FGT basic

Flat compact air handling units with counter flow heat exchanger

systemair

Systemair FGT basic

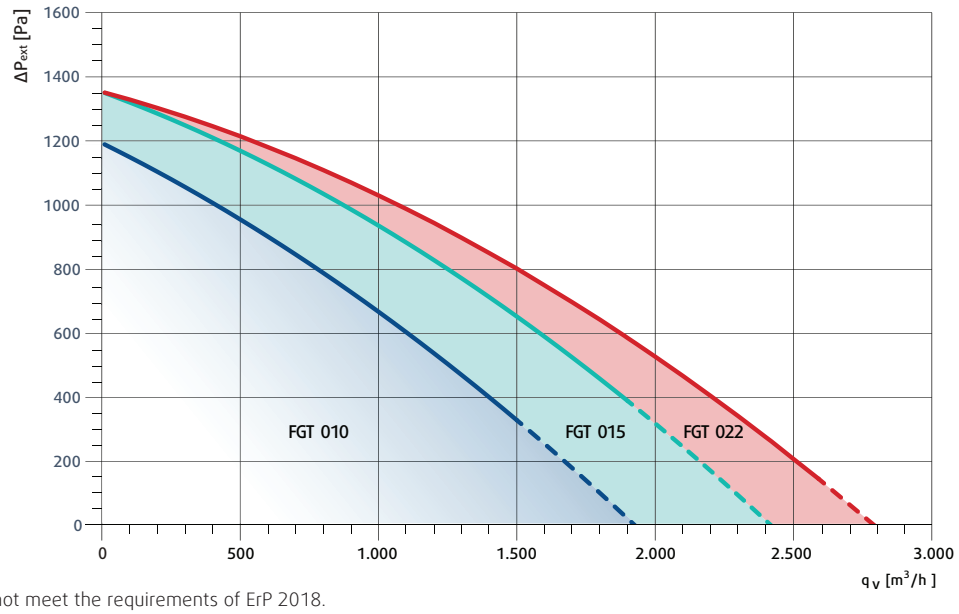
Compact air handling unit with counter flow heat exchanger, suitable for ceiling installation. Available in three preconfigured sizes with air flow up to 2.500 m³/h. Space-saving low height casing design with bottom service site and fully integrated controls makes FGT easy to install, maintain and control.

FGT basic

- 3 sizes, max. air flow up to 2.500 m^3/h
- Size FGT 022 is assembled from three modules, which are delivered as separate modules for easier transport and installation
- Air flow values are visible on display in m^3/h
- High efficient counter flow heat exchanger with temperature efficiency up to 90%
- Option of factory installed integrated water heater
- 100% heat exchanger by-pass for “free cooling” in summer
- Low energy consumption thanks to high efficient plug fans with EC motors
- Compact flat design (low height), suitable for false ceilings installation
- Double-shell insulated panels made of Zinc-Magnesium coated steel
- Factory pre-wired electric cabinet on the side of the unit for easy access and commissioning
- Remote control with display for setting and monitoring device operation
- Modbus RTU via RS-485 & TCP/IP & BACnet via IP
- Integrated motorized dampers for outdoor air, exhaust air with a spring return motor that closes air dampers in case of a power failure and protects inner components from freezing
- Integrated motorized by-pass dampers for plates exchanger
- Air-tight flexible all-site duct connections for easy installation (no vibration transmission to the duct)
- Integrated free terminals for interface connection of an external refrigerator compressor unit for DX cooling coil
- Short lead time

Quick selection & short lead time

There are three factory preconfigured models available.
FGT basic units are in right-hand execution. All included components are specified in the function diagram (site 5). Units are delivered with air-tight flexible all-site duct connections and complete control system. There are several accessories available to be ordered separately.



- - - - Does not meet the requirements of ErP 2018.

Functions, components and control

Casing
Compact and flat space-saving casing design allows FGT to be mounted under the ceiling. The casing is made of aluminum profile frame and Zinc-Magnesium coated steel double-shell panels, insulated with 35mm non-combustibility mineral wool (Euroclass A1) for good thermal and acoustic insulation. Air dampers for outdoor and exhaust air and a set of flexible connections are delivered as standard.

Fans
Energy efficient plug fans with EC motors have backward curved impeller blades, dynamically balanced according to ISO 21940. Performance adjustment through the output signal of the controller or as pressure or volume flow control through an integrated PID controller.

Heat recovery
High efficient (up to 90%) counter flow heat exchanger made of corrosion-resistant aluminum has an integrated motorized by-pass damper for quick defrosting and free cooling option. Drain pan for condensate collection has a side connection for drainage.

Air filters
Outdoor and extract air filters can be replaced from the bottom of the unit. Panel filters class ePM10 70% (M5) for extract air and ePM1 55% (F7) for outdoor fresh air is set as standard.

Control
Constant supply air temperature is maintained by controlling the heat exchanger by-pass damper (0-10V) and the position of the heating valve (0-10V) on the water heater. Dampers for outdoor and exhaust air are regulated by a spring return "open-close" motor. Limiter for minimum supply air temperature prevents penetration of too cold air into the room in case the controller lowers supply air temperature too much to achieve set room temperature. This usually happens when internal heat load increases (increased room occupancy, thermal sources of appliances, etc.).

Continuous frost protection by 2-stage frost monitoring in case the risk of water frost in water heater occurs. Circulation pump for heating is switched on → air dampers are closed → heating valve is open → fans are switched off.

The controller also takes care of cooling recovery and free cooling in summertime.

Cooling recovery function helps to prevent the opening of heat exchanger by-pass damper, in case we want to cool down the room and the outside air temperature is ≥ 1°C higher than the extract air temperature from room.

Free cooling function helps to cool down the room with fresh outdoor air in summer nights when the outdoor air temperature is lower than the room temperature and demand for cooling is present (extract air temperature is higher than room setpoint temperature). In this case, air dampers and heat exchanger by-pass damper are opened and both fans are working. This function helps chillers to reduce indoor air temperature during the day.

Spring return motor closes air dampers in case of a power failure and thus prevents freezing of water coil, invasion of animals into the unit, etc.

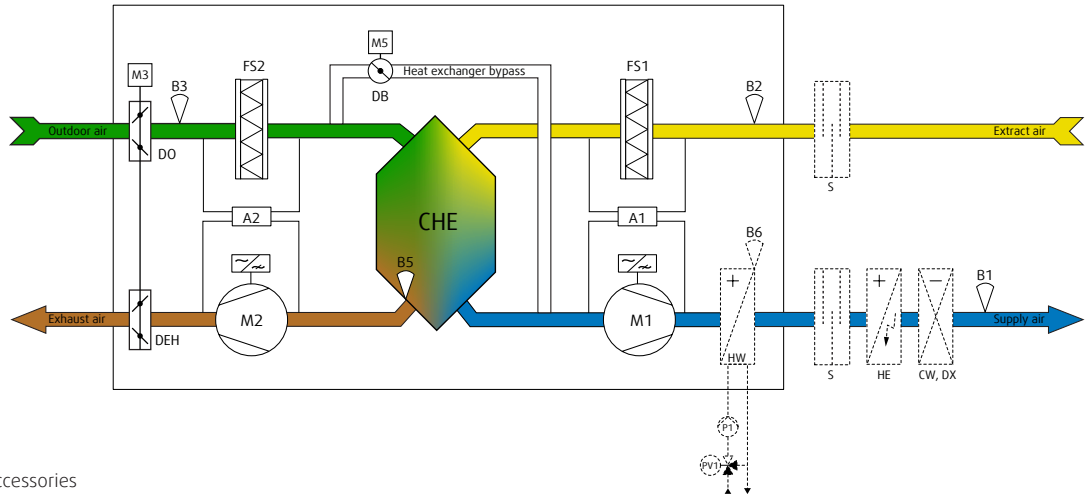
Extract air temperature control is set as standard but it can be changed to constant supply air temperature control.

Constant air volume (CAV) is set as standard.
Filter's status can be checked on display, where the exact pressure drop over filter can be checked. When pressure drop reaches 250 Pa, filter change alarm will occur on display.

Communication is possible over Modbus RTU via RS-485 & TCP/IP & BACnet via IP.

FGT uses the Corrigo controller with cable attached display (10 m cable included).
The cable length between the display and the controller can be extended by the user up to a maximum of 100 m.

Function diagram



- - - - Accessories

DO	Outdoor air damper
M3	Air damper motor
B3	Outdoor air temperature sensor
FS2	Supply air filter
A2	Presigo pressure transmitter
CHE	Counter flow heat exchanger
DB	By-pass damper
M5	By-pass damper motor

M1	Supply fan
A1	Presigo pressure transmitter
HW	Water heater (accessories)
PV1	3-way water valve (accessories)
B6	Frost prot. temp. sensor (accessories)
B1	Supply air temperature duct sensor
B2	Extract air temperature sensor
FS1	Extract air filter

B5	Freeze protection temp. sensor
M2	Extract fan
DEH	Extract air damper
HE	Electric heater (accessories)
CW, DX	Water or DX cooler (accessories)
S	Sound attenuator

NOTE: All components are factory installed and tested. The 3-way valve with actuator is not integrated into the device. It is supplied separately and must be installed during the construction of hydraulic lines.

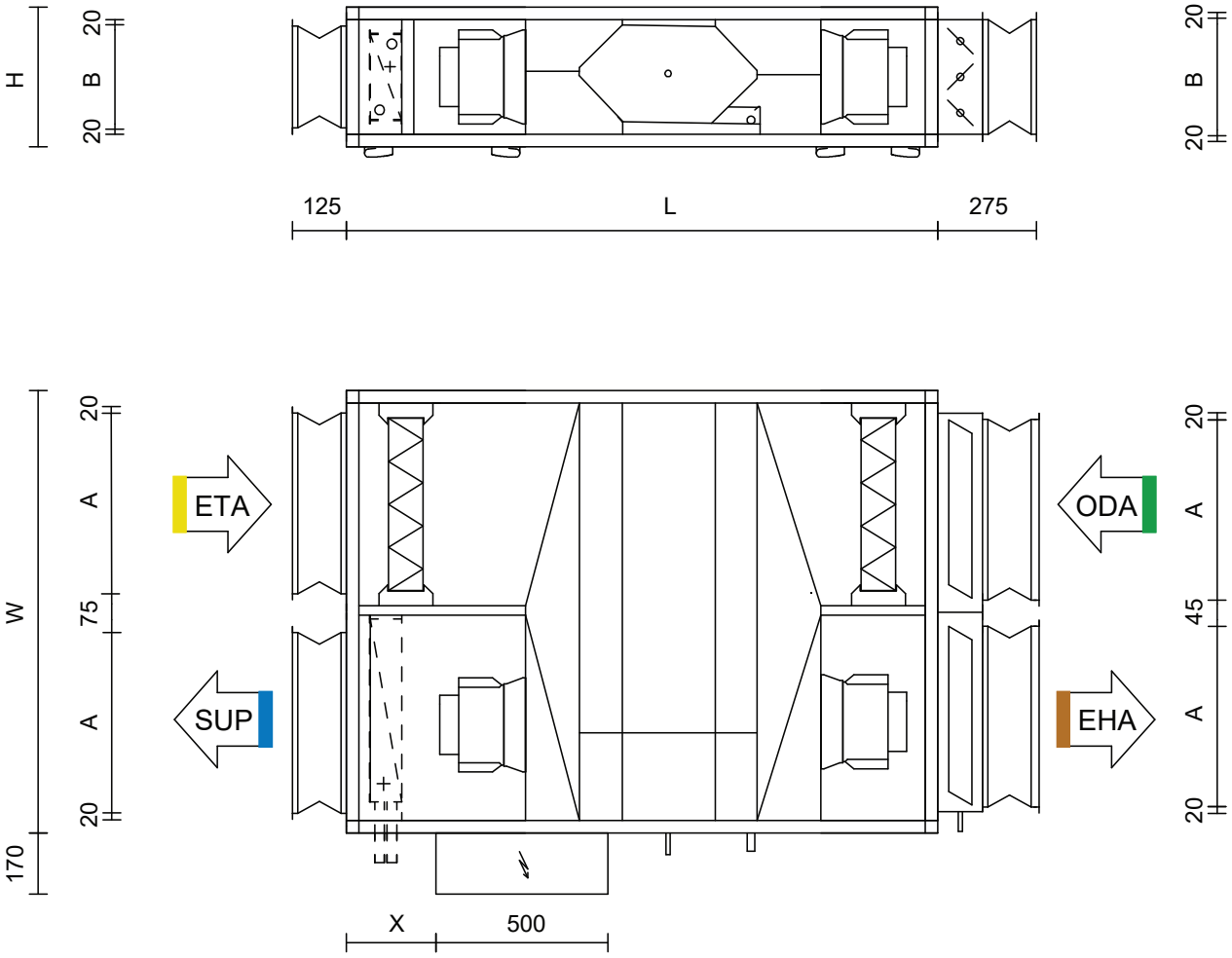
Technical data

Unit without integrated water heater (Left)		**FGT basic 010 C-35-L**	**FGT basic 015 C-35-L**	**FGT basic 022 C-35-L**
Item number		**9995225***	**9995226***	**9995227***
Unit with integrated water heater (Left)		**FGT basic 010 C-35-L-HW**	**FGT basic 015 C-35-L-HW**	**FGT basic 022 C-35-L-HW**
Item number		**9995228***	**9995229***	**9995230***
Unit without integrated water heater (Right)		**FGT basic 010 C-35-R**	**FGT basic 015 C-35-R**	**FGT basic 022 C-35-R**
Item number		**9995076***	**9995077***	**9995078***
Unit with integrated water heater (Right)		**FGT basic 010 C-35-R-HW**	**FGT basic 015 C-35-R-HW**	**FGT basic 022 C-35-R-HW**
Item number		**9995107***	**9995108***	**9995109***
Nominal air flow	m^3/h	1.000	1.500	2.200
External pressure drop, supply fan/extract fan	Pa	350/350	350/350	350/350
Fans / speed regulation		Plug fans with EC motor / stepless		
Heat recovery efficiency		Up to 90%		
ErP ready		ErP 2018		
Outdoor air filter		ePM1 55% (F7)		
Extract air filter		ePM10 70% (M5)		
Input power, supply fan/extract fan	kW	0,52/0,52	0,75/0,75	0,75/0,75
Nominal electric current	A	2,30/2,30	3,30/3,30	3,30/3,30
Nominal voltage	V	230	230	230
Phase	~	1	1	1
Frequency	Hz	50	50	50
Total sound power				
Outdoor air	dB(A)	67,5	68	67,5
Supply air	dB(A)	79,1	79,1	81,3
Extract air	dB(A)	67,3	67,7	67,3
Exhaust air	dB(A)	79,6	79,8	82,5
Casing	dB(A)	55,5	55,1	55,4

* FGT basic unit with air-tight flexible all-site duct connections and complete control system.

Dimensions and weight - FGT 010-L, FGT 015-L

FGT basic 010 and FGT basic 015 are assembled and delivered in one piece.



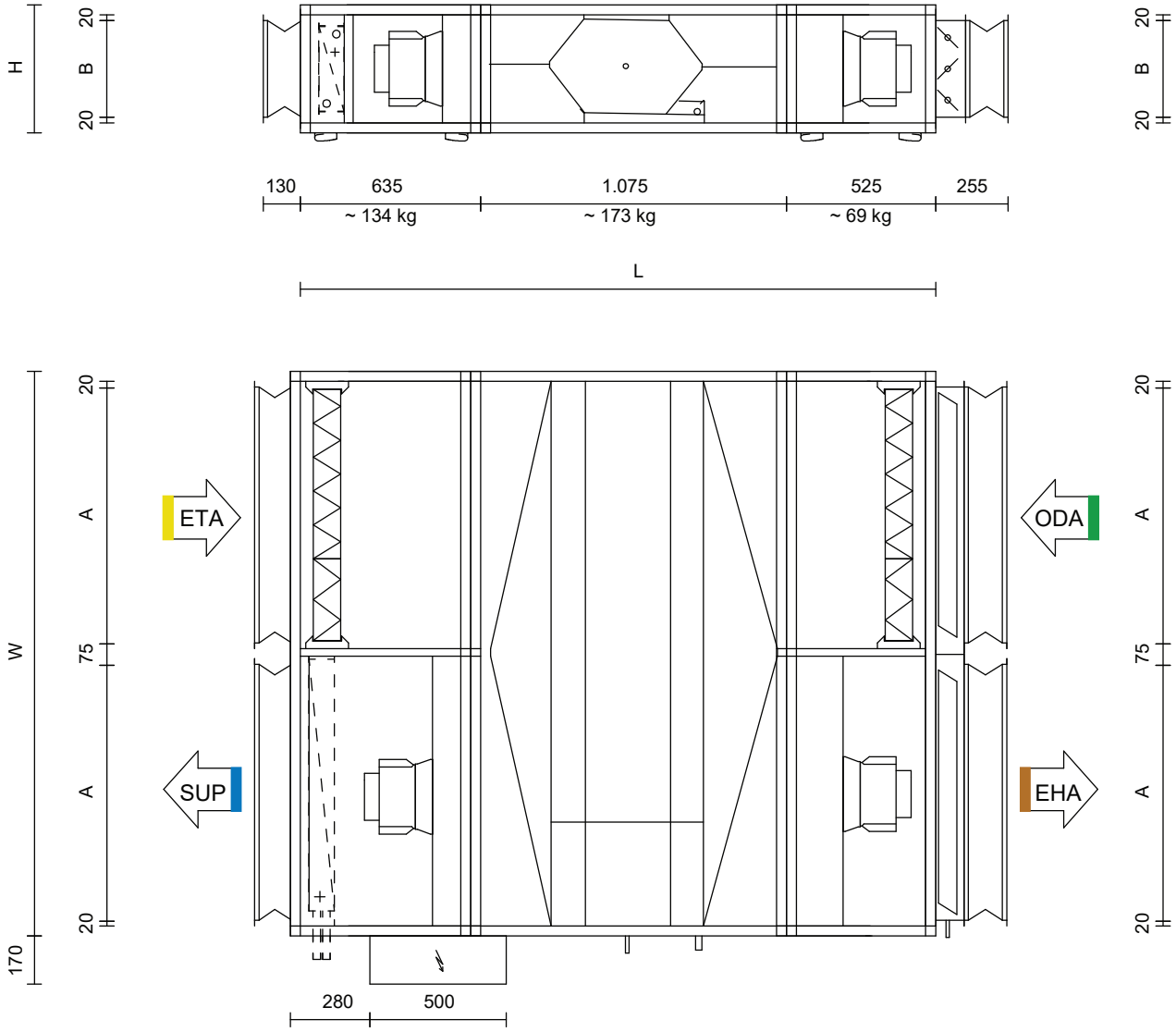
- - - - Accessories

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

Type		FGT 010-L	FGT 015-L
Height (H)	mm	390	390
Width (W)	mm	1.235	1.465
Lenght (L)	mm	1.650	1.650
A	mm	525	640
B	mm	280	280
X	mm	250	200
Weight (approx.)	kg	190	215

Dimensions and weight - FGT 022-L

FGT basic 022 is delivered in three separate modules for easier transport and installation.
Modules need to be assembled on site. It is necessary to attach a pre-wired electrical cabinet to the housing (already prepared holes) and connect the electrical connectors.



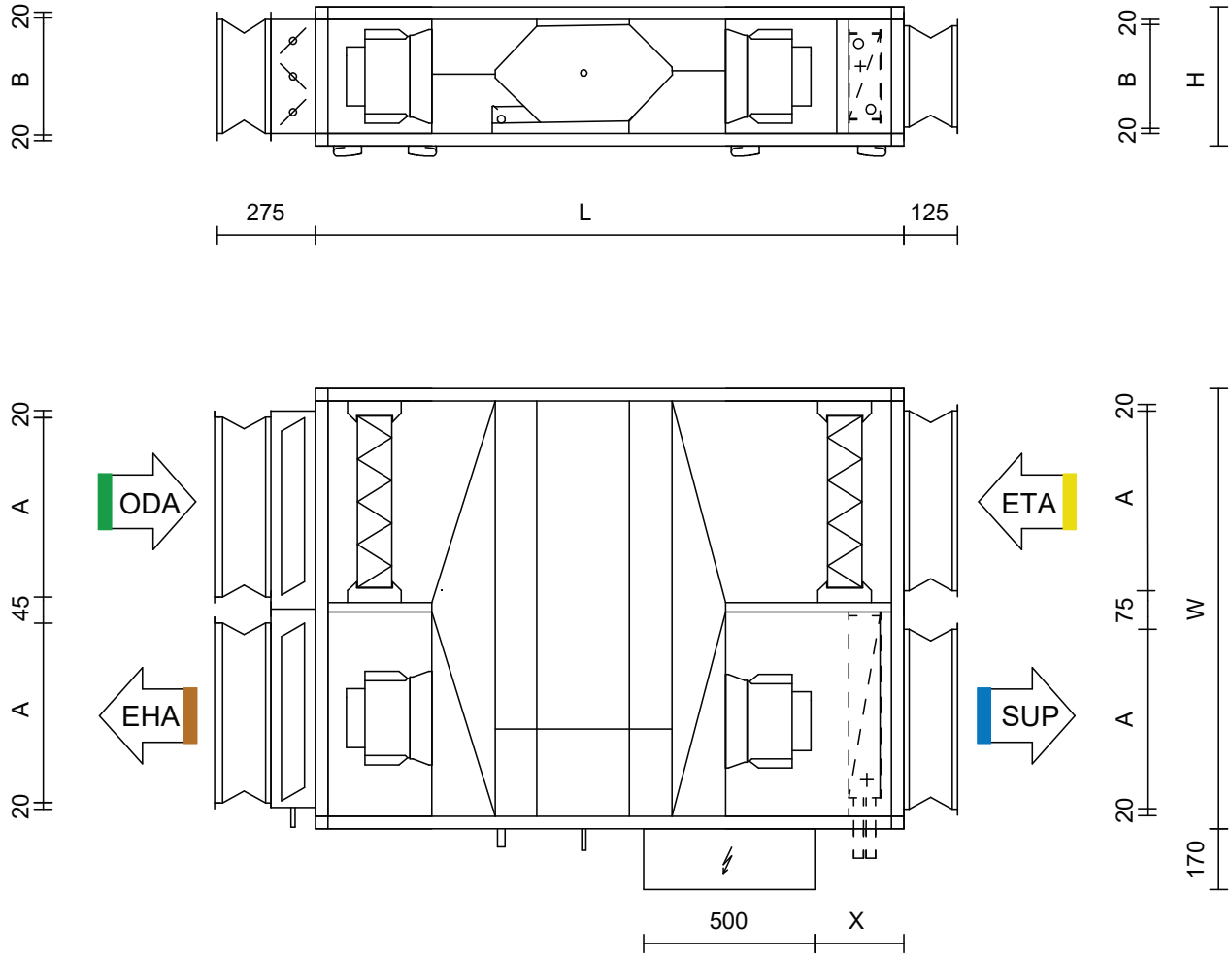
Accessories

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

Type		FGT 022-L
Height (H)	mm	450
Width (W)	mm	1.985
Lenght (L)	mm	2.235
A	mm	900
B	mm	340
Weight (approx.)	kg	376

Dimensions and weight - FGT 010-R, FGT 015-R

FGT basic 010 and FGT basic 015 are assembled and delivered in one piece.



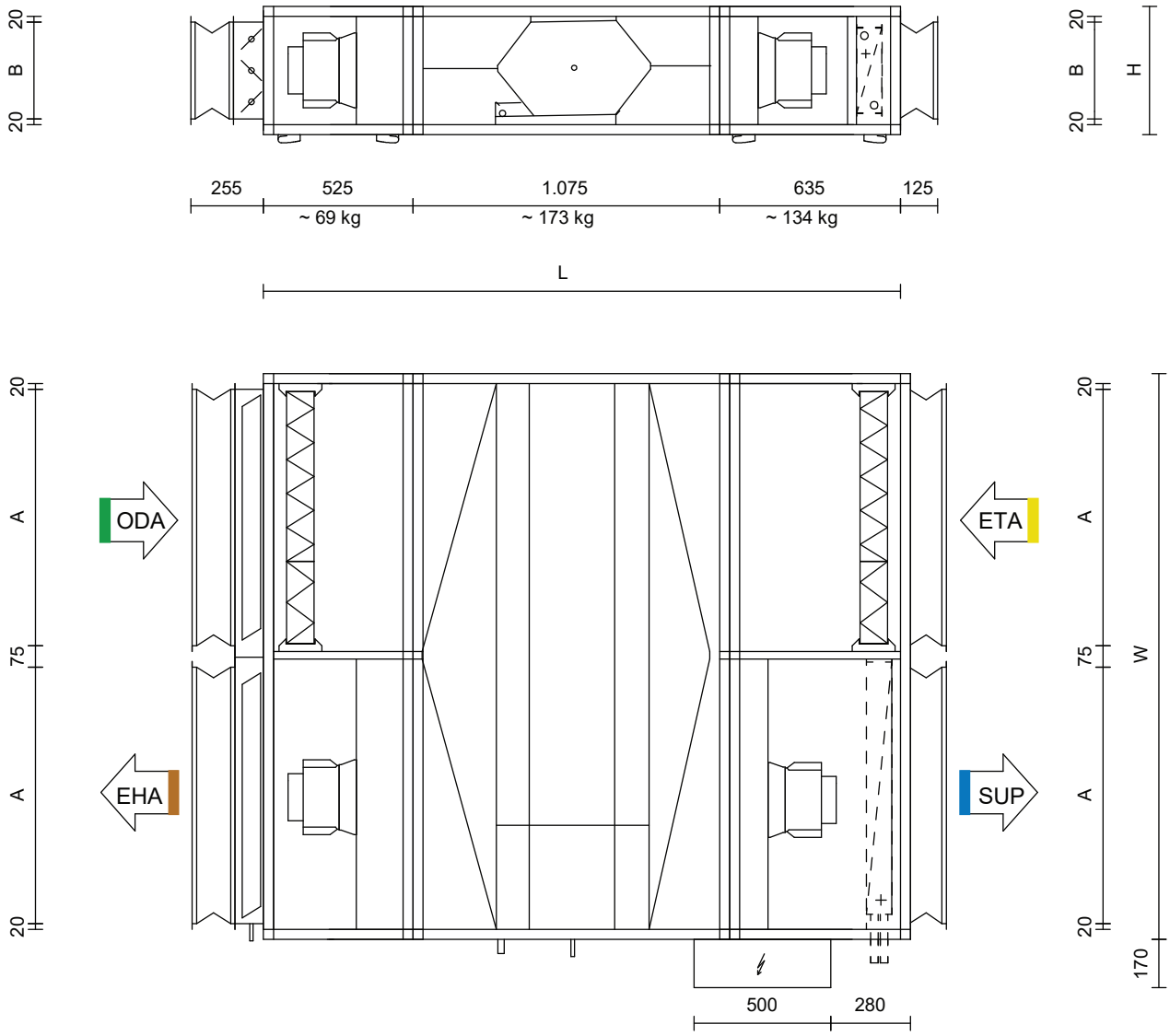
- - - - Accessories

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

Type		FGT 010-R	FGT 015-R
Height (H)	mm	390	390
Width (W)	mm	1.235	1.465
Lenght (L)	mm	1.650	1.650
A	mm	525	640
B	mm	280	280
X	mm	250	200
Weight (approx.)	kg	190	215

Dimensions and weight - FGT 022-R

FGT basic 022 is delivered in three separate modules for easier transport and installation.
Modules need to be assembled on site. It is necessary to attach a pre-wired electrical cabinet to the housing (already prepared holes) and connect the electrical connectors.



Accessories

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

Type		FGT 022-R
Height (H)	mm	450
Width (W)	mm	1.985
Lenght (L)	mm	2.235
A	mm	900
B	mm	340
Weight (approx.)	kg	376

Accessories

The integrated controller supports all aditional accessories such as water or electric heater, reversible water or DX cooler, water pump regulation etc..

Water cooling coil

Air-tight water cooling coil is made of galvanized steel sheet frame, aluminum fins and copper tubes with treated brass connections. The integrated 3-slope drip tray is made of stainless steel and can be removed from the bottom side.

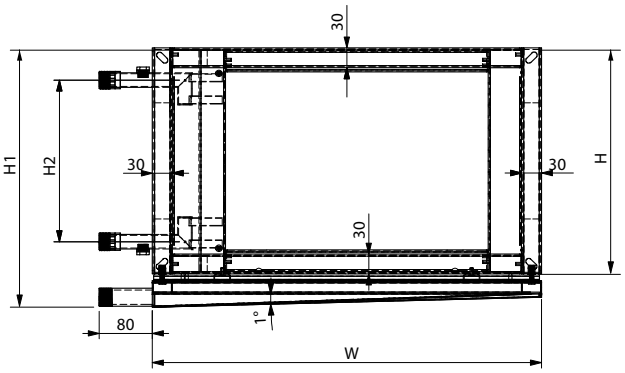
Cooling medium: water, water/antifreeze mixture.

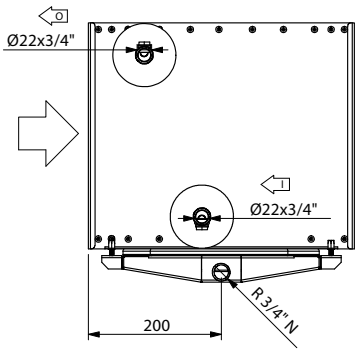
Integrated water droplet eliminator with polypropylene blades can be pulled out of the housing from the bottom side.

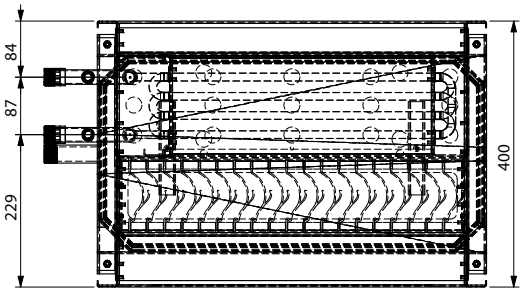
Type (Right)	Item no.
FGT 010 CW (4R)-R	9995101
FGT 015 CW (4R)-R	9995102
FGT 022 CW (4R)-R	9995103

Type (Left)	Item no.
FGT 010 CW (4R)-L	9995234
FGT 015 CW (4R)-L	9995235
FGT 022 CW (4R)-L	9995236

Dimensions







Type		FGT 010 CW-R	FGT 015 CW-R	FGT 022 CW-R
W	mm	585	700	960
H	mm	340	340	400
H1	mm	390	390	450
H2	mm	243	243	310
Weight	kg	19	22	30

I - cooling medium **in**
O - cooling medium **out**

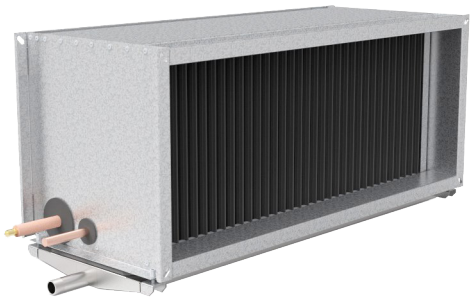
*** Detailed dimensions for right and left versions are available online**

Reversible DX cooling coil

Air-tight reversible DX cooling coil is made of galvanized steel sheet frame, aluminum fin package and air-tight closed copper tubes filled with gass. The integrated 3-slope drip tray is made of stainless steel and can be removed from the bottom side.

Cooling/heating medium: R410A

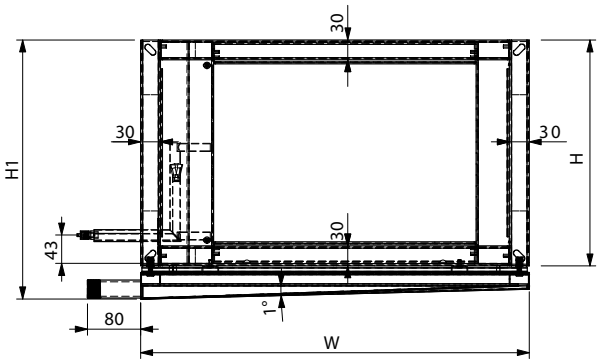
Integrated water droplet eliminator with polypropylene blades can be pulled out of the housing from the bottom side.

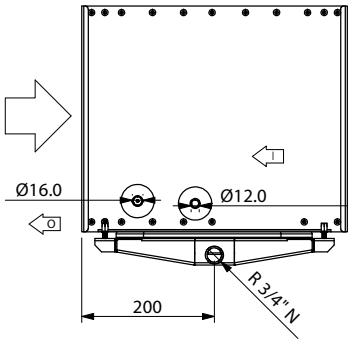


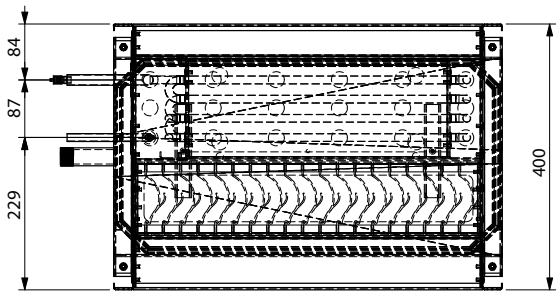
Type (Right)	Item no.
FGT 010 DX/CD (4R)-R	9995098
FGT 015 DX/CD (4R)-R	9995099
FGT 022 DX/CD (4R)-R	9995100

Type (Left)	Item no.
FGT 010 DX/CD (4R)-L	9995231
FGT 015 DX/CD (4R)-L	9995232
FGT 022 DX/CD (4R)-L	9995233

Dimensions







I - cooling medium **in**
O - cooling medium **out**

Type		FGT 010 DX/CD-R	FGT 015 DX/CD-R	FGT 022 DX/CD-R
W	mm	585	700	960
H	mm	340	340	400
H1	mm	390	390	450
Weight	kg	19	41	56

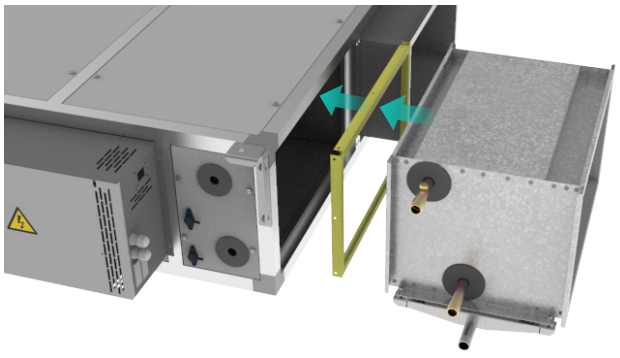
*** Detailed dimensions for right and left versions are available online**

Installation set for direct external cooling coil connection to the FGT unit

The installation set allows direct connection of the cooling coil to the FGT unit.

This set is available as an accessorie and can be used together with CW and DX/CD cooling coils.

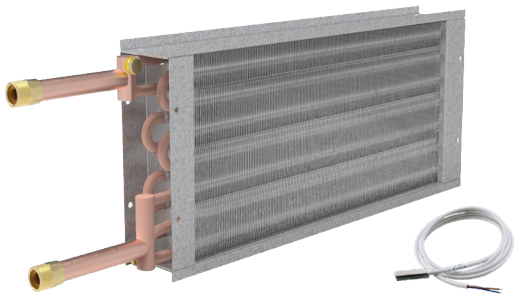
Installation set for	FGT 010	FGT 015	FGT 022
Item number	9994168	9994169	9994170



Water heating coil

Water heating coil is made of galvanized steel sheet frame, aluminum fins and copper tubes with treated brass connections. Factory installed together with surface temperature sensor TG-B440/PT1000.

Heating medium: water, water/antifreeze mixture.



Type	Item no.
FGT 010 HW	939961
FGT 015 HW	939962
FGT 022 HW	939963

ZTR 3-way valve

For heating and cooling coils

The control valves ZTR is a 3-way valve. The body is manufactured in brass and spindle in stainless steel, the plug in brass and O-ring in EPDM.
The valves have equal percentage flow characteristics.

- Media temperature 1...110°C
- Pressure class PN16
- Rangeability better than 50:1
- Differential pressure up to 350 kPa
- No leakage when the valve is closed
- For water and cooling media (max 30% glycol)

The valves are intended to be used together with actuator, RVAZ4-24A

Unit	Valve type (heating)	Item no.	Valve type (cooling)	Item no.
FGT 010	ZTR15-0,4	9670	ZTR15-1,6	9673
FGT 015	ZTR15-0,6	6573	ZTR15-1,6	9673
FGT 022	ZTR15-1,0	9672	ZTR20-2,5	9677

RVAZ4 24A Actuator 0-10V

Item Number: 9862

RVAZ4 is a range of valve actuators for control of Regin's zone valves in the ZTV/ZTR, ZTVB/ZTRB range. Force 400 N. This product conforms with the EMC requirements of European harmonised standards EN60730-1:2000 and EN60730-2-8:2002 and carries the CE mark.

- 0...10 V control signal
- 24 V AC supply voltage
- Manual manoeuvring
- Easy to mount on the valve
- Stroke 5,5 mm
- Position indication

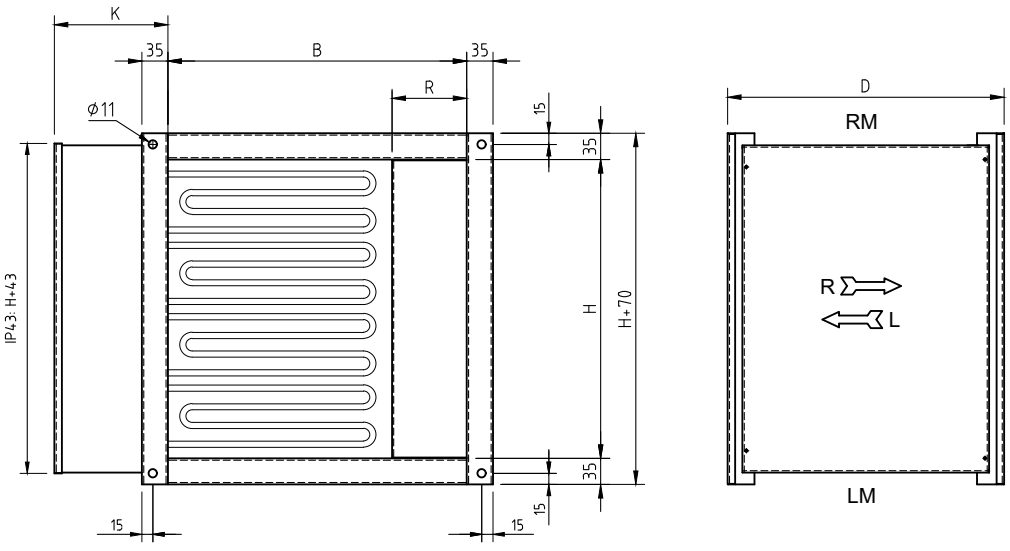
Electric heater

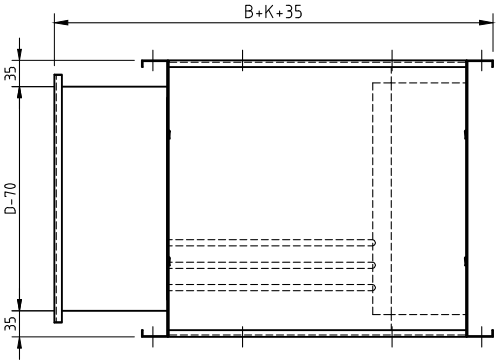
Duct heater for rectangular ducts. Manufactured from Aluzinc (AZ185) coated sheet steel with a stanless steel heating elemen. The heater has integrated overheating protection with automatic and manual reset function. Suitable for connection to an external 0-10V control signal. The minimum air volume is based on minimum air velocity of 1,5 m/s. These duct heaters are designed for a maximum output air temperature of 40°C.

It is mandatory to use a pressure switch for protection.

Type		FGT 010 VFL 3 kW (2~, 400V)	FGT 015 VFL 4,5 kW (2~, 400V)	FGT 022 VFL 6 kW (2~, 400V)
Itemo no.		9995092	9995093	9995094
Power	kW	3	4,5	6
Voltage	V	400	400	400
Frequency	Hz	50	50	50
Phase(s)		2~	2~	2~
Enclosure class		IP43	IP43	IP43

Dimensions



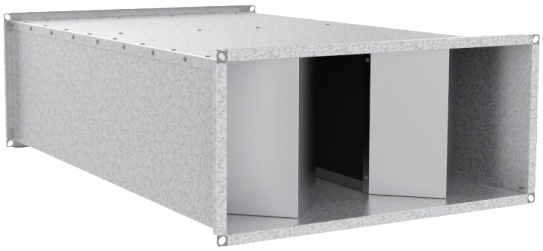


RM, LM - Gland position (RM is default placement)

Type		FGT 010 VFL	FGT 015 VFL	FGT 022 VFL
B	mm	495	610	870
H	mm	250	250	310
D	mm	500	500	500
K	mm	200	200	200
R	mm	125	55	215

Sound attenuator

Casing is made of galvanized steel sheet.
The splitter frames are made of galvanised steel sheet and the filler material is mineral wool protected with water-repellent glass silk fabric resistant to decay and abrasion.

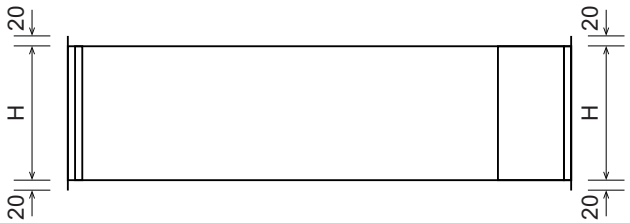


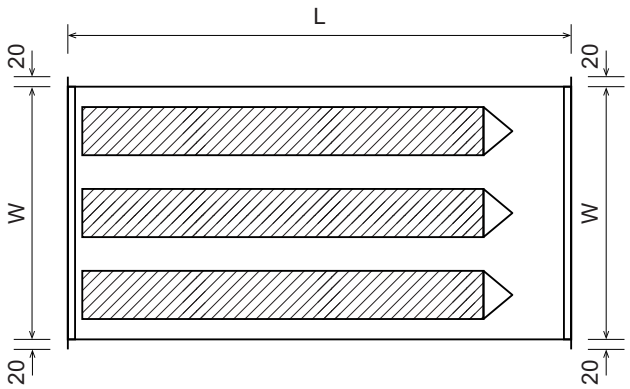
Type	FGT 010 SA	FGT 015 SA	FGT 022 SA
Item no.	9995104	9995105	9995106

Noise suppression

Frequency	Hz	63	125	250	500	1000	2000	4000	8000
FGT 10 - noise suppression	dB	3,0	4,0	9,0	17,0	32,0	32,0	21,0	14,0
FGT 15 - noise suppression	dB	2,0	5,0	10,0	22,0	28,0	22,0	14,0	9,0
FGT 22 - noise suppression	dB	3,0	6,0	12,0	25,0	33,0	28,0	17,0	12,0

Dimensions





Type		FGT 010 SA	FGT 015 SA	FGT 022 SA
W	mm	525	640	900
L	mm	1.050	1.050	1.050
H	mm	280	280	340
Weight	kg	42	45	60

Filters

A cassette filter consists of a galvanised steel sheet frame 100 mm in width. The frame is fitted with a zigzag-shaped synthetic fibre filtering medium with resin reinforcement and galvanised steel mesh protection. Cassette filters are inserted into the support frame in a dismountable manner and sealed with sealing tape. The filter support frame is affixed in the section casing and sealed with permanent elastic putty.

Type	Item no.
FLT for FGT 010 ePM1 55% (F7)	938385
FLT for FGT 010 ePM10 70% (M5)	939895
FLT for FGT 015 ePM1 55% (F7)	938386
FLT for FGT 015 ePM10 70% (M5)	939896
FLT for FGT 022 ePM1 55% (F7)	938387
FLT for FGT 022 ePM10 70% (M5)	939897

DTV 500 X - pressure switch

Item number: 71661

For air, non-combustible and non-aggressive gases only. Relay output max. 1 A (0.4 A), 250 V AC, change-over contact. Connection pipes for 6 mm tube.
Pressure range 50...500Pa.

VAV Air Volume Control

Item number: 9993247

The VAV Duct pressure control kit is used for VAV control of Air Handling Units.
Included in the kit are: 2pcs of settable diff. pressure transmitters, taps, tubes, electrical cables and installation instruction.

Underpressure siphon

Item number: 9993302

The underpressure siphon is ready for direct connection to the negative pressure site of the counter flow heat exchanger condensate tray.

Discharge pipe dimension DN40.

Overpressure siphon

Item number: 9993303

The overerpressure siphon is ready for direct connection to the water and DX cooling coil condenstate tray, located on the positive pressure site.

Discharge pipe dimension DN40.

RCO2-W room CO_2 sensor

Item number: 993305

Maintenance-free room sensor RCO2 - W with active/ switching output, automatic calibration (can be deactivated), in an elegant plastic housing with snap-on lid, optional with traffic light indicator (five coloured LEDs), for determining the CO_2 content of the air (0...2000 ppm/0...5000 ppm). The measuring transducer converts the measured values into a standard signal of 0 -10 V or 4...20 mA (switchable).

The sensor is used in offices, hotels, convention centres, apartments, shops, etc. for the purpose of evaluating the indoor climate. This enables energy-saving room ventilation on an as-needed basis, thereby reducing operating costs and improving well-being.

The CO_2 measurement is performed using an optical NDIR sensor (non-dispersive infra-red technology). The detection range is calibrated for standard applications such as monitoring residential rooms and conference rooms.

Technical data

Voltage supply	24 V AC/ DC (± 10 %)
Power consumption	< 1.5 W/ 24 V DC typical; < 2.9 VA/ 24 V AC typical; peak current 200 mA
Output, CO2	0 -10 V or 4...20 mA (selectable via DIP switches)
Measuring accuracy	typically ± 30 ppm ± 3 % of measured value
Temperature dependence, CO2	± 5 ppm/ °C or ± 0.5 % of measured value/ °C (whichever is higher)
Pressure dependence	± 0,13 %/ mm Hg
Gas exchange	by diffusion
Relay output	with potential-free changeover contact 24 V (assignment selectable via DIP switches)
Warm up time	approx. 1 hour
Response time	< 2 minutes
Output	0 -10 V or 4...20 mA, working resistance < 800 Ω (selectable via DIP switches) with offset potentiometer (± 10 % of the measuring range
Sensor	Optical NDIR sensor (non-dispersive infra-red technology), with manual calibration (via zero button), with automatic calibration (can be deactivated via DIP switches)
Measuring range	0...2000 ppm or 0...5000 ppm (selectable via DIP switches)
Ambient temperature	0...+50 °C
Electrical connection	0.14 - 1.5 mm^2 via terminal screws
Housing	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions	85 x 85 x 27 mm (Baldur 1)
Installation	wall mounting or on in-wall flush box, Ø 55 mm, base with 4 holes, for attachment to vertically or horizontally installed in-wall flush boxes for rear cable entry, with predetermined breaking point for cable entry from top/ bottom in case of plain on-wall installation
Long-term stability	< 2 % in 15 years
Protection class	III (according to EN 60 730)
Protection type	IP 30 (according to EN 60 529)
Standards	CE conformity, electromagnetic compatibility according to EN 61 326, EMC Directive 2014/ 30/ EU, Low Voltage Directive 2014/ 35/ EU

Systemair-2 CO2 duct sensor

Item number: 14907

CO2-transmitter for duct mounting (200 mm)

- CO2-level 0...2000 ppm measuring range
- Good long term stability
- Simple installation and service friendly housing
- Probe 31mm diameter
- Auto-calibration

Duct transmitter for measuring carbon dioxide concentration in air. Measuring range 0...2000 ppm and output signal 0...10 V DC

RTF1 PT1000 room temperature sensor

Item number: 993136

Room temperature sensor RTF 1 with passive output, in an elegant housing made of plastic, with snap-on lid, base with 4-hole attachment, for installation on vertically or horizontally installed flush-mounted boxes, with predetermined breaking point for on-wall cable entry or in housing made of stainless steel (top and bottom parts are stainless steel, the cover is screwed on), vandal-proof version e.g. for schools, barracks and public buildings. This residential room temperature sensor is used to detect/ display temperatures in closed, dry rooms, in apartments, in cinemas, supermarkets, storage rooms, office and business facilities.

Technical data

Sensor	Pt1000, DIN EN 60751, class B
Connection type	2-wire connection
Testing current	< 0.6 mA
Measuring range	–30...+70 °C
Process connection	by screws
Electrical connection	0.14 - 1.5 mm^2 via terminal screws, secured against loss due to unscrewing, on safety extra-low voltage max. 24 V DC only
Housing	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions	85 x 85 x 27 mm (Baldur 1)
Installation	wall mounting or on in-wall flush box, Ø 55 mm, base with 4 holes, for attachment to vertically or horizontally installed in-wall flush boxes for rear cable entry, with predetermined breaking point for cable entry from top/ bottom in case of plain on-wall installation
Permissible air humidity	max. 90 % r. H., non-precipitating air
Protection class	III (according to EN 60 730)
Protection type	IP 30 (according to EN 60 529)

QPA2002D room air quality sensor

Item number: 994027

- maintenance-free CO2 sensing element (depending on type) based on optical infrared absorption measurement (NDIR1))
- or with VOC2) sensing element based on a heated tin dioxide semiconductor
- CO2 temperature (active or passive) and CO2 humidity-temperature multisensor
- No recalibrations required
- Operating voltage AC 24 V or DC 15...35 V
- Signal outputs DC 0...10 V or DC 0...5 V adjustable
- Selectable passive temperature sensing element

For use in ventilation and air conditioning plants to enhance room comfort and optimize energy consumption by providing demand-controlled ventilation.
The sensor acquires:

- CO2 concentrations as an indication of occupancy in rooms where smoking is prohibited.
- VOC concentrations as an indication of odors such as tobacco smoke, body odor, or material fumes in the room.
- Relative humidity in the room.
- Room temperature.

QPM2102 duct CO2 + VOC sensor

Item number: 993301

The QPM Series Indoor Air Quality Duct Sensors are designed for applications where precise, stable sensing of carbon dioxide (CO2), temperature, or relative humidity sensing is required. Model QPM2102 senses both volatile organic compounds (VOCs) and CO2, with the output signal automatically switching to reflect the higher of the two values.
These sensors are directly wired to the controller with 18 to 22 AWG (recommended) multi-conductor shielded cable. The number of conductors required depends on the model selected. All field wiring is terminated in a terminal block on the sensor body.
The output signal is field selectabe for 0 to 10V or 0 to 5V. Siemens CO2 + VOC sensors are designed to help maximize occupant comfort and are not suitable for use in life safety applications.

Control panel S-ED-TOUCH

Item number: 208998

Touch panel S-ED-TOUCH is an external display for connection to a Systemair controller

ventilation with two ports. The touch panel permits starting and stopping an air handling unit, setting extended running time, adjusting setpoints and viewing alarms. The display is connected to port 2 on Systemair controller and can be used in combination with expansion units.

Use only together with Corrigo next gen.vers.3.3 or later

Technical data

Voltage (nominal)	24 V
Voltage type	DC
Enclosure class	IP30
Product type	CORRIGO parts
Dimensions and weights	
Width	120 mm
Height	90 mm
Depth	27 mm
Weight	0.15 kg
Permissible air humidity	max. 90 % r. H., non-precipitating air
Protection class	III (according to EN 60 730)
Protection type	IP 30 (according to EN 60 529)

Room Controller S-ED-RU-DFO

Item number: 27989

Change fan speed, set temperature, extended running, etc.

- Stylish design suitable for all environments
- Range of up to 300 m
- Can be used as a display
- Built-in room sensor

ED-RU-DFO is an external room unit intended for control of an air handling unit via a Corrigo controller running a ventilation application.

FGT configuration with airCalc++

Effective and powerful a selection tool.

Quick selection and thermodynamic calculation of the unit can be made in **airCalc++**. By using this application we can provide useful information about the unit such as:

- techical data for all modules,
- heat recovery and coil calculations,
- energy consumption,
- acoustics information,
- detailed technical drawings, dimensions and weights,
- Mollier diagram,
- prices

ErP 2018

Calculation is performed according to ErP 2018.

Custom FGT units

In addition to the preconfigured units, there are also custom FGT units available in four sizes and different configuration, with an air flow up to 3.500 m^3/h, which can be selected in airCalc++.

Custom FGT units can be delivered in one piece or divided into modules for easier installation and transport. Casing can be modified for outdoor or indoor installation in the left or right supply air direction sites. It is made of the same materials as preconfigured FGTs, with some additional functions, such as integrated water or DX cooler with different row numbers, electric heater, electric pre-heater, etc.

All functions can be controlled with a Systemair E283W-3 controller, which allows the connection of several addition sensors (CAV or VAV air volume control, CO2, temperature, humidity, etc.) and other electrical accessories (smoke detector, damper actuators, water valves, etc.)

Remote control panel E3-DSP with different lengths of cable (10, 20, 50, 100 m), ED-TCV touch display, ED-RU-DFO display and RTF-Comfort remote control panel are also available as accessories.

All options and accessories are available in airCalc++ as well and can be checked or uncheck when selecting the custom FGT units.