SMARTY R

NEW!

ErP READY

EC

B

Smarty 2R V

| 0 | 50 | | | 230 | 250 |

V [m³/h]

Application	Apartments, private houses, villas and ither heated premises.
Description	Smarty R V is a heat recovery unit with high-efficiency rotor heat exchanger. Unit is designed for vertical placement in auxiliary heated or non-heated premises. Smarty R V is designed for placement in tight spaces: kitchen cabinets, boiler rooms and etc. Unit has high overall energy savings due to the highly efficient heat recovery (up to 80%), quiet and eco-nomical EC fans, effective low-pressure-drop filters, and top-level air tightness. Smarty R V is fully equipped with automatic control. Demand-level control options with CO_2 and humidity sensors and summer mode are available for highest comfort. Smarty is service-friendly and are easy to mount. Rotor fault indicators are included in every AHU. Units are supplied tested and ready to install.
Controls	Three remote control options are available: 1. Stouch remote controller. 2. Building management system connections. 3. Remote control via PC MB-Gateway.
Features	› Efficient rotor heat exchanger with up to 80% heat recovery. › Electrical heating. › Easy and quick installation. › Controlled airflow. › Fully integrated plug-and-play control system.
Rotor	› Eurovent certified. › Plate gap 1,5 mm. › Rotor fault indicator. › Minimal airflow mixing.
Construction	› Frameless construction from double-skinned steel, with powder coated paint, panels. › Acoustic wall insulation – 20 mm. › 3 sensors for fresh, supply and extract air temperatures. › Low-pressure-drop filters: F7/M5. › Integrated electrical heater. › Kitchen hood connection d125.

View from buttom
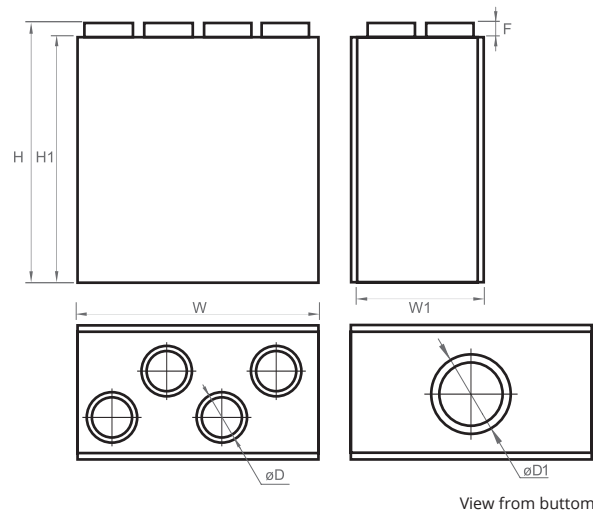
Unit	Dimensions [mm]							
	W	W1	L	H	H1	øD	øD1	F
Smarty 2R VE	598	320	320	653	620	125	175	30

Unit	Optional accessories					
	Stouch MB-Gateway	EKA NV PH	WSG	S-RC02-F2 S-KFF-U S-RFF-U-D-F2 S-KCO2	AKS AP SKG	SP
Smarty 2R VE	+	125	125	+	125	CM24-F-L

Accessories

Network Module	Remote controller	Electrical duct pre-heater	Actuator for dampers	Shut-off damper	Mounting clamp	Circular duct silencer	Supply and exhaust air grill
MB-Gateway p. 178	**Stouch p. 176**	**EKA NV PH p. 201**	**SP p. 210**	**SKG p. 212**	**AP p. 219**	**AKS p. 216**	**WSG p. 218**

CO2 sensor	CO2 sensor	Humidity sensor	Humidity sensor	Kitchen hood	Front cover
S-RC02-F2 p. 180	**S-KCO2 p. 180**	**S-RFF-U-D-F2 p. 181**	**S-KFF-U p. 181**		

AIR HANDLING UNITS

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

SMARTY R

Smarty 2R V

Supply air

Performance ———
Power consumption - - - - - -
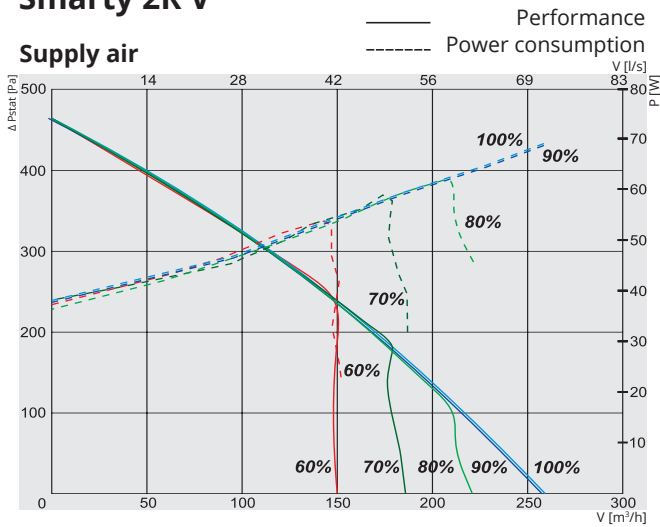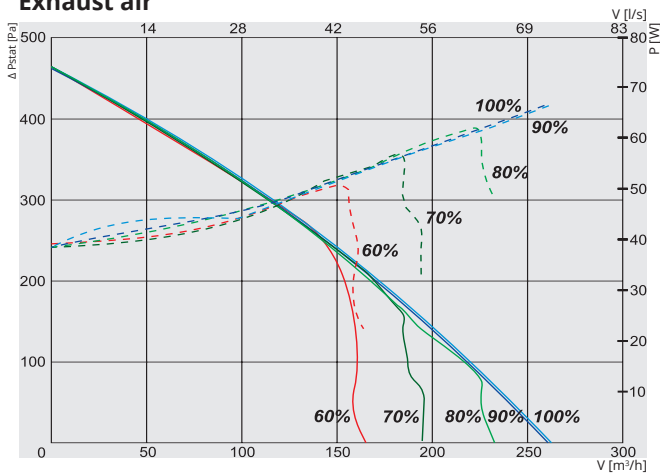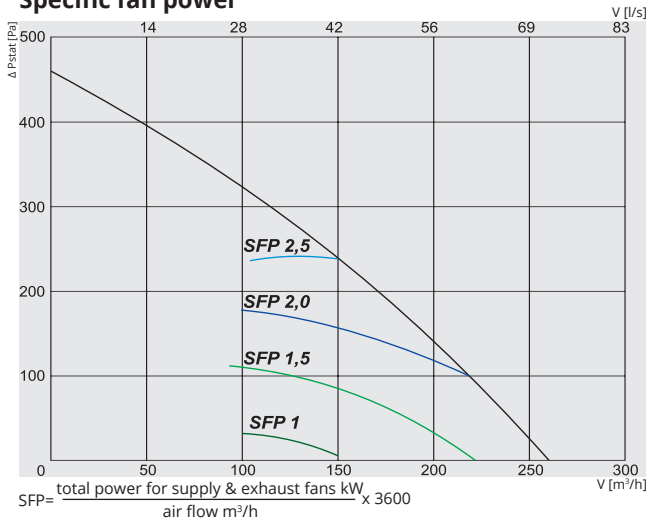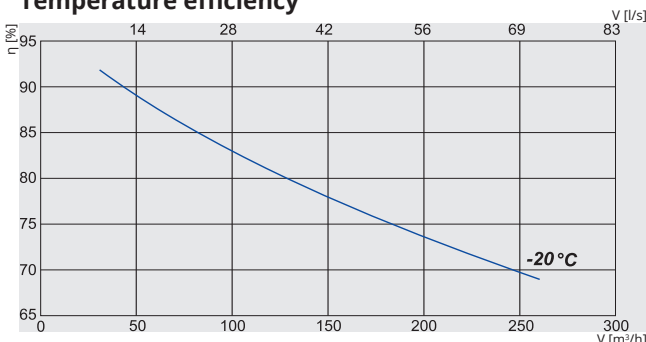
NEW!

Smarty 2R VEL
Air intake side (L- left convertible)

View from inspection side
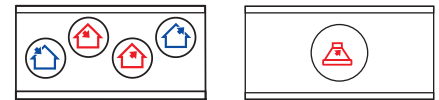
Smarty 2R VER
Air intake side (D- right convertible)

View from inspection side

Exhaust air

⌂ Exhaust air   ⌂ Extract air   ⌂ Outdoor air   ⌂ Supply air   ⏏ Kitchen hood

Article No.		Version
GAGSMARTY1981_0102A	Smarty 2R VEL	Left-hand maintenace version with integrated electrical heater.
GAGSMARTY1975_0102A	Smarty 2R VER	Right-hand maintenace version with integrated electrical heater.

Specific fan power

SFP 2,5

SFP 2,0

SFP 1,5

SFP 1

			Smarty 2R V
Heater	-phase/voltage	[50Hz/VAC]	~1, 230
	-power consumption	[kW]	0,6
EC Fans	-phase/voltage	[50Hz/VAC]	1/230
exhaust	-power/current	[kW/A]	0,07/0,6
	-fan speed	[min⁻¹]	1380
supply	-power/current	[kW/A]	0,07/0,6
	-fan speed	[min⁻¹]	1380
Motor protection class			IP-44
Thermal efficiency			75%
Max power consumption		[kW/A]	0,75 / 3,91
Automatic control			integrated
Filter class	-exhaust		M5
	-supply		M5
Thermal insulation		[mm]	20
Weight		[kg]	36,0
Comply with ERP			2018

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

Air flow temperature range from -20°C to +40°C.
Designed for operation indoors only.

Temperature efficiency

-20 °C

Temperature efficiency (balanced mass flow):
Extract air = 20°C/60%RH
Outdoor air = -20°C

Smarty 2R V	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	65	50	59	61	59	55	51	40
Extract	60	45	58	53	45	37	28	21
Surrounding	46	37	40	42	38	29	19	16
Measured at 214 m³/h, 100 Pa								

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Smarty 2R VE (vertical) **with electrical heater**
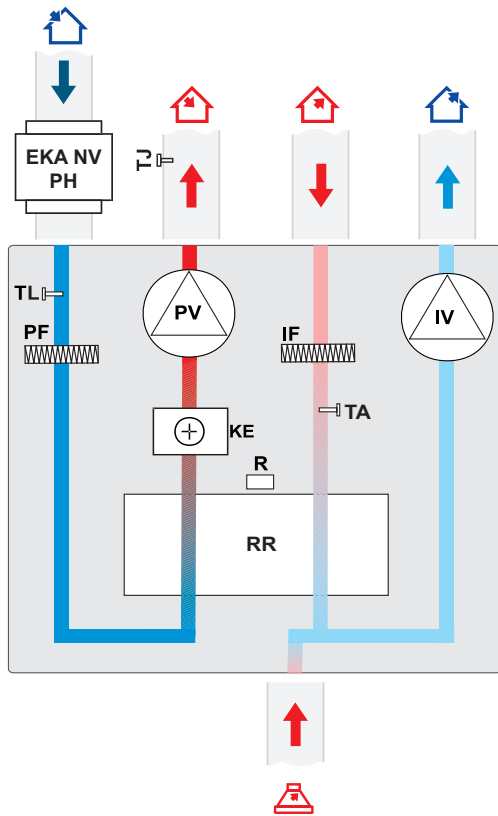
EKA NV PH - optional fresh air pre-heater
TL - fresh air temperature sensor
PF - filter for supply air
PV - supply air fan
KE - electrical heater
R - motor of rotor heat exchanger
RR - rotary heat exchanger
TJ - supply air temperature sensor
IF - filter for extract air
TA - extract air temperature sensor
IV - exhaust air fan

SMARTY R

FUNCTIONS	
	MCB
Descriptions of the functions	**Smarty R**
	E
Functions	
Date and time settings	●
System modes for easy and-user friedly control (Stand-by, Building protection, Economy, Comfort)	●
BOOST function (Fans operate at highst speed)	●
Comfortable air temperature function	●
Cold/heat recovery	●
Heating season (from a selected date, 3-day temperature average or manually)	●
Dryness protection	○
Weekly/holiday schedule	●
User and service control levels	●
Manual air flow balancing	●
CO_2 level indication and reduction function	○
Night cooling function	●
Relative humidity (RH) level indication and reduction function	○
Software and configuration update possibility	●
Supply air temperature control according to the extract air sensor	●
Monitoring function (all sensors and I/O) Mode switch (start/stop)	●
Manual components control	●
Switching the speed of the fans	●
Functional units	
Fans	
Soft start and stop	●
Protection by RPM	●
Speed synchronous/asynchronous 0-10V control	●
Electrical heater	
On/off control	●
Overheat protection (additional protection software)	●
Filter pollution minitoring	
By filter timer	●
Rotor	
On/off control	●
Motor belt levers protection	●
Rotation speed indication	●
Service timer	●
Air temperature sensors	
temperature sensor failure protection (with emergency mode)	●
Supply air temperature sensor	●
Outdoor air temperature sensor	●
Extract air temperature sensor	●
Dampers	
open/close	○
Emergency signals and inputs/outputs	
Fire protection input	●
Configurable digital inputs	●
Remote controllers	
Stouch	○
Ptouch	○
MB Gateway	○

● standard feature
○ for the feature to function an accessory is needed

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