P 1.2	Smarty 3X P 1.1	Smarty 3X P 1.2	Smarty 4X P 1.1	Smarty 4X P 1.2
Energy efficiency class	A+*	A	A+*	A	A*	B	A+*	A	A+*	A	A*	B
Control board	Mini MCB	Mini MCB Basic	Mini MCB	Mini MCB Basic	Mini MCB	Mini MCB Basic	Mini MCB	Mini MCB Basic	Mini MCB	Mini MCB Basic	Mini MCB	Mini MCB Basic
Version	Premium	Advanced	Premium	Advanced	Premium	Advanced	Premium	Advanced	Premium	Advanced	Premium	Advanced
Heat recovery	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temp.control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bypass damper	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Integrated pre-heater	✓		✓		✓							
Extracted air humidity sensor			✓		✓							
Optional heating elements												
Duct-based pre-heater		✓**		✓**		✓**	✓	✓**	✓	✓**	✓	✓**
Duct-based heater	✓	✓**	✓	✓**	✓	✓**	✓	✓**	✓	✓**	✓	✓**

* - version V1.1 with additional CO2 or RH sensors complies to A+/A.
** - only with pre-heater or heater.

Smarty 2X P

A

49 dB

218 m³/h

		Version 1.1	Version 1.2
Ordering code		AHU000108	AHU000109
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.051/0.4	
supply	[kW/A]	0.051/0.4	
Electrical preheater integrated	[kW/A]	Optional on duct	
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	0.10/0.85	
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	A	
	Local demand control	A	
Thermal efficiency of heat recovery	[%]	86,3	
Sound power level (Lwa)	[dB(A)]	49	
SPI	[W/(m³/h)]	0.33	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	20	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	30	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

* - ePM1 70% (F7) filter is available as an accessory

Without frost protection	**With air flow** disbalancing protection	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

Verified:

EPDB

PCDB

Ekofund

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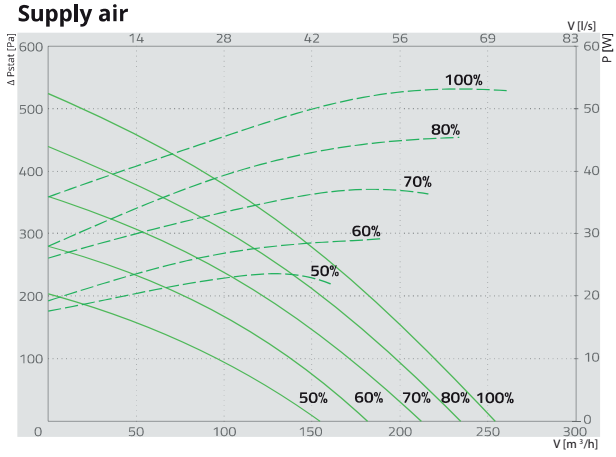
View from inspection side

EHA Exhaust air ETA Extract air ODA outdoor air SUP Supply air

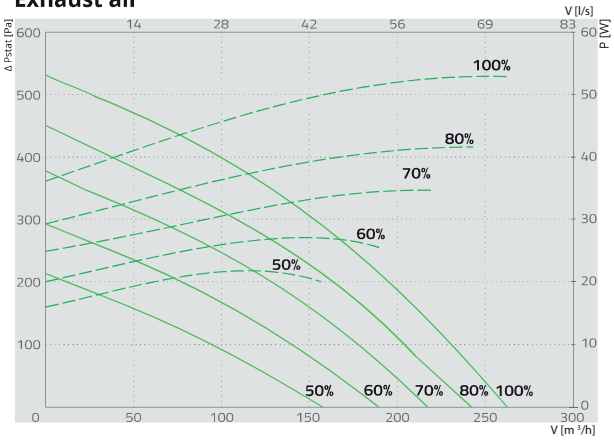
Performance

Power consumption

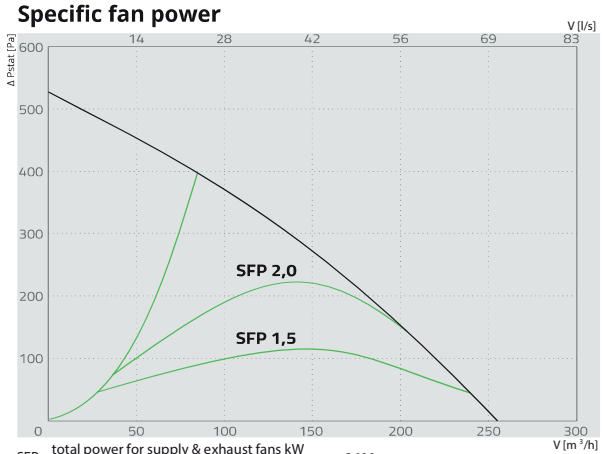
Supply air



Exhaust air

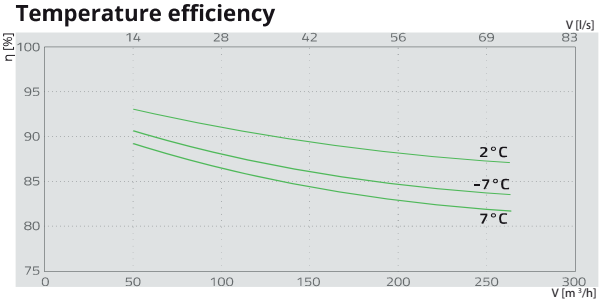


Specific fan power



SFP= $\frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m³/h}}$ x 3600

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

Smarty 2X P	L_{wa} total, dB(A)	L_{WA}, dB(A) 63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Outdoor	55	14	46	53	49	40	25	15	7
Supply	68	21	51	61	66	60	54	47	32
Extract	55	20	46	52	49	39	32	16	7
Exhaust	65	19	50	59	61	57	51	43	29
Surround	48	9	32	41	46	38	35	34	32

Measured at 151 m³/h, 50 Pa

SMARTY X

Smarty 3X P

A

45 dB

395 m³/h

		Version 1.1	Version 1.2
Ordering code		AHU000112	AHU000113
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.085/0.75	
supply	[kW/A]	0.085/0.75	
Electrical preheater integrated	[kW/A]	Optional on duct	
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	0.17 /1.55	
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	A	
	Local demand control	A	
Thermal efficiency of heat recovery	[%]	85	
Sound power level (Lwa)	[dB(A)]	45	
SPI	[W/(m³/h)]	0,28	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	30	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	53	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

* - ePM1 70% (F7) filter is available as an accessory

Without frost protection	**With air flow** disbalancing protection	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

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ZERTIFIZIERTE KOMPONENTE
Passivhaus Institut

Verified:

EPDB

PCDB

Ekofund

CasaClima

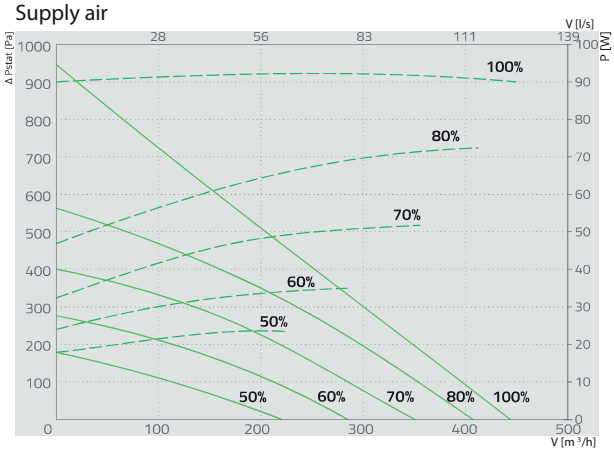
View from inspection side

EHA Exhaust air ETA Extract air ODA outdoor air SUP Supply air

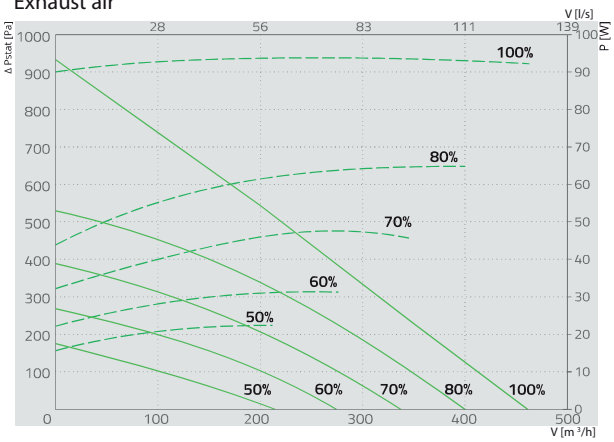
Performance

Power consumption

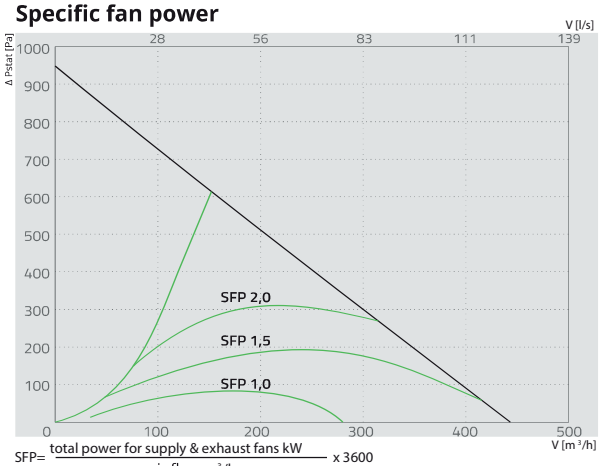
Supply air



Exhaust air

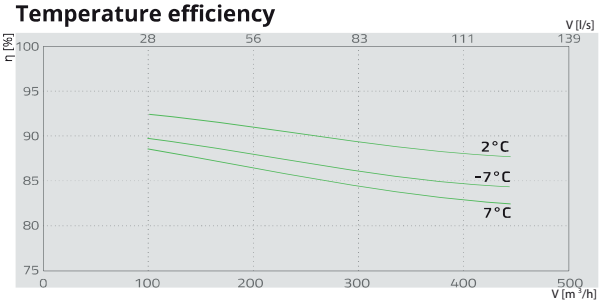


Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

Smarty 3X P	L_{wa} total, dB(A)	L_{WA}, dB(A) 63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Outdoor	63	22	54	62	53	38	31	20	12
Supply	68	26	58	66	62	56	53	47	35
Extract	62	22	54	61	52	39	32	21	11
Exhaust	66	22	54	62	62	57	53	47	35
Surround	45	15	33	42	39	33	32	33	34

Measured at 277 m³/h, 50 Pa

AIR HANDLING UNITS

Smarty 4XP F2

		Version 1.1	Version 1.2
Ordering code		AHU001719	AHU001720
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.17/1.35	
supply	[kW/A]	0.17/1.35	
Electrical preheater integrated	[kW/A]	Optional on duct	
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	0.34/2.7	
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	B	
	Local demand control	A	
Thermal efficiency of heat recovery	[%]	83	
Sound power level (Lwa)	[dB(A)]	55	
SPI	[W/(m³/h)]	0.34	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	30	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	53	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

* - ePM1 70% (F7) filter is available as an accessory

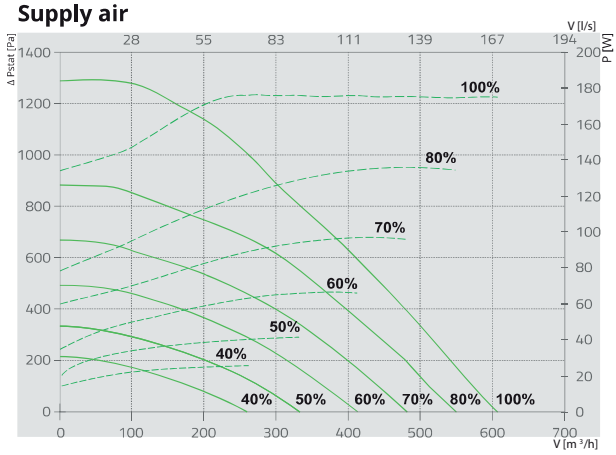
Without frost protection	**With air flow** disbalancing protection	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

View from inspection side

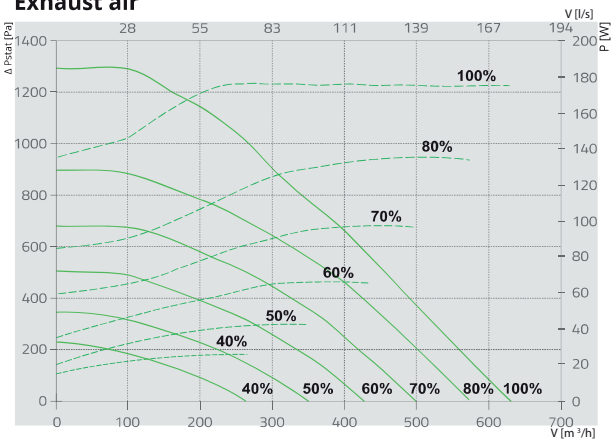
EHA Exhaust air ETA Extract air ODA outdoor air SUP Supply air

Performance
Power consumption

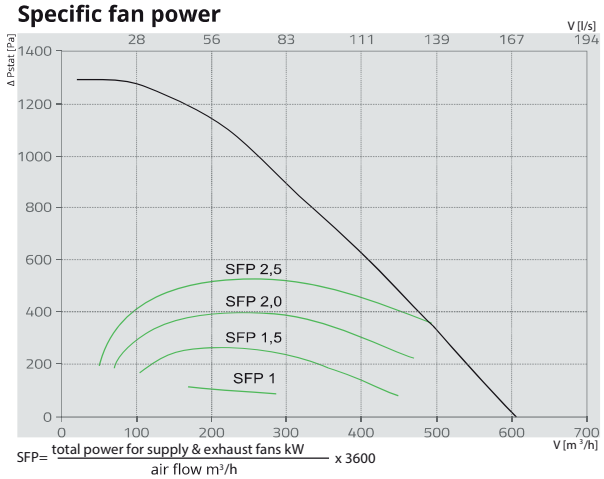
Supply air



Exhaust air

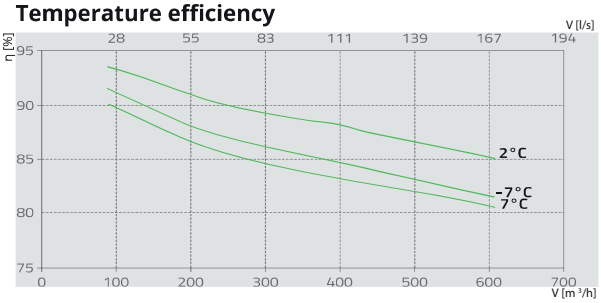


Specific fan power



SFP= $\frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m³/h}}$ x 3600

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

Smarty 4X P	L_{wa} total, dB(A)	L_{WA}, dB(A) 63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	60	45	49	55	54	53	49	43	37
Extract	53	43	44	50	45	43	41	35	31
Surrounding	55	38	38	51	51	44	39	33	34

Measured at 405 m³/h, 50 Pa

AIR HANDLING UNITS

SMARTY X

Smarty 2X V

A+
A

51 dB

182 m³/h

		Version 1.1	Version 1.2
Ordering code		AHU000110	AHU000111
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.035/0.35	
supply	[kW/A]	0.035/0.35	
Electrical preheater integrated	[kW/A]	0.6	Optional on duct
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	0.67/3.35	0.07/0.75
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	A	A
	Local demand control	A+	A
Thermal efficiency of heat recovery	[%]	90,4	
Sound power level (Lwa)	[dB(A)]	51	
SPI	[W/(m³/h)]	0.31	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	30	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	25	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

* - ePM1 70% (F7) filter is available as an accessory

Without frost protection	**With air flow** disbalancing protection	With integrated preheater	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-15°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

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ZERTIFIZIERTE KOMPONENTE
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Verified:

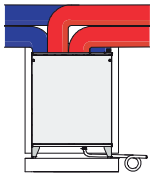
EPDB

PCDB

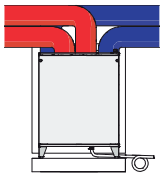
Ekofund

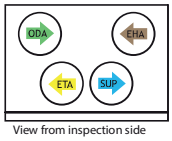
CasaClima

Right side connection



Left side connection



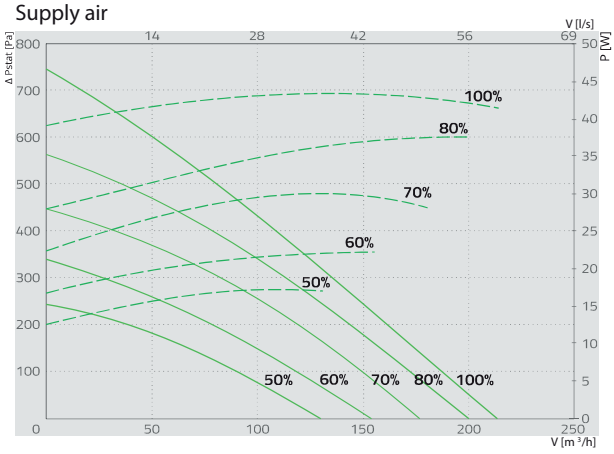


View from inspection side

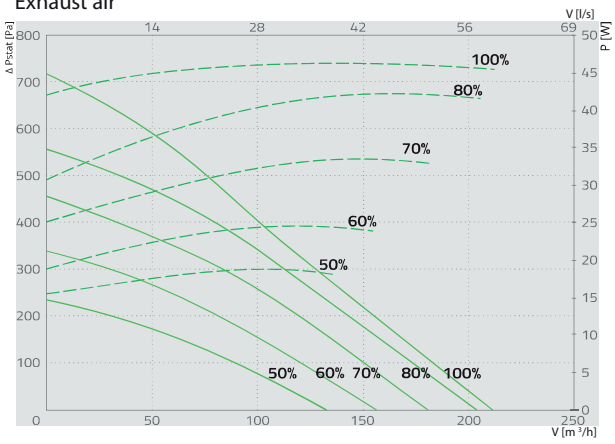
EHA Exhaust air
ODA Outdoor air
ETA Extract air
SUP Supply air

——— Performance
------- Power consumption

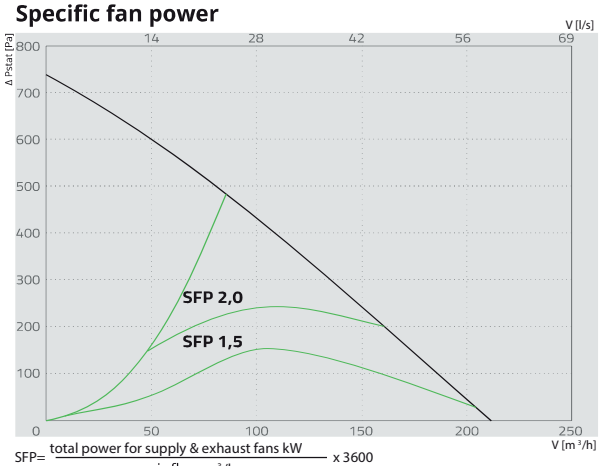
Supply air



Exhaust air

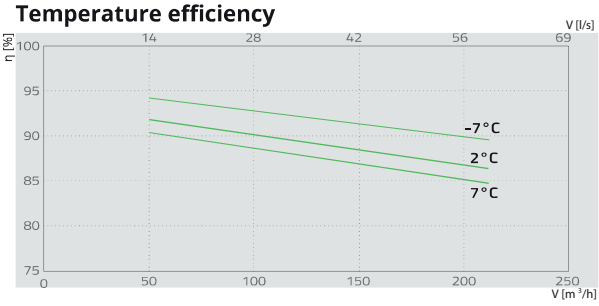


Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

Smarty 2X V	L_{wa} total, dB(A)	L_{WA}, dB(A) 63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Outdoor	53	12	44	51	45	40	26	14	4
Supply	63	17	48	57	60	56	51	48	33
Extract	55	12	44	51	52	43	26	19	6
Exhaust	68	21	52	60	64	62	54	51	36
Surround	51	8	32	42	47	43	43	42	38

Measured at 126 m³/h, 50 Pa

AIR HANDLING UNITS

Smarty 3X V

A+

A

50 dB

394 m³/h

		Version 1.1	Version 1.2
Ordering code		AHU000114	AHU000115
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.083/ 0.75	
supply	[kW/A]	0.083/ 0.75	
Electrical preheater integrated	[kW/A]	1.2	Optional on duct
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	1.37/ 6.75	0.17/1.55
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	A	
	Local demand control	A+	
Thermal efficiency of heat recovery	[%]	86,9	
Sound power level (Lwa)	[dB(A)]	50	
SPI	[W/(m³/h)]	0.26	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	30	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	39	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

* - ePM1 70% (F7) filter is available as an accessory

Without frost protection	**With air flow** disbalancing protection	With integrated preheater	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-15°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

Verified:

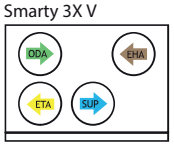
EPDB

PCDB

Ekofund

CasaClima

Smarty 3X V



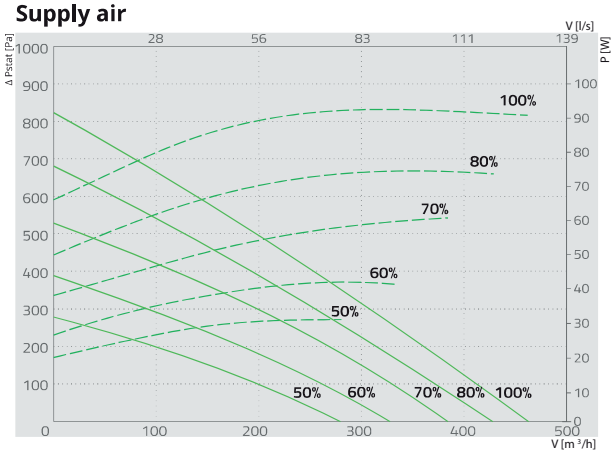
View from inspection side

EHA Exhaust air ETA Extract air ODA outdoor air SUP Supply air

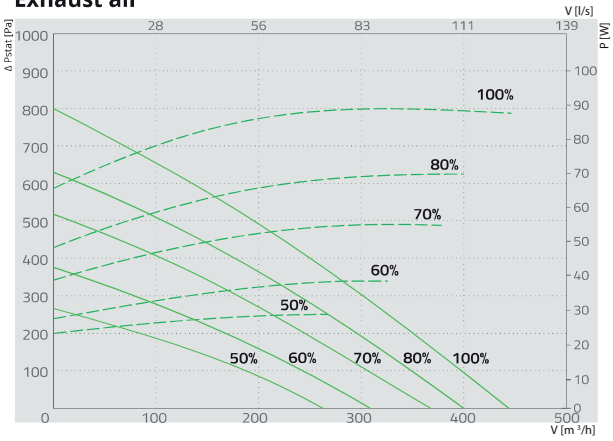
——— Performance

------- Power consumption

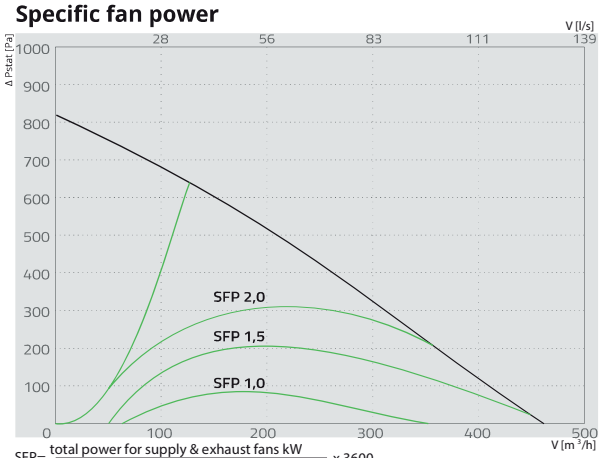
Supply air



Exhaust air

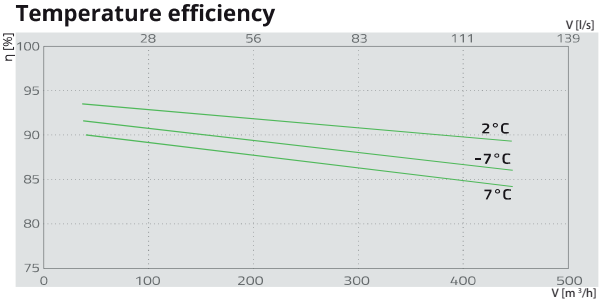


Specific fan power



SFP= $\frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m³/h}}$ x 3600

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

Smarty 3X V	L_{wa} total, dB(A)	L_{WA}, dB(A) 63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Outdoor	56	16	48	55	47	37	30	21	14
Supply	66	22	53	62	62	57	52	41	31
Extract	60	19	51	59	50	40	33	23	16
Exhaust	69	25	57	65	64	57	55	48	39
Surround	50	16	38	46	45	41	37	34	30

Measured at 277 m³/h, 50 Pa

AIR HANDLING UNITS

SMARTY X

Smarty 4X V F2

A
B

59 dB

565 m³/h

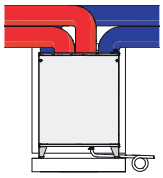
		Version 1.1	Version 1.2
Ordering code		AHU001717	AHU001718
Electrical data			
Fans	[50Hz/VAC]	~1, 230	
exhaust	[kW/A]	0.169/1.35	
supply	[kW/A]	0.169/1.65	
Electrical preheater integrated	[kW/A]	1.2/5.2	Optional on duct
Electrical heater	[kW/A]	Optional on duct	
Max.power consumption	[kW/A]	1.54/7.9	0.34/2.7
Power connection	[50Hz/VAC]	~1, 230	
Control board		MiniMCB	MiniMCB basic
Ecodesign data			
Energy efficiency class	Time control	B	B
	Local demand control	A	A
Thermal efficiency of heat recovery	[%]	86.6	
Sound power level (Lwa)	[dB(A)]	59	
SPI	[W/(m³/h)]	0.35	
Maximum internal/external leakage rates	[%]	1.2/1.2	
ErP compliance		2018	
Other data			
Filters	Supply/Extract	Coarse 65%/Coarse 65% (G4/G4)*	
Housing insulation, polyurethane	[mm]	30	
Colour	white	RAL 9016	
Weight (net, without packing)	[kg]	39	
Housing protection class		IP 34	
Operation		Indoors only (heated premises)	

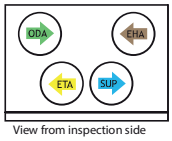
* - ePM1 70% (F7) filter is available as an accessory

Without frost protection	**With air flow** disbalancing protection	With integrated preheater	With optional preheater on duct	Extract air
0°C+40°C/ 90%	-15°C+40°C/ 90%	-10°C+40°C/ 90%	-40°C/+40°C/90%	+15°C/+40°C/60%

Right side connection

Left side connection



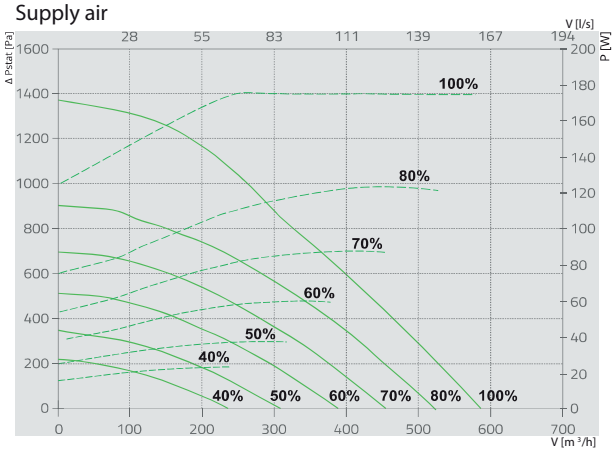


View from inspection side

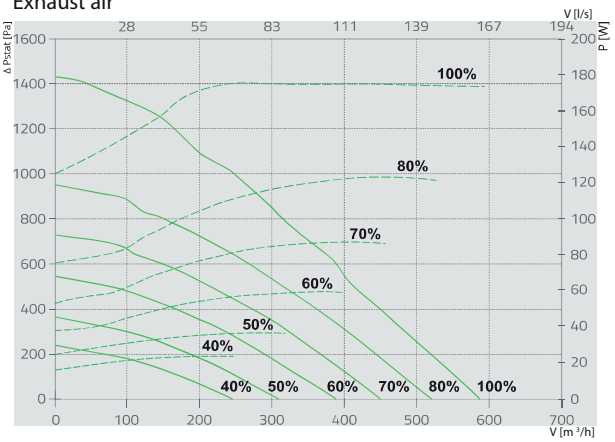
EHA Exhaust air
ODA Outdoor air
ETA Extract air
SUP Supply air

Performance
Power consumption

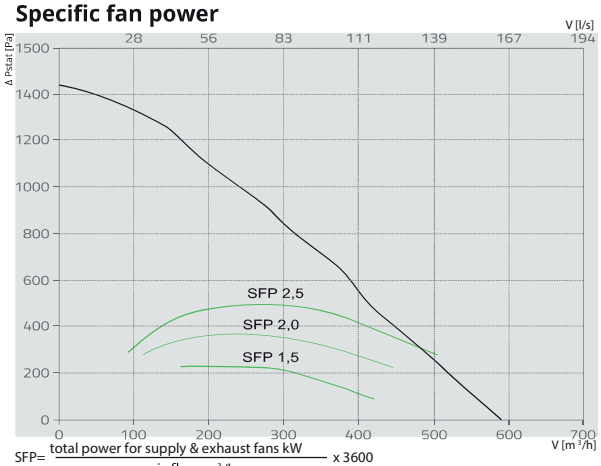
Supply air



Exhaust air

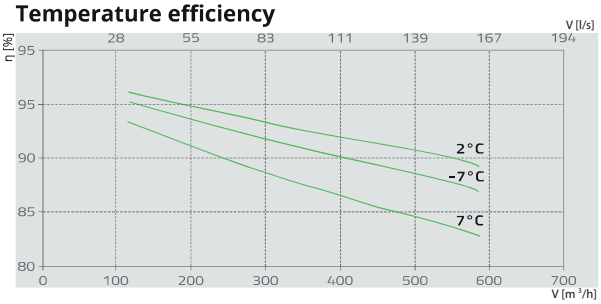


Specific fan power



SFP= $\frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}}$ x 3600

Temperature efficiency



Temperature efficiency (balanced mass flow):
+7 - 20°C/39% dry / +2 - 20°C/60% wet / -7 - 20°C/39% wet

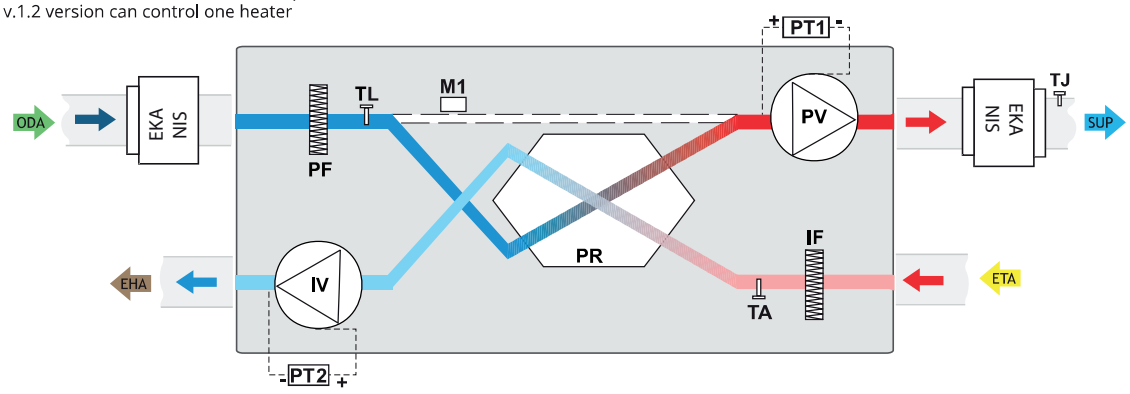
Smarty 4X V F2	L_{wa} total, dB(A)	L_{WA}, dB(A)							
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	54	61	72	74	70	66	59	52
Extract	65	44	52	61	62	48	43	32	24
Surrounding	59	38	39	53	56	50	45	36	51

Measured at 396 m³/h, 50 Pa

AIR HANDLING UNITS

Smarty 2X P* / 3X P / 4X P versions v1.1 / v1.2**

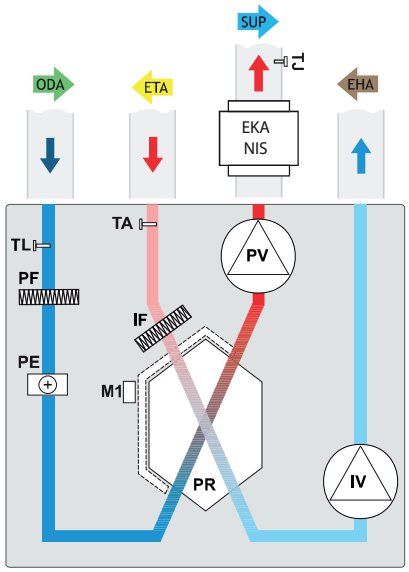
* - 2X P does not have constant air flow/pressure functions
** - v.1.2 version can control one heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air
IF - filter for extract air
M1 - actuator of by-pass damper
TA - extract air temperature sensor

TL - outdoor air temperature sensor
TJ - supply air temperature sensor
EKA NIS - electric pre-heater
EKA - electric heater
PT1 - supply air fan pressure transmitter (only v1.1 version)
PT2 - exhaust air fan pressure transmitter (only v1.1 version)

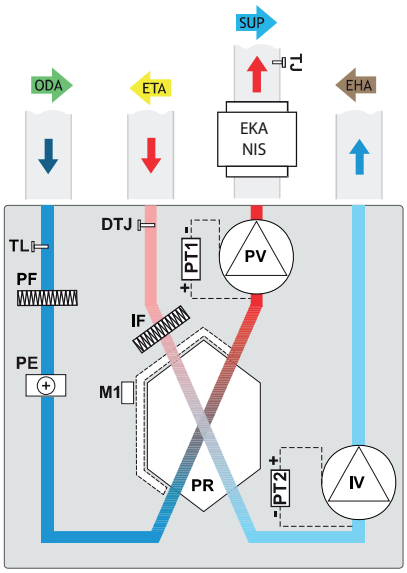
Smarty 2X V version v1.1 with electrical heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air
IF - filter for extract air
M1 - actuator of by-pass damper
TA - extract air temperature sensor

TL - outdoor air temperature sensor
TJ - supply air temperature sensor
EKA - electric heater
PE - electric pre-heater

Smarty 3X V / 4X V versions v1.1 with electrical heater

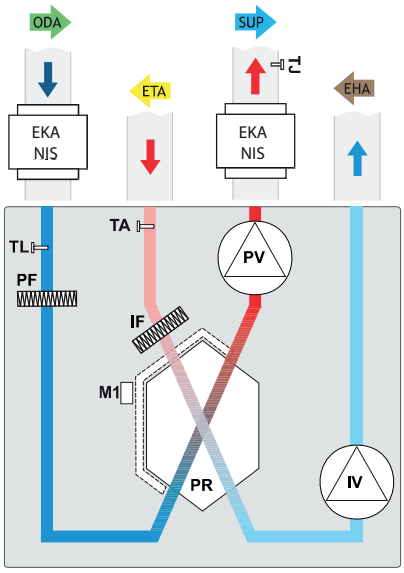


IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air
IF - filter for extract air
M1 - actuator of by-pass damper
DTJ - air temperature and humidity sensor

TL - outdoor air temperature sensor
TJ - supply air temperature sensor
EKA - electric heater
PE - electric pre-heater
PT1 - supply air fan pressure transmitter
PT2 - exhaust air fan pressure transmitter

Smarty 2X V / 3X V / 4X V versions v1.2* with electrical heater

* - v.1.2 version can control one heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air
IF - filter for extract air
M1 - actuator of by-pass damper

TA - extract air temperature sensor
TL - outdoor air temperature sensor
TJ - supply air temperature sensor
EKA - electric heater
EKA NIS - electric pre-heater

SMARTY X

FUNCTIONS			
Descriptions of the functions		MiniMCB	MiniMCB basic
		Smarty range	
Functions			
	Date and time settings	+	+
System modes for easy and-user friedly control:	Stand-by, Building protection, Economy, Comfort.	+	+
	BOOST function (Fans operate at highest speed)	+	+
	Cold/heat recovery	+	+
	Fire place function	+	-
	Fireplace protection (NC)	o	-
	Fire protection	+	+
	Winter/summer mode	+	+
	System monitoring	o	o
	Alarm indication output	+	-
	Operation indication output	+	-
	Digital input confguration	+	+
	Event register (storing up to 50 entries)	+	+
	Dryness protection	o	o
	Constant air pressure	+	-
	Constant airflow mode	+	-
	Heat exchanger frost protection	+	+
	Manual components control	o	o
	Weekly schedule	+	+
	Holiday schedule	+	+
	CO_2 level indication and reduction function	o	o [1]
	Night cooling function	+	+
	Relative humidity (RH) level indication and reduction function	o	o [1]
	Supply air temperature control according to the extract air sensor	+	+
	Reset to factory defaults	+	+
Functional units			
Fans			
	Speed synchronous/asynchronous 0-10V control	+	+
	Protection by RPM	+	+
	Protection by pressure	+	-
Electric heater			
	On/off and 0-10V control	+	*
	Automatic and Manual protection (NC)	+	*
Electric pre-heater			
	On/off and 0-10V control	+	*
	Pre-heater manual/automatic protection (NC)	+	*
Air dampers			
	Outdoor air dampers control	+	+
Filters clogging monitoring			
	Air filters timer	+	+
Sensors			
	Supply air temperature sensor	+	+
	Outdoor air temperature sensor	+	+
	Extract air temperature sensor	+	+
Remote controllers			
	S-Touch	x	x
	ST-SA-Control	x	x
	MB Gateway	x	x
Building management system			
	Modbus	+	+
	BACnet/IP	o	o

o	Required additional components: CO2 and moisture sensors, switches, etc.
+	Standard feature (the number of features depends on the ventilation unit in which the automatics are used); to be confgured through BMS network or remote control panel
x	Remote control panels
*	Only one heater or pre-heater can be connected
o[1]	Only one sensor can be connected

The company reserves the right to make changes of technical data without prior notice