CX3000
RANGE
COUNTER FLOW
HEAT EXCHANGER

CX3000

SPACE SAVING AND ENERGY EFFICIENT VENTILATION TECHNOLOGY CEILING MOUNTED

Universal range of applications for ceilings in new or renovated non-residential buildings

- **CX3060:** 305 - 3,280 m³/h
- **CX3050:** 280 - 2,810 m³/h
- **CX3040:** 215 - 2,060 m³/h
- **CX3030:** 150 - 1,600 m³/h
- **CX3020:** 100 - 760 m³/h
- **CX3010:** 55 - 520 m³/h

www.exhausto.com

EXHAUSTO

OUTSTANDING PERFORMANCE: CX3000 WINS PLUS X AWARD

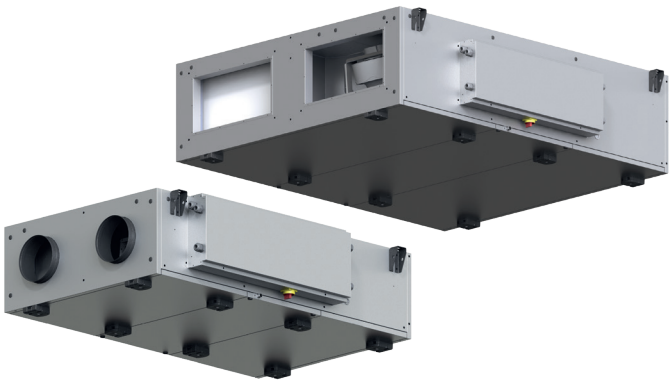
The PLUS X AWARD is the world's largest Innovation award for technology, sport and lifestyle. The award signs for brand manufacturers for the quality and innovation lead of their products.
We received this award in 2023 for the new CX3000 ceiling ventilation unit in the four categories of high quality, ease of use, functionality and ecology. The PLUS X AWARD categories offer you as our customers and users clear information about the added value of excellent products such as the CX3000 vs. competitors.

For us at EXHAUSTO, the PLUS X AWARD is particularly important because it was awarded by industry insiders. Among the members of the jury are professional tradespeople who, thanks to their practical experience, know exactly what is important when it comes to ventilation units.

The PLUS X AWARD jury based the decision for our CX3000 ceiling ventilation unit on the four relevant categories as follows: "The **high quality** of the system is ensured by high-quality materials and precise workmanship that promise reliable and long-lasting performance. The CX3000's **ease of use is** outstanding, as it has user-friendly controls and intuitive functions that allow for easy handling. The **functionality** of the ventilation system is impressive, with efficient air filtration systems, various operating modes and intelligent control for optimal air quality. EXHAUSTO also places great importance on **ecology**, as the CX3000 is energy efficient and helps to reduce energy consumption."

In addition to the four categories mentioned, the jury emphasised the universal application of the CX3000, the space-saving installation on the ceiling, the individual adjustment options of the air volume flows to the room sizes, the installation advantages and the integrated complete control for air volume and temperature control.

Great benefits for you as an EXHAUSTO customer!



EXHAUSTO is part of the Aldes Group, and since 2016 the EXHAUSTO Group, headquartered in Langeskov, Denmark, has been part of the Aldes Group.

Founded in Lyon (France) in 1925, the Aldes Group is a global specialist in ventilation and residential comfort solutions.

CX3000

...The benefits at a glance

CX3000-Series
General views.

EASY TO INSTALL AND MAINTAIN

LOW NOISE

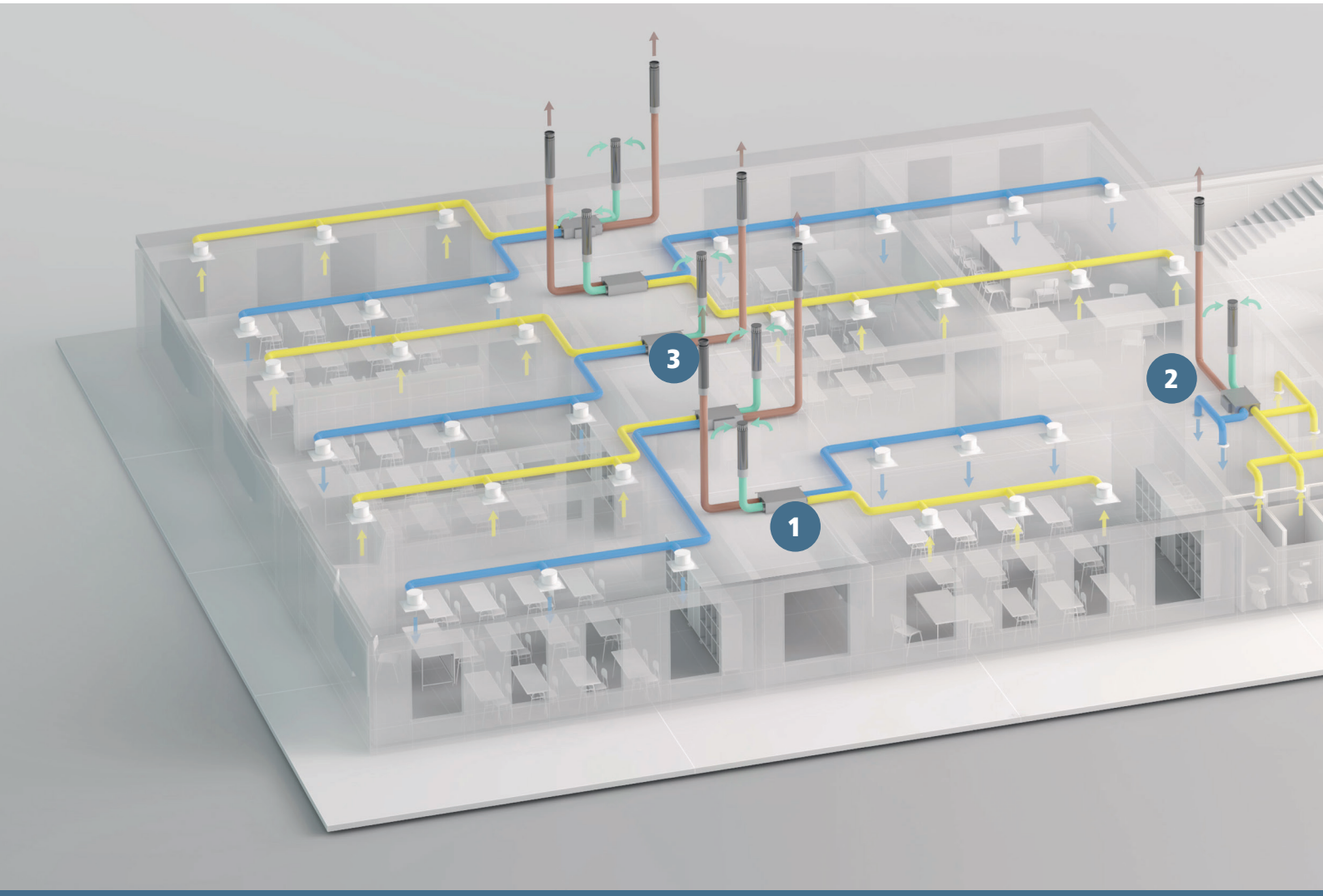
EXTREMELY SPACE-SAVING

HIGH ENERGY EFFICIENCY

BEST SUPPLY AIR QUALITY

CX3000

...versatile applications!

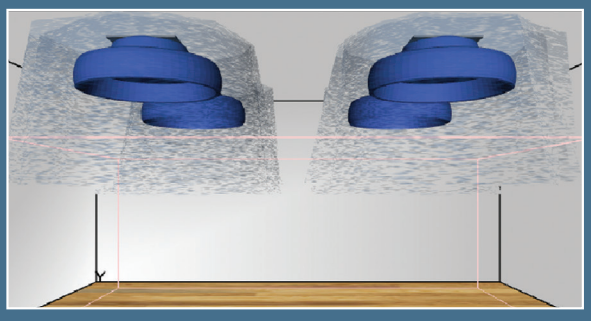


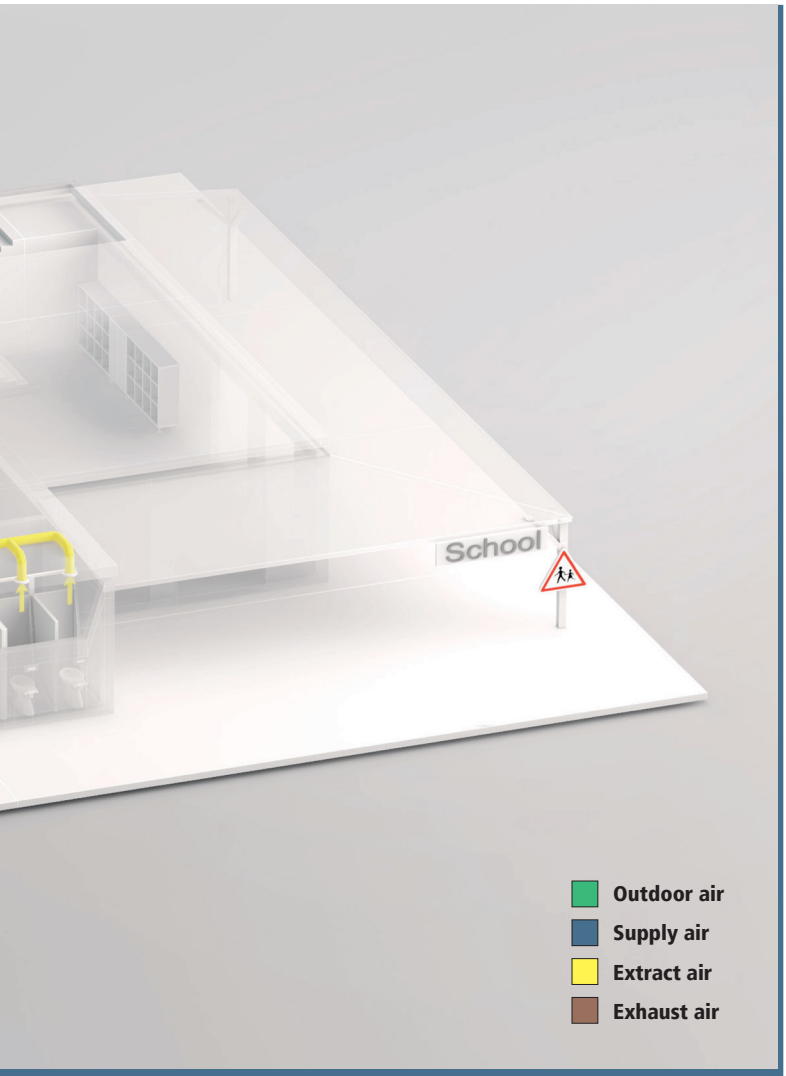
The illustration shows the following system components:

① **Classroom ventilation units** (type CX3000)

② **Air handling units for sanitary areas** (type CX3000 or alternatively VEX300T)

③ **Roof terminals** (type THAV/THFV)





FROM EDUCATIONAL INSTITUTIONS AND OFFICE BUILDINGS TO SHOPS AND CATERING TO SANITARY AND SOCIAL SPACES!

SYSTEM SOLUTION EXAMPLE: DECENTRALISED VENTILATION FOR SCHOOLS

Classrooms

Simply install the CX3000 ceiling ventilation units in the false ceiling of a hallway or corridor. The outdoor and exhaust air openings can either be placed in the facade or directed outside via the roof with a central shaft.

The supply air enters the classrooms via a duct system and finally via the TWISTED or LINED ceiling air ducts. The volumetric flow control in the individual classrooms can be carried out in different ways. The simplest control method is a constant flow rate throughout the entire service life.

A much more efficient solution is demand-driven control. Using a CO_2 or VOC sensor, the air handling unit only provides the required amount of air for the number of people.

Sanitary facilities

For ventilation of the sanitary areas, we recommend the use of an AHU with a counterflow heat exchanger to prevent odour transmission. If there is sufficient space in the suspended ceiling, the CX3000 ceiling ventilation units can be used.

Alternatively, EXHAUSTO VEX300T standalone units are available, which offer high performance in the smallest space with four vertical spigots. Control can be carried out via a weekly program and, if required, also via occupancy detectors in order to switch between basic and demand ventilation.

BENEFITS:

- Optimal control for efficient ventilation in every room
- Possibility of night cooling in summer
- Only one classroom is affected in the event of faults or malfunctions in the ventilation unit
- Ensuring optimal distribution of supply air

... PRECAUTIONS:

- Depending on the design, separate outdoor and exhaust air ducting via the facade is required for each classroom
- A false ceiling is required for ducting and outlets, except where visible duct mounting is desired
- Device placement option may be limited or not available everywhere

CX3000-Series

55 m³/h to 3,395 m³/h

The CX3000 air handling units are particularly suitable for rooms with limited space and high energy efficiency. Six unit sizes are available with ErP air volumes of 55 m³/h to 3,280 m³/h.

To meet all requirements for duct installation under the ceiling, each unit is available in both left and right versions. The units are equipped with a counterflow heat exchanger for maximum heat recovery efficiency. The latest generation of EC fans optimises energy use and enables the best SFP values.

All CX3000 air handling units are equipped with the integrated and functionally tested complete EXcon control system. It controls the required air volumes and temperatures in demand-controlled operation. A wide range of accessories, including water or electric heating coils, cooling coils, dampers and flexible connections, complete the range of services.

6 unit sizes in 2 versions each*

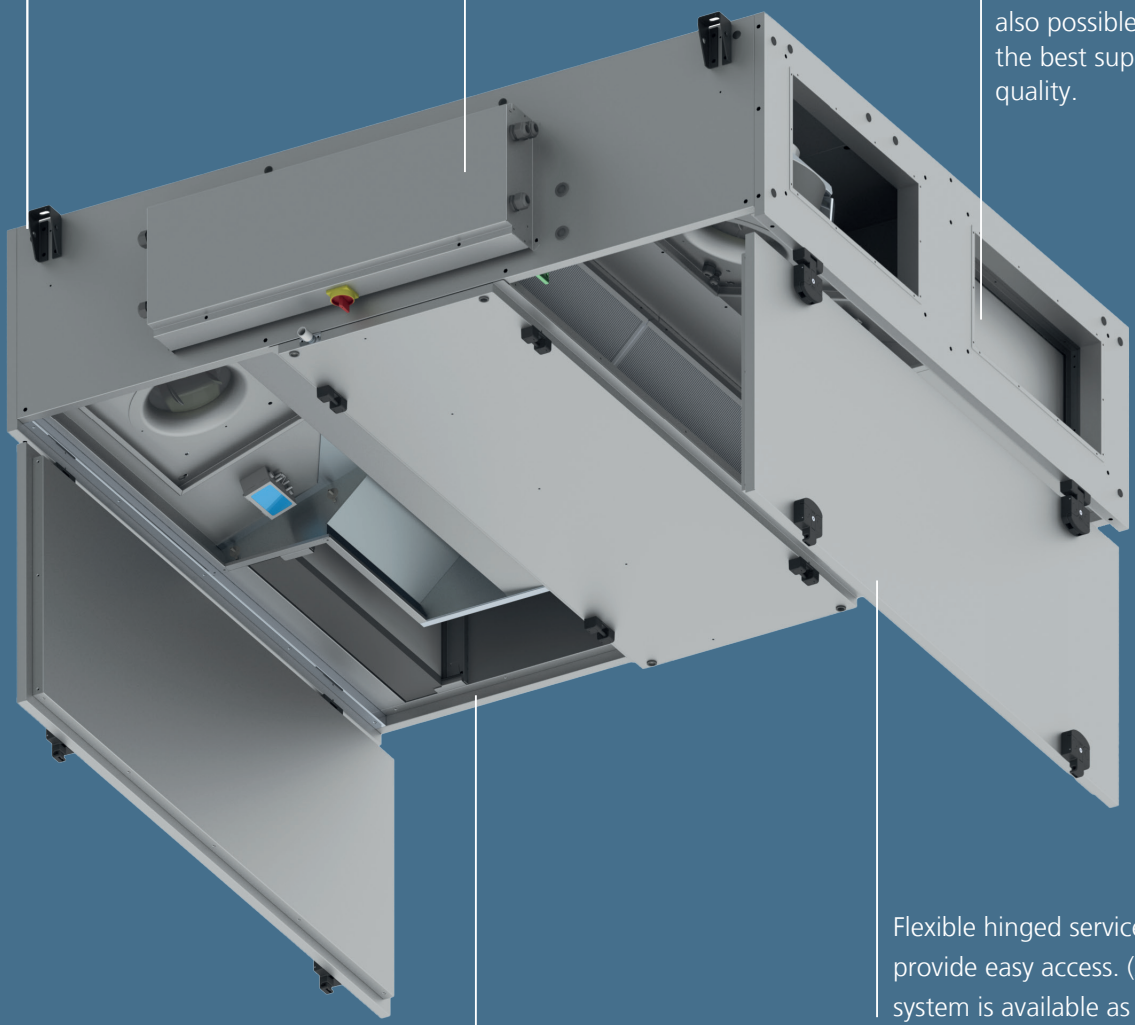
- **CX3010**
- **CX3020**
- **CX3030**
- **CX3040**
- **CX3050**
- **CX3060**

*Supply air left and supply air right

Compact galvanised sheet steel housing (corrosion class C4) with 50 mm insulation in all unit sizes for extremely low noise levels.

Integrated EXcon control system handles all necessary control functions for optimum demand control.

A wide range of filters (F9 channel filter option also possible) ensures the best supply air quality.



Flexible hinged service doors provide easy access. (A rail system is available as an option).

Built-in bypass (0–100% exchanger bypass) for temperature control and summer night cooling.

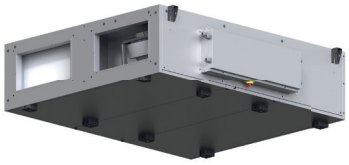
VDI Certified in accordance with VDI guideline

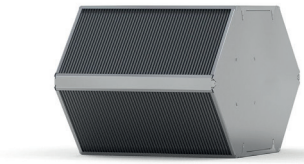
ECO ENERGY

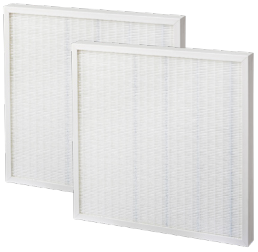
COMPACT

EASY INSTALLATION

CX3000-Series
General views







Construction

The housings are manufactured in a double-walled panel construction of galvanised steel plate of class C4 according to EN/ISO 12 944–2 and an internal insulation layer of 50 mm mineral wool. This ensures a low noise level to the surroundings or in the installation room and minimises the formation of thermal bridges.

Despite the compact design, care was taken during the development and design of the units to comply with the specifications of the hygiene guideline VDI6022 and to ensure problem-free cleaning with removable fan sections, heat exchangers and filters. The units have double-sided hinged doors with lockable handles that are easy and flexible to open for maintenance.

A rail system for horizontal opening is available as an accessory. Here, the doors can be completely dismantled and moved on the rail system below the unit for optimal inspection.

Heat exchangers

At the heart of this range of heat recovery units is a Eurovent-certified aluminium counterflow plate heat exchanger with a thermal efficiency of up to 90% according to EN308, which specifically specifies these units for applications where odour transfer from exhaust air to supply air is to be prevented.

The additionally integrated by-pass is used for efficient temperature control and thus demand-controlled use of the heat exchanger, and it also implements the efficient night-time cooling function in summer.

In addition, the bypass is also used for de-icing control when a post-heating coil is used, which means that an otherwise necessary pre-heating coil in the outdoor air can be dispensed with for frost protection.

Fan sections

The fan sections are equipped with EC motors, which have an exceptionally high efficiency and thus comply with the requirements of the EcoDesign Directive.

The optimised centrifugal impeller with backward-curved blades and high-quality composite material ensures maximum performance with maximum energy efficiency.

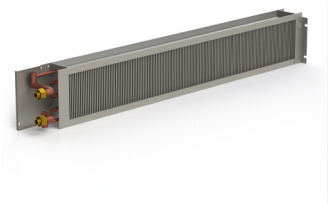
Filters

The panel filters used as standard in the outdoor air and exhaust air ensure maximum protection of the unit against contamination and proper supply air quality. The filters have the maximum possible filter surface with the lowest possible pressure loss, which guarantees a long service life.

The following filters are installed as standard:

	VEX Type	Item no.	Filter class acc. ISO 16890
Exhaust air filter	CX3010	A11059215	ISO ePM_{10} 50% (M5)
	CX3020	A11059218	ISO ePM_{10} 50% (M5)
	CX3030	A11059221	ISO ePM_{10} 50% (M5)
	CX3040	A11059224	ISO ePM_{10} 50% (M5)
	CX3050	A11059227	ISO ePM_{10} 50% (M5)
	CX3060	A11059230	ISO ePM_{10} 50% (M5)
Outdoor air filter*	CX3010	A11059216	ISO ePM_1 50% (F7)
	CX3020	A11059219	ISO ePM_1 50% (F7)
	CX3030	A11059222	ISO ePM_1 50% (F7)
	CX3040	A11059225	ISO ePM_1 50% (F7)
	CX3050	A11059228	ISO ePM_1 50% (F7)
	CX3060	A11059231	ISO ePM_1 50% (F7)

*In addition, a duct filter box in the insulated housing incl. an ISO ePM_1 80% (F9) filter is available.



Heating coil (internal)

The CX3000 series can be equipped with a water heating coil (HW) for demand-based supply air temperature control. Three-way mixing valves in different sizes are available for capacity control. For more detailed performance data, please refer to the technical data on page 28.

The internal heating coil (accessory) for installation in the ventilation unit is supplied separately.

Duct coil (external)

The following coils (accessories) are available for mounting on the duct of the CX3000 air handling unit:
- PHE: electric preheating coil
- HE: Electric heating coil
- CW: Change-over coil (water cooling/heating coil)

The coils are supplied in a 50 mm insulated box.

The technical data of the cooling/heating coils can be found on the accessories pages.

Control

The CX3000 series is supplied with EXcon control system as standard. With EXcon, all common control variants for precise control of airflows and temperatures can be set individually.

WEB server:
The integrated WEB server enables monitoring and control of the system from a higher-level control centre. With remote access and comprehensive monitoring of the system functions, control is possible at any time.

Manual control unit:
The HMI is included in the standard delivery and has a user-friendly 3.5" touch display. This control panel can be used to set and call up the most important plant parameters. A connecting cable (10 m) with RJ12 connector is included.

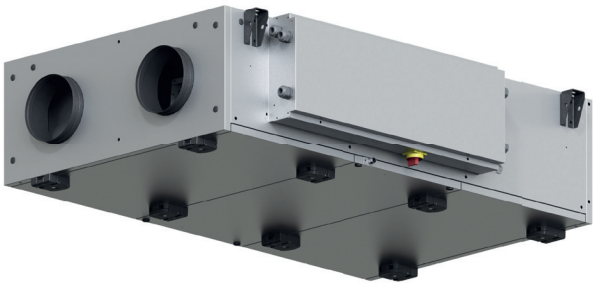
In addition, a 2" touch display for room mounting can be purchased as an accessory. This enables convenient control of the system directly on site by the user.

Accessories

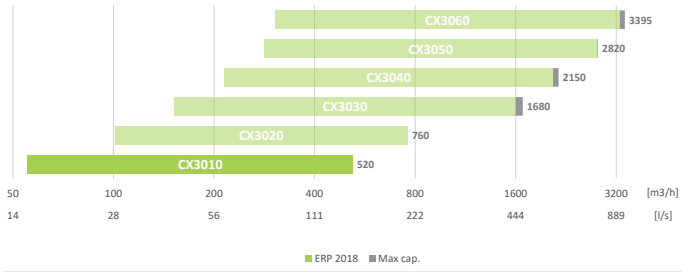
A wide range of accessories are available for the CX3000 series to optimise requirements. A detailed overview of these options can be found at the end of the following device pages.

CX3010 – Air flow up to 520 m³/h

CX3010



Capacity chart



Ordering codes

CX3010 L C X 1

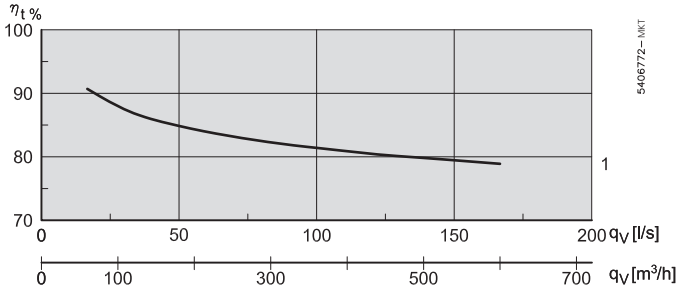
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3010	Unit-size

Variants		Item no.
CX3010LCX1	→	A11058139
CX3010RCX1	→	A11058000

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	100 m³/h	300 m³/h	500 m³/h
Outdoor air (L_{WA})	53	55	60
Supply air (L_{WA})	72	73	79
Extract air (L_{WA})	53	54	59
Exhaust air (L_{WA})	71	73	78
Breakout noise (L_{WA})	41	42	47

*To calculate the exact sound data,
we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	55 m³/h
ERP18 Airflow	520 m³/h
Max. Air volume	520 m³/h
Power consumption at	0.45 kW
Power supply voltages	1 x 230 V + N + PE ~ 50 Hz
Max. Phase current	3.4 A *

Weight

Unit ready for operation	125 kg

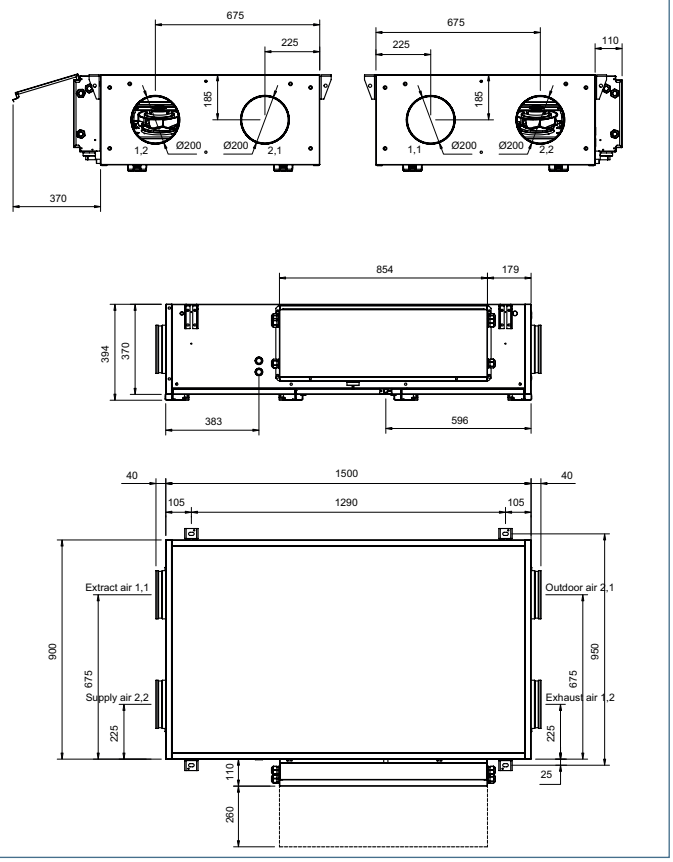
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

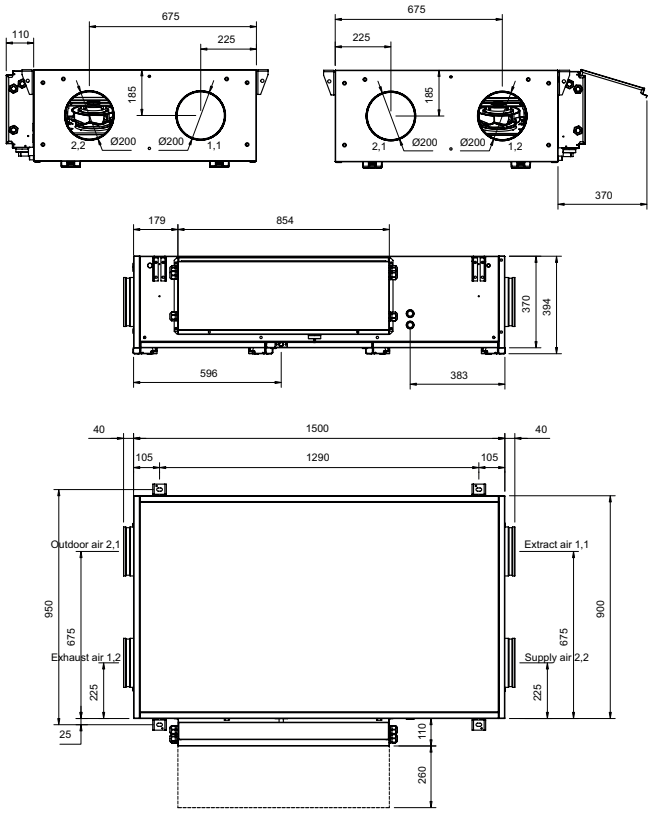
*) the power consumption is not sinusoidal

CX3010 – Air flow up to 520 m³/h

CX3010 Dimensional sketches, left version (layout drawing)



CX3010 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 → Exhaust 1.2 → Outdoor 2.1 → Supply 2.2

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058343	28
Water heating coil (HW) for built-in unit – left	A11058344	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 3 kW – Right	A11058239	28
Electric preheating coil (PHE) 3 kW – Left	A11058247	28
Electric heating coil (HE) 3 kW – Right	A11058273	29
Electric heating coil (HE) 3 kW – Left	A11058279	29
Water Change Over coil (CW) - Right	A11058387	30
Water change-over coil (CW) - Left	A11058388	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058429	30
Duct transition piece rectangular – round Ø200 mm	A11058476	31
MS PRO – flexible connection – round Ø200 mm	A11094296	31

Damper	Item no.	Page
Damper with motor -round Ø200 mm	A11058481	32

Condensate outlet	Item no.	Page
Condensate outlet heat exchanger (neg.pressure)	A11023483	33

Fire protection	Item no.	Page
Smoke detector - Duct	A11059211	33

Filter	Item no.	Page
Extract air filter ePM_{10} 50% (M5)	A11059215	10
Outdoor air filter ePM_1 50% (F7)	A11059216	10
Outdoor air filter ePM_1 80% (F9)	A11059217	10
External filter box for duct installation (F9)	A11058359	33

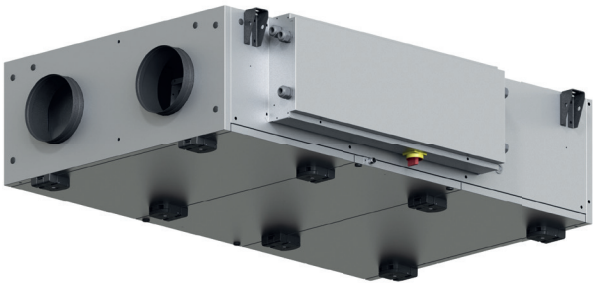
Controller accessories	Item no.	Page
2“ HMI touchpanel (user panel)	A11059207	34
HMI cable 25 m	A11058497	34
Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
Temperatursensor - Outdoor (Modbus)	A11059208	35
Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
AG 638 Weather protection grille made of aluminium 300 mm x 400 mm	A11052005	36
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

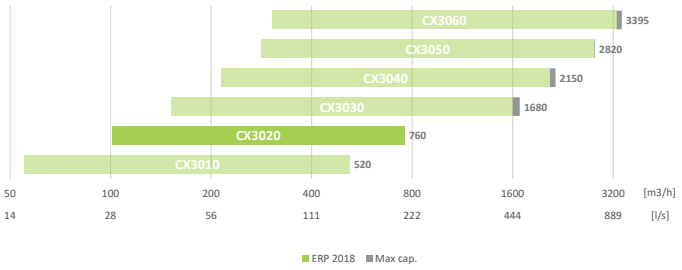
For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

CX3020 – Air flow up to 760 m³/h

CX3020



Capacity chart



Ordering codes

CX3020 L C X 1

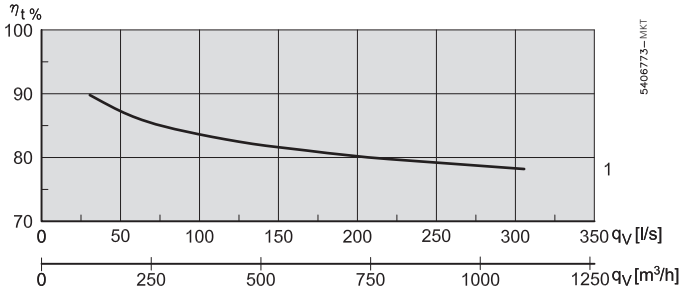
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3020	Unit-size

Variants		Item no.
CX3020LCX1	→	A11058146
CX3020RCX1	→	A11058143

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	200 m³/h	500 m³/h	700 m³/h
Outdoor air (L_{WA})	54	54	56
Supply air (L_{WA})	70	72	74
Extract air (L_{WA})	53	54	56
Exhaust air (L_{WA})	69	71	74
Breakout noise (L_{WA})	41	42	45

*To calculate the exact sound data, we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	100 m³/h
ERP18 Airflow	760 m³/h
Max. Air volume	760 m³/h
Power consumption at	0.56 kW
Power supply voltages	1 x 230 V + N + PE ~ 50 Hz
Max. Phase current	4.2 A *

Weight

Unit ready for operation	164 kg

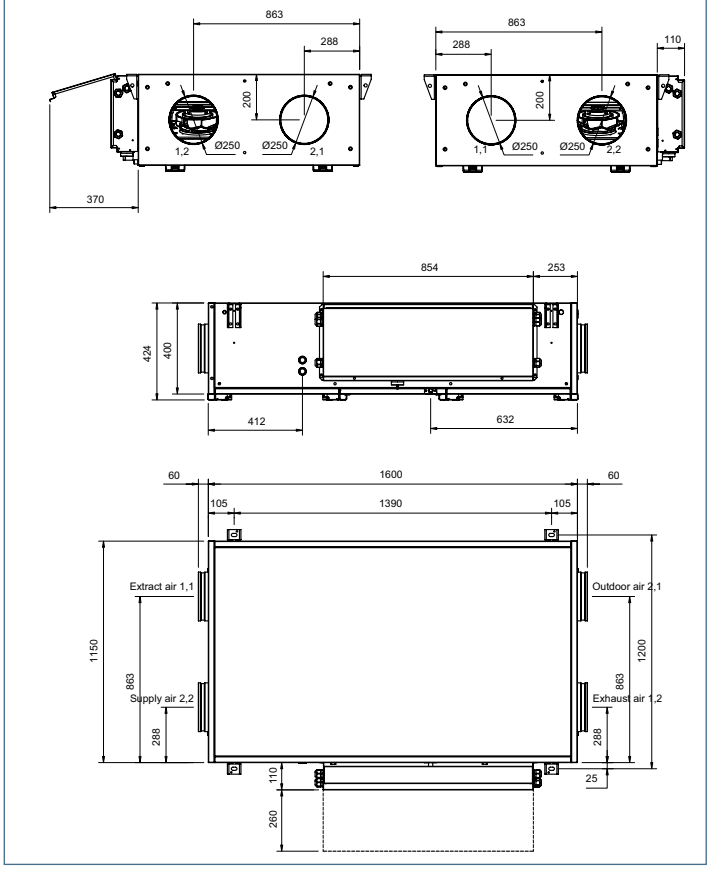
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

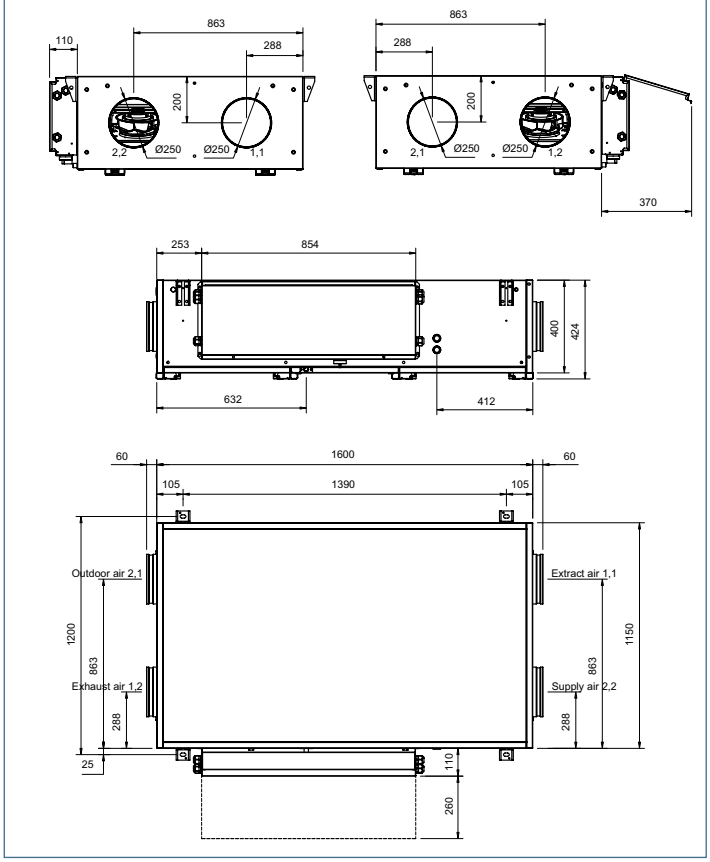
*) the power consumption is not sinusoidal

CX3020 – Air flow up to 760 m³/h

CX3020 Dimensional sketches, left version (layout drawing)



CX3020 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 → Exhaust 1.2 → Outdoor 2.1 → Supply 2.2

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058345	28
Water heating coil (HW) for built-in unit – left	A11058346	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 5 kW – Right	A11058248	28
Electric preheating coil (PHE) 5 kW – Left	A11058250	28
Electric heating coil (HE) 5 kW – Right	A11058280	29
Electric heating coil (HE) 5 kW – Left	A11058281	29
Water Change Over coil (CW) - Right	A11058389	30
Water change-over coil (CW) - Left	A11058390	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058430	30
Duct transition piece rectangular – round Ø250 mm	A11058477	31
MS PRO – flexible connection – round Ø250 mm	A11094297	31

Damper	Item no.	Page
Damper with motor - round Ø250 mm	A11058482	32

Condensate outlet	Item no.	Page
Condensate outlet heat exchanger (neg.pressure)	A11023483	33

Fire protection	Item no.	Page
Smoke detector - Duct	A11059211	33

Filter	Item no.	Page
Extract air filter ePM_{10} 50% (M5)	A11059218	10
Outdoor air filter ePM_1 50% (F7)	A11059219	10
Outdoor air filter ePM_1 80% (F9)	A11059220	10
External filter box for duct installation (F9)	A11058366	33

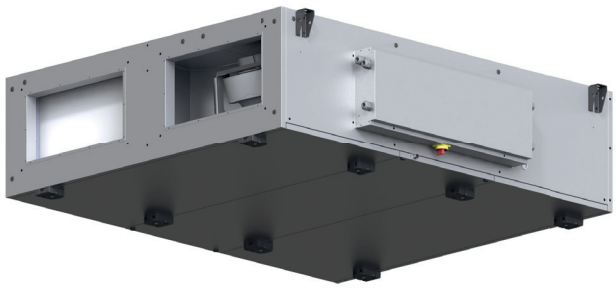
Controller accessories	Item no.	Page
2“ HMI touchpanel (user panel)	A11059207	34
HMI cable 25 m	A11058497	34
Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
Temperatursensor - Outdoor (Modbus)	A11059208	35
Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
AG 638 Weather protection grille made of aluminium 400 mm x 400 mm	A11052007	36
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

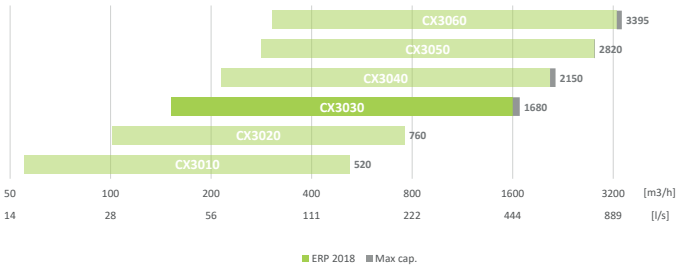
For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

CX3030 – Air flow up to 1,680 m³/h

CX3030



Capacity chart



Ordering codes

CX3030 L C X 1

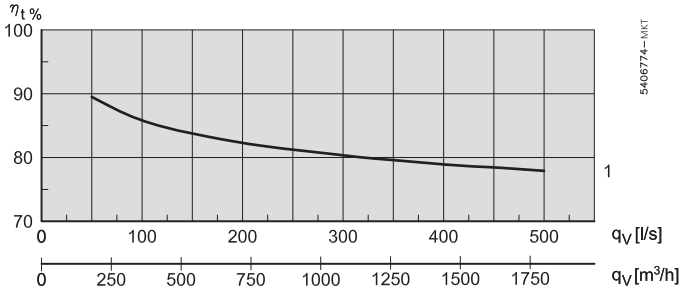
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3030	Unit-size

Variants		Item no.
CX3030LCX1	→	A11058158
CX3030RCX1	→	A11058157

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	400 m³/h	1000 m³/h	1500 m³/h
Outdoor air (L_{WA})	64	63	63
Supply air (L_{WA})	75	76	78
Extract air (L_{WA})	64	63	62
Exhaust air (L_{WA})	75	75	77
Breakout noise (L_{WA})	49	49	50

*To calculate the exact sound data,
we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	150 m³/h
ERP18 Airflow	1,600 m³/h
Max. Air volume	1,680 m³/h
Power consumption at	1.12 kW
Power supply voltages	1 x 230 V + N + PE ~ 50 Hz
Max. Phase current	5.0 A *

Weight

Unit ready for operation	230 kg

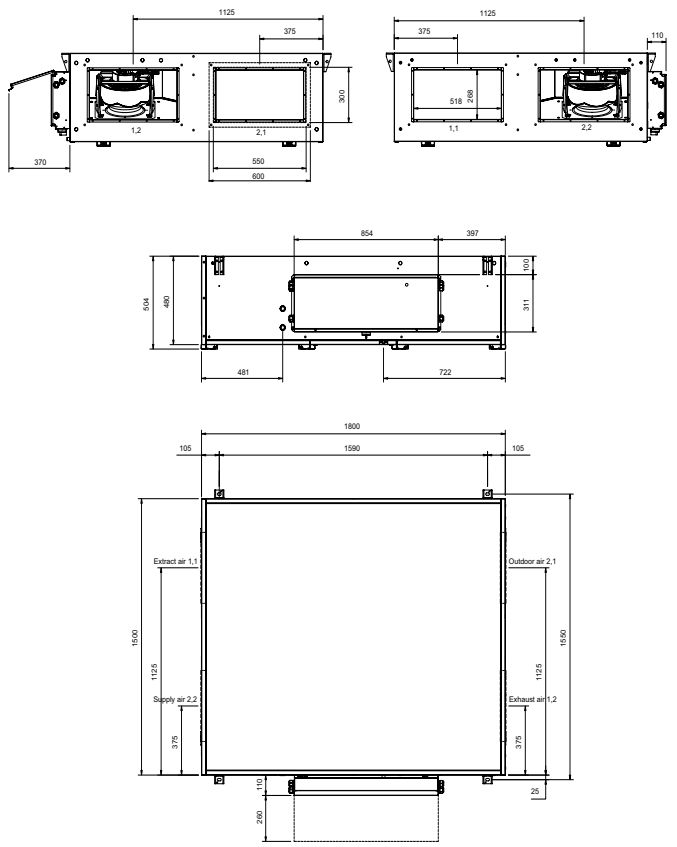
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

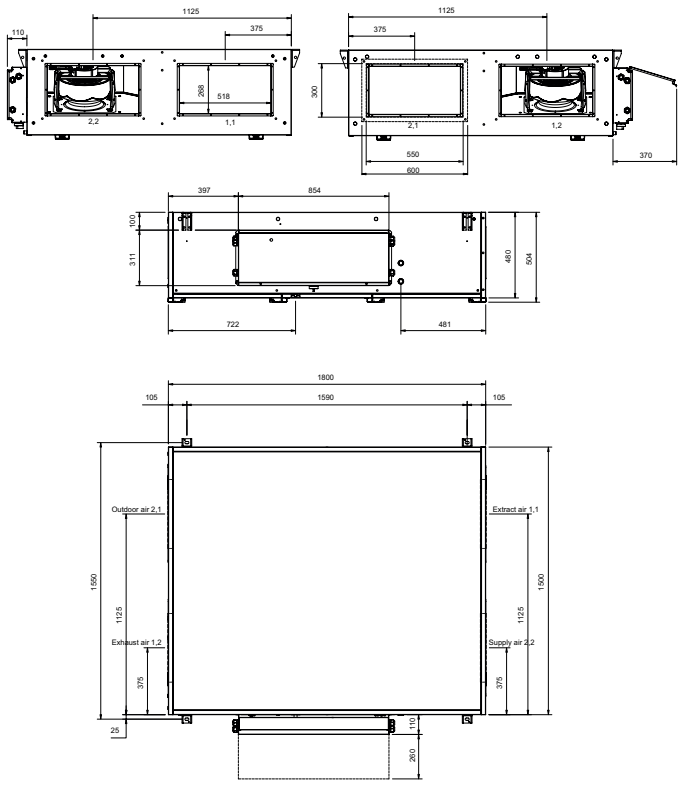
*) the power consumption is not sinusoidal

CX3030 – Air flow up to 1,680 m³/h

CX3030 Dimensional sketches, left version (layout drawing)



CX3030 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 **Exhaust 1.2** **Outdoor 2.1** **Supply 2.2**

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058347	28
Water heating coil (HW) for built-in unit – left	A11058348	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 8 kW – Right	A11058253	28
Electric preheating coil (PHE) 8 kW – Left	A11058254	28
Electric heating coil (HE) 4 kW – Right	A11058300	29
Electric heating coil (HE) 4 kW – Left	A11058304	29
Electric heating coil (HE) 8 kW – Right	A11058307	29
Electric heating coil (HE) 8 kW – Left	A11058309	29
Water Change Over coil (CW) - Right	A11058391	30
Water change-over coil (CW) - Left	A11058397	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058433	30
Duct transition piece rectangular – round Ø315 mm	A11058478	31
MS PRO – flexible connection – round Ø315 mm	A11094298	31

Damper	Item no.	Page
Damper with motor - rectangular 300 x 550 mm	A11058483	32

Condensate outlet	Item no.	Page
Condensate outlet heat exchanger (neg.pressure)	A11023483	33

Fire protection	Item no.	Page
Smoke detector - Duct	A11059211	33

Filter	Item no.	Page
Extract air filter ePM_{10} 50% (M5)	A11059221	10
Outdoor air filter ePM_1 50% (F7)	A11059222	10
Outdoor air filter ePM_1 80% (F9)	A11059223	10
External filter box for duct installation (F9)	A11058377	33

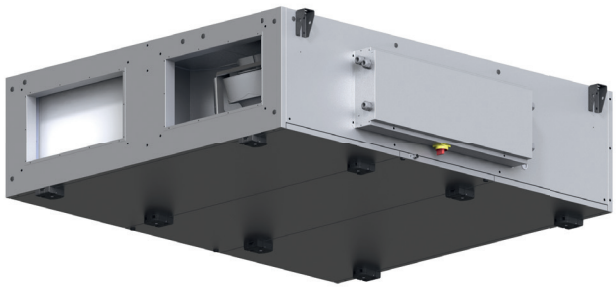
Controller accessories	Item no.	Page
2“ HMI touchpanel (user panel)	A11059207	34
HMI cable 25 m	A11058497	34
Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
Temperatursensor - Outdoor (Modbus)	A11059208	35
Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
AG 638 Weather protection grille made of aluminium 500 mm x 600 mm	A11052009	36
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

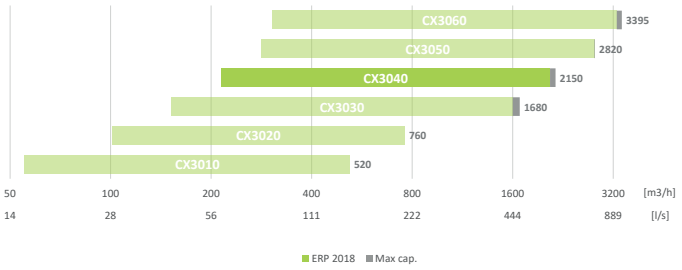
For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

CX3040 – Air flow up to 2,150 m³/h

CX3040



Capacity chart



Ordering codes

CX3040 L C X 1

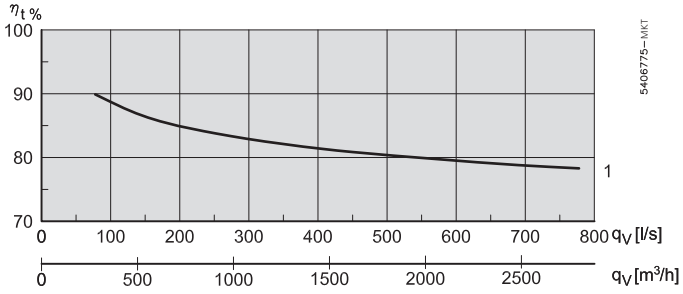
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3040	Unit-size

Variants		Item no.
CX3040LCX1	→	A11058189
CX3040RCX1	→	A11058175

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	600 m³/h	1200 m³/h	2000 m³/h
Outdoor air (L_{WA})	59	59	61
Supply air (L_{WA})	72	76	78
Extract air (L_{WA})	58	58	62
Exhaust air (L_{WA})	71	76	79
Breakout noise (L_{WA})	46	49	51

*To calculate the exact sound data,
we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	215 m³/h
ERP18 Airflow	2,060 m³/h
Max. Air volume	2,150 m³/h
Power consumption at	1.58 kW
Power supply voltages	1 x 230 V + N + PE ~ 50 Hz
Max. Phase current	7.0 A *

Weight

Unit ready for operation	286 kg

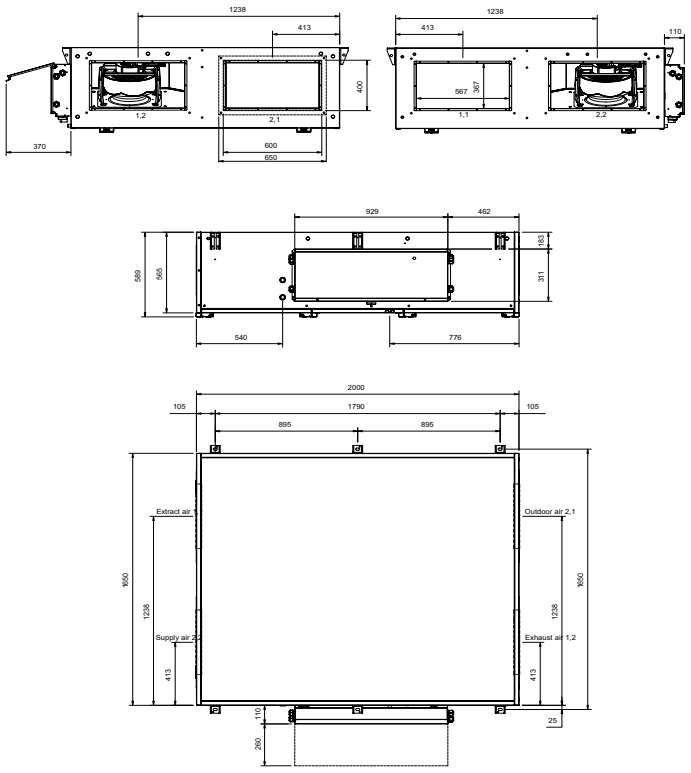
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

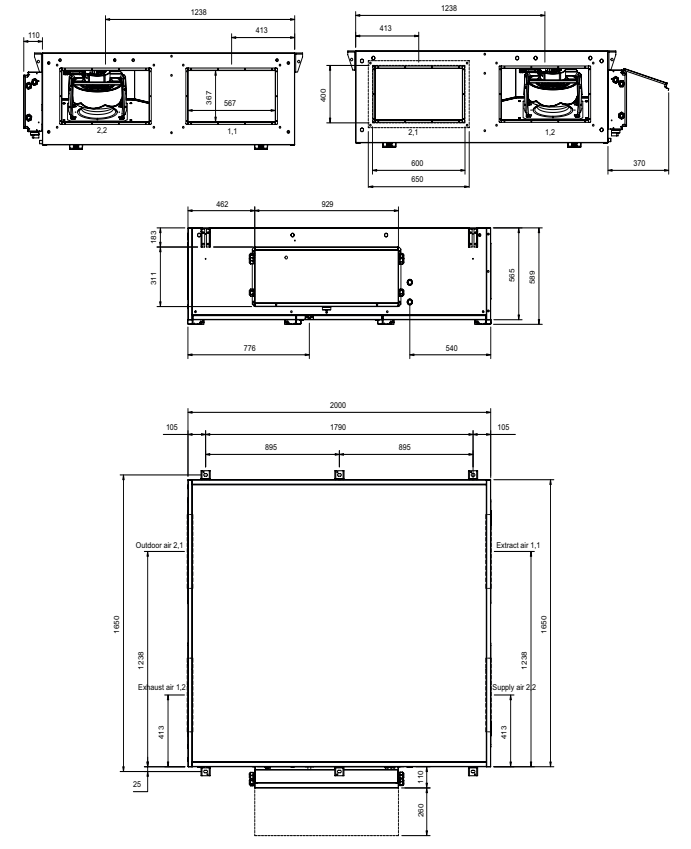
*) the power consumption is not sinusoidal

CX3040 – Air flow up to 2,150 m³/h

CX3040 Dimensional sketches, left version (layout drawing)



CX3040 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 → Exhaust 1.2 → Outdoor 2.1 → Supply 2.2

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058349	28
Water heating coil (HW) for built-in unit – left	A11058350	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 11 kW – Right	A11058258	28
Electric preheating coil (PHE) 11 kW – Left	A11058259	28
Electric heating coil (HE) 5,5 kW – Right	A11058311	29
Electric heating coil (HE) 5,5 kW – Left	A11058312	29
Electric heating coil (HE) 11 kW – Right	A11058313	29
Electric heating coil (HE) 11 kW – Left	A11058328	29
Water Change Over coil (CW) - Right	A11058398	30
Water change-over coil (CW) - Left	A11058409	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058439	30
Duct transition piece rectangular – round Ø400 mm	A11058479	31
MS PRO – flexible connection – round Ø400 mm	A11094300	31

Damper	Item no.	Page
Damper with motor - rectangular 400 x 600 mm	A11058489	32

Condensate outlet	Item no.	Page
Condensate outlet heat exchanger (neg.pressure)	A11023483	33

Fire protection	Item no.	Page
Smoke detector - Duct	A11059211	33

Filter	Item no.	Page
Extract air filter ePM$_{10}$ 50% (M5)	A11059224	10
Outdoor air filter ePM$_1$ 50% (F7)	A11059225	10
Outdoor air filter ePM$_1$ 80% (F9)	A11059226	10
External filter box for duct installation (F9)	A11058378	33

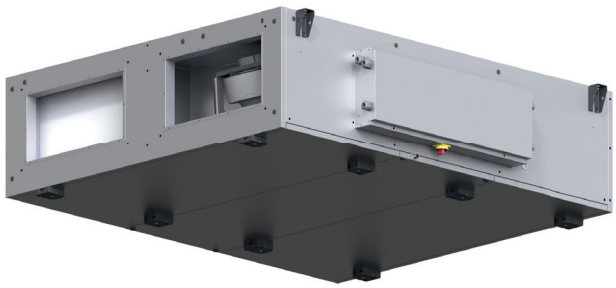
Controller accessories	Item no.	Page
2“ HMI touchpanel (user panel)	A11059207	34
HMI cable 25 m	A11058497	34
Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
Temperatursensor - Outdoor (Modbus)	A11059208	35
Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
AG 638 Weather protection grille made of aluminium 600 mm x 600 mm	A11052017	36
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

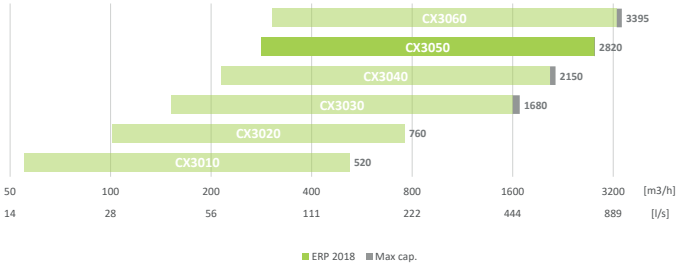
For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

CX3050 – Air flow up to 2,820 m³/h

CX3050



Capacity chart



Ordering codes

CX3050 L C X 1

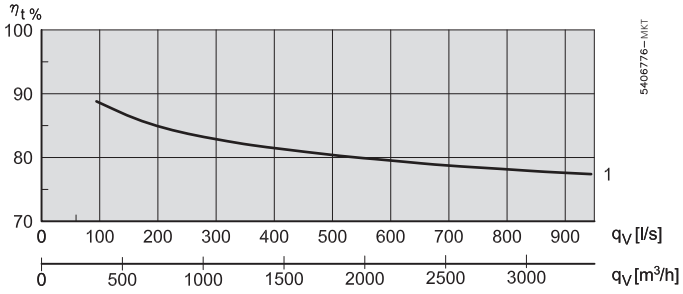
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3050	Unit-size

Variants		Item no.
CX3050LCX1	→	A11058215
CX3050RCX1	→	A11058196

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	700 m³/h	1700 m³/h	2500 m³/h
Outdoor air (L_{WA})	66	64	65
Supply air (L_{WA})	77	77	79
Extract air (L_{WA})	65	65	67
Exhaust air (L_{WA})	77	77	80
Breakout noise (L_{WA})	55	54	56

*To calculate the exact sound data,
we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	280 m³/h
ERP18 Airflow	2,810 m³/h
Max. Air volume	2,820 m³/h
Power consumption at	2.32 kW
Power supply voltages	3 x 400 V + N + PE ~ 50 Hz
Max. Phase current	4.0 A *

Weight

Unit ready for operation	308 kg

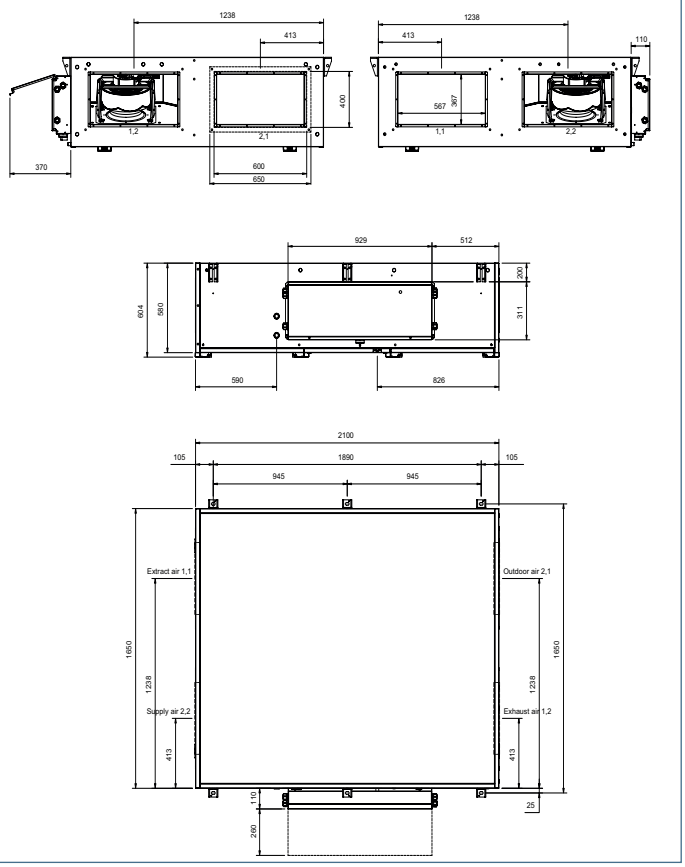
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

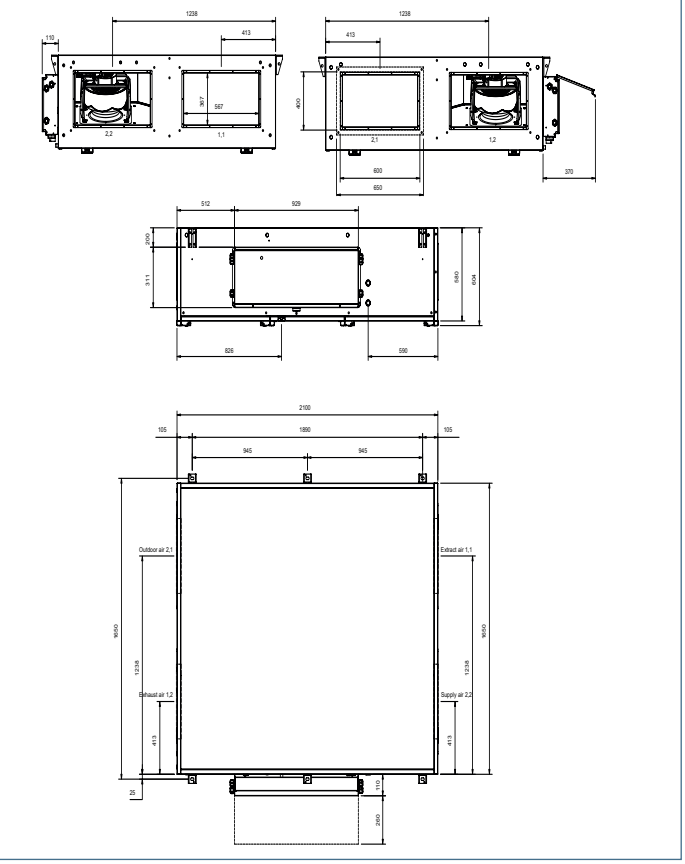
*) the power consumption is not sinusoidal

CX3050 – Air flow up to 2,820 m³/h

CX3050 Dimensional sketches, left version (layout drawing)



CX3050 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 → Exhaust 1.2 → Outdoor 2.1 → Supply 2.2

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058349	28
Water heating coil (HW) for built-in unit – left	A11058350	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 14 kW – Right	A11058260	28
Electric preheating coil (PHE) 14 kW – Left	A11058263	28
Electric heating coil (HE) 7 kW – Right	A11058334	29
Electric heating coil (HE) 7 kW – Left	A11058335	29
Electric heating coil (HE) 14 kW – Right	A11058336	29
Electric heating coil (HE) 14 kW – Left	A11058338	29
Water Change Over coil (CW) - Right	A11058424	30
Water change-over coil (CW) - Left	A11058426	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058440	30
Duct transition piece rectangular – round Ø400 mm	A11058479	31
MS PRO – flexible connection – round Ø400 mm	A11094300	31

Damper	Item no.	Page
Damper with motor - rectangular 400 x 600 mm	A11058489	32

Condensate outlet	Item no.	Page
Condensate outlet heat exchanger (neg.pressure)	A11023483	33

Fire protection	Item no.	Page
Smoke detector - Duct	A11059211	33

Filter	Item no.	Page
Extract air filter ePM_{10} 50% (M5)	A11059227	10
Outdoor air filter ePM_1 50% (F7)	A11059228	10
Outdoor air filter ePM_1 80% (F9)	A11059229	10
External filter box for duct installation (F9)	A11058379	33

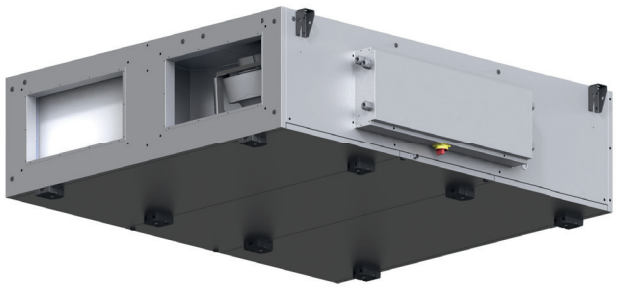
Controller accessories	Item no.	Page
2“ HMI touchpanel (user panel)	A11059207	34
HMI cable 25 m	A11058497	34
Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
Temperatursensor - Outdoor (Modbus)	A11059208	35
Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
AG 638 Weather protection grille made of aluminium 600 mm x 800 mm	A11052018	36
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

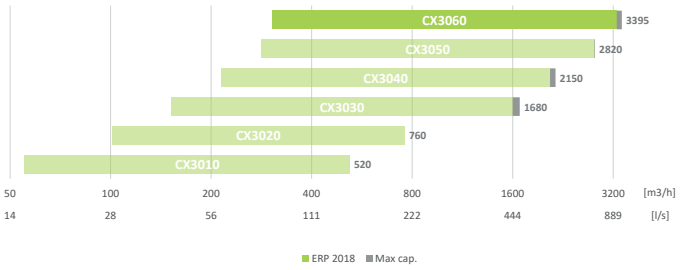
For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

CX3060 – Air flow up to 3,395 m³/h

CX3060



Capacity chart



Ordering codes

CX3060 L C X 1

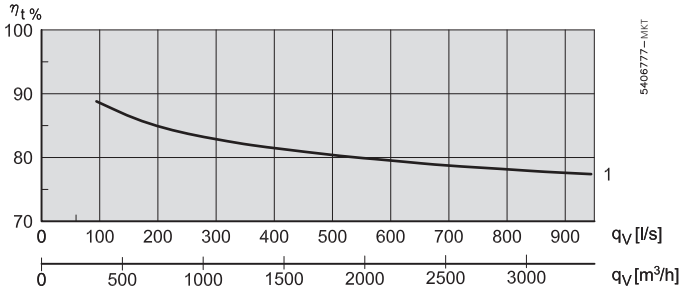
Varianten

1	**1:** EXcon
X	Without coil = **X**
C	Fan impeller, **C:** COMPOSITE
L or R	**L:** Left, **R:** Right (Direction of air supply)
CX3060	Unit-size

Variants		Item no.
CX3060LCX1	→	A11058228
CX3060RCX1	→	A11058226

Temperature efficiency

Heat exchanger, counter flow



Efficiency without condensation according to EN308
Extract air = 25°C/30 RH – outdoor air = 5°C/50 RH
Equilibrium between supply air/extract air = 1.0

$\eta_t = \frac{t_{2,2} - t_{2,1}}{t_{1,1} - t_{2,1}}$ = Temperature efficiency

$t_{2,1}$ = Temperature of the outdoor air
$t_{2,2}$ = Supply air temperature
$t_{1,1}$ = Exhaust air temperature

Sound data

Acoustic level L_{WA} dB(A)

Airflow at 200 Pa external pressure	800 m³/h	2000 m³/h	3000 m³/h
Outdoor air (L_{WA})	67	65	69
Supply air (L_{WA})	76	76	81
Extract air (L_{WA})	66	64	68
Exhaust air (L_{WA})	75	75	80
Breakout noise (L_{WA})	56	54	58

*To calculate the exact sound data, we refer to our calculation software EXselectPRO.

Unit information section

Min. airflow	305 m³/h
ERP18 Airflow	3,280 m³/h
Max. Air volume	3,395 m³/h
Power consumption at	2.32 kW
Power supply voltages	3 x 400 V + N + PE ~ 50 Hz
Max. Phase current	4.0 A *

Weight

Unit ready for operation	370 kg

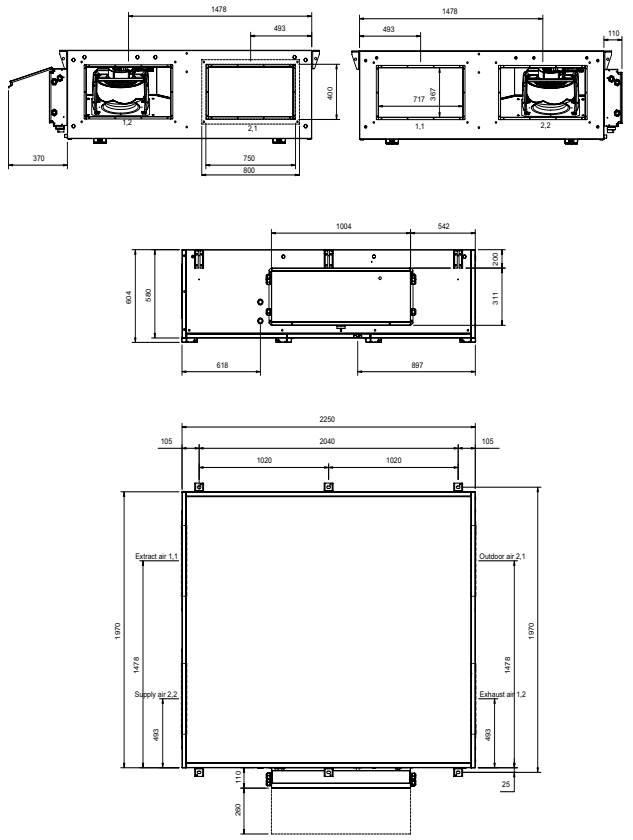
Motor and motor control (MC)

Type of engine	EC-Motor with integrated VSD
Motor class as per IEC 60034-30-2	IE4 (Ultra Premium Efficiency)
Power supply voltages	1 x 230 V
Overload protection device	Built-in
Control	Continuously variable via engine control (MC)
Control signals	With integrated control system: Modbus

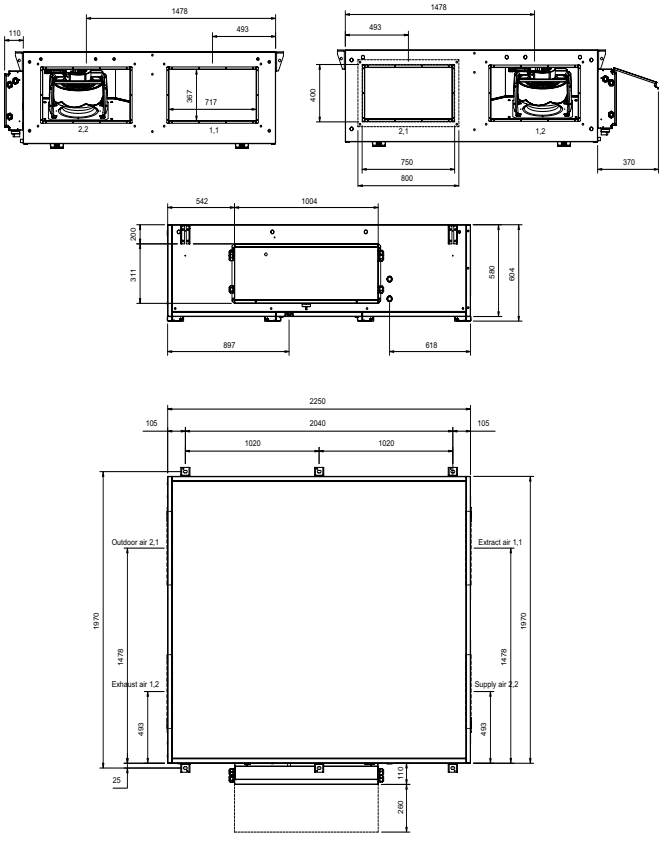
*) the power consumption is not sinusoidal

CX3060 – Air flow up to 3,395 m³/h

CX3060 Dimensional sketches, left version (layout drawing)



CX3060 Dimensional sketches, right version (layout drawing)



Unit dimensions in mm

Extract 1.1 → Exhaust 1.2 → Outdoor 2.1 → Supply 2.2

Accessories

Post-heating coil (internal)	Item no.	Page
Water heating coil (HW) for built-in unit – right	A11058351	28
Water heating coil (HW) for built-in unit – left	A11058352	28

Duct coil (external)	Item no.	Page
Electric preheating coil (PHE) 18 kW – Right	A11058269	28
Electric preheating coil (PHE) 18 kW – Left	A11058270	28
Electric heating coil (HE) 9 kW – Right	A11058339	29
Electric heating coil (HE) 9 kW – Left	A11058340	29
Electric heating coil (HE) 18 kW – Right	A11058341	29
Electric heating coil (HE) 18 kW – Left	A11058342	29
Water Change Over coil (CW) - Right	A11058427	30
Water change-over coil (CW) - Left	A11058428	30

Accessories Items	Item no.	Page
Rail system for maintenance doors	A11058454	30
Duct transition piece rectangular – round Ø500 mm	A11058480	31
MS PRO – flexible connection – round Ø500 mm	A11094301	31

Damper	Item no.	Page
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Fire protection	Item no.	Page
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Controller accessories	Item no.	Page
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Pressure transmitter kit for constant pressure control (Two items are required per device)	A11059206	34
CO_2-Sensor - Duct (Modbus)	A11059209	34
CO_2-Sensor - Room	A11017090	34
Temperature sensor - Room (Modbus)	A11069100	35
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Motion sensor (PIR-Sensor)	A11059210	35
3-way control valves	Please see page	35

Air outlets	Item no.	Page
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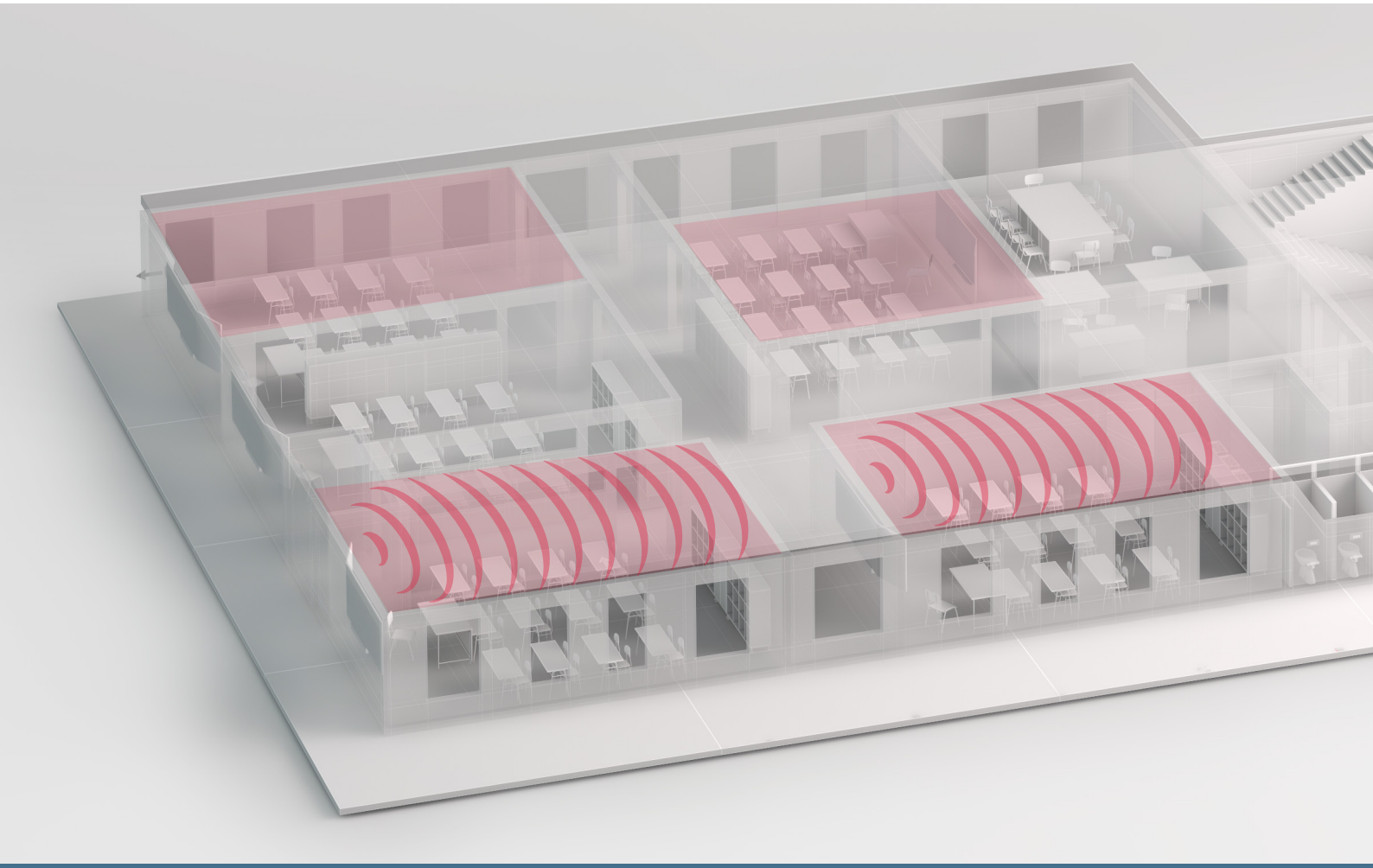
Roof hood exhaust air outlet THAV (configurable)	On request	36
Roof hood outdoor air inlet THFV (configurable)	On request	36

For further calculations of CX3000 unit sizes, airflows, energy consumption, Ecodesign data, etc., please use our design program EXselectPRO on **www.exhausto.com.**

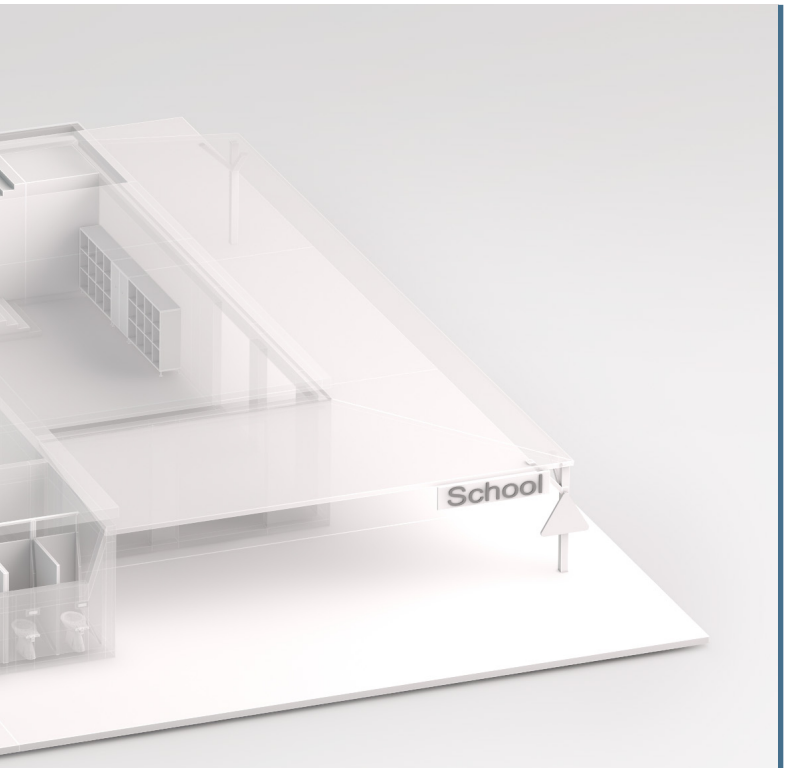
CX3000

...The right control option for every need



CX3000 CONFIGURATOR

- Download program for easy and quick configuration
- Compatible with laptop, tablet or smartphone
- Automatic adaptation to heating, cooling or combi coils
- Automatic control for accessories such as CO_2 or pressure control
- Automatic function change on free inputs and outputs as required



OPERATING OPTIONS

The CX3000 unit series has an integrated complete control system (EXcon) which, due to its flexibility, meets all requirements. This allows the devices to be set in a wide range of operating modes.

STANDARD:

DAY, WEEK AND YEAR CLOCK

The integrated year clock can be used to define defined times during which the unit should be in operation. Different power levels can be programmed, so that a minimum air change can also be used when not in use. The annual clock also makes it possible to take holiday periods into account. **Depending on the room situation, daily use with the same number of people at fixed times can be programmed via the clock.**

FREE NIGHT COOLING FUNCTION

The clock programming ensures that the rooms can be cooled overnight to an individually selectable desired temperature at low outdoor temperatures in summer.
The intelligent control system activates the system exclusively within the specified temperature-related framework conditions.

OPTIONAL:

PRESENCE DETECTOR

An additionally available occupancy detector can generally switch the system on or to demand mode. This makes it possible to automatically adjust the airflow if the unit is used outside of scheduled times. **In the event of irregular use of the space, a motion detector ensures that the ventilation system is activated when the room is in use.**

CO_2 SENSOR

A CO_2 sensor (room or duct sensor) can be used to adjust the operation of the system according to requirements (number of people). This ensures that the system automatically adjusts the air output to the desired CO_2 level and thus optimises energy consumption according to demand. **This option is particularly useful if the usage times and number of people in the rooms in question vary.**

CONSTANT PRESSURE CONTROL

Sensor-controlled volume flow controllers can be used to enable demand-based control of ventilation of different rooms. To enable the central ventilation unit to perform this adjustment, pressure sensors are installed in both the supply air and extract air ducts. Constant pressure control thus ensures automatic adjustment of the air volume.

CX3000
...Overview of control functions

Model	Defrosting the heat recovery unit	Filter pressure loss monitoring	Operating options
CX3010 CX3020	• Temperature-controlled	• Static	• Constant motor speed • Constant pressure control (accessory required) • CO_2 control (CO_2 sensor required)
CX3030 CX3040 CX3050 CX3060	• Dynamic pressure control • Temperature-controlled (optional)	• Static • Dynamic in relation to airflow	• Constant motor speed • Flow rate control • Constant pressure control (accessory required) • CO_2 control (CO_2 sensor required) • Adaptive pressure control (accessory required)

The different models offer a wide range of control options to meet your individual requirements.

To give you a clear overview of the available functions, we have created a table. This table shows you all the functions of the models at a glance. From defrosting the heat exchanger to filter monitoring, from further setting options to control of heating and cooling coils. Various control elements are available for communication with EXHAUSTO air handling units (see accessories).

Temp. controller	Heating and cooling coils	Automatic frost protection	Operating/fan levels
• Supply air temperature • Exhaust air or room temperature • Temperature difference (extract-/supply air)	• Electric preheating coil • Electric heating coil • Water heating coil • Cooling coil water • Water change-over coil	Yes	Low, Medium, High
• Supply air temperature • Exhaust air or room temperature • Temperature difference (extract-/supply air)	• Electric preheating coil • Electric heating coil • Water heating coil • Cooling coil water • Water change-over coil	Yes	Low, Medium, High

The integrated WEB server offers the option of connecting to a modern building control system via the BACnet and Modbus protocols as standard for all unit sizes.

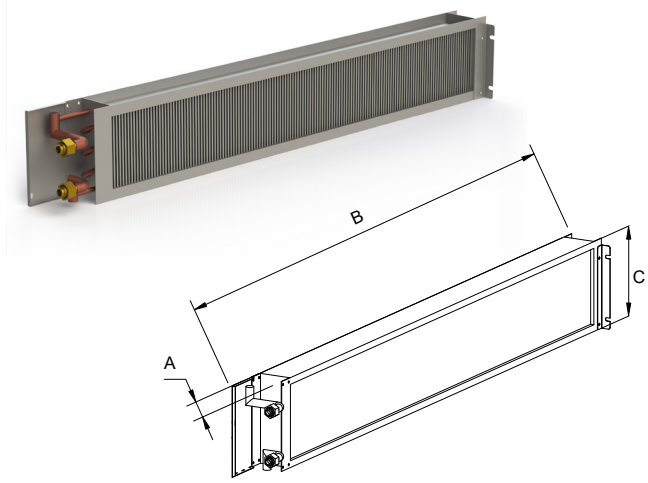
CX3000 – Accessories

HW – Water heating coil (internal)

The water heating coil (internal) is a space-saving addition to the CX3000 ventilation unit. It enables effective temperature control of the supply air and is also used for power compensation during the defrosting process of the heat exchanger. The installation of the heating coil is extremely easy and time-saving, as the mounting brackets and duct connections to the outside are already prepared in the ventilation unit.

In addition, the required 3-way control valve for heating capacity control can be calculated using the user-friendly online product selection program EXselectPro. This handy tool makes selecting and configuring the control valve a hassle-free process.

HW - Water heating coil



Technical specifications

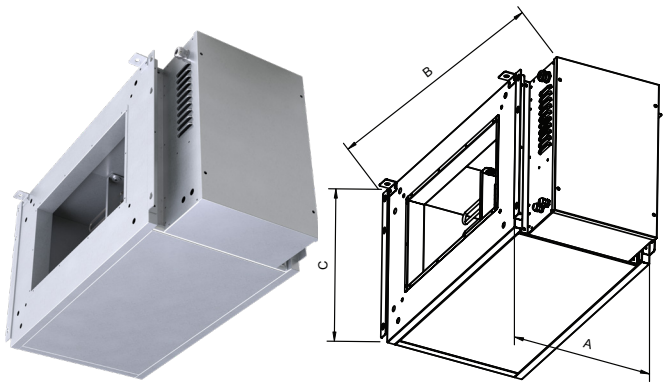
Item no.	Unit size	Test pressure [kPa]	Max. opr. pressure [kPa]	No of tubes [pcs.]	No. of channels [pcs.]	Inlet WxH [mm]	Connection dimension	Blade spacing [mm]	Weight (no water) [kg]	Water content [l]	Power consumption* [kW]	A [mm]	B [mm]	C [mm]
A11058343	CX3010 - Right	2000	1000	2	1	620 x 95	DN15 1/2"	2.80	5	0.5	2.89	89	764	130
A11058344	CX3010 - Left	2000	1000	2	1	620 x 95	DN15 1/2"	2.80	5	0.5	2.89	89	764	130
A11058345	CX3020 - Right	2000	1000	2	1	870 x 95	DN15 1/2"	2.50	6.7	0.7	5.38	89	1014	151
A11058346	CX3020 - Left	2000	1000	2	1	870 x 95	DN15 1/2"	2.50	6.7	0.7	5.38	89	1014	151
A11058347	CX3030 - Right	2000	1000	2	1	1220 x 159	DN15 1/2"	3.60	9.6	1.5	8.38	89	1364	187
A11058348	CX3030 - Left	2000	1000	2	1	1220 x 159	DN15 1/2"	3.60	9.6	1.5	8.38	89	1364	187
A11058349	CX3040/3050 - Right	2000	1000	2	1	1370 x 190	DN15 1/2"	3.20	11.4	2.0	12.84/14.67	89	1514	228
A11058350	CX3040/3050 - Left	2000	1000	2	1	1370 x 190	DN15 1/2"	3.20	11.4	2.0	12.84/14.67	89	1514	228
A11058351	CX3060 - Right	2000	1000	2	1	1690 x 190	DN15 1/2"	3.00	13.3	2.4	19.11	89	1834	227
A11058352	CX3060 - Left	2000	1000	2	2	1690 x 190	DN15 1/2"	3.00	13.3	2.4	19.11	89	1834	227

* At max. flow and medium temperature supply/return 60°C/40°C

PHE – Electric preheating coil

The electric preheating coil is a reliable solution for protection against icing. It is supplied in an insulated enclosure (50 mm) and offers versatile installation options. The connection can be made either directly to the CX3000 air handling unit or in the outdoor air duct. The preheating coil plays an important role in providing extra protection for the counterflow heat exchanger, especially at extremely cold outdoor temperatures below -16°C.

PHE – Electric preheating coil



Technical specifications

Item no.	Unit size	Power consumption [kW]	Min. airflow [m³/h]	Heating level	Regulation	Power supply	Max. absorbed power [A]	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058239	CX3010 - Right	3.0	305	1	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	4.34	27	425	587	370
A11058247	CX3010 - Left	3.0	305	1	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	4.34	27	425	587	425
A11058248	CX3020 - Right	5.0	505	1	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	7.23	30	425	712	700
A11058250	CX3020 - Left	5.0	505	1	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	7.23	30	425	712	700
A11058253	CX3030 - Right	8.0	780	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	11.56	42	425	890	480
A11058254	CX3030 - Left	8.0	780	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	11.56	42	425	890	480
A11058258	CX3040 - Right	11.0	1075	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	15.90	46	425	964	565
A11058259	CX3040 - Left	11.0	1075	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	15.90	46	425	964	565
A11058260	CX3050 - Right	14.0	1365	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	20.23	49	425	964	580
A11058263	CX3050 - Left	14.0	1365	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	20.23	49	425	964	580
A11058269	CX3060 - Right	18.0	1755	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	26.01	52	425	1125	580
A11058270	CX3060 - Left	18.0	1755	2	ON/OFF	3 x 400 V + N + PE ~ 50 Hz	26.01	52	425	1125	580

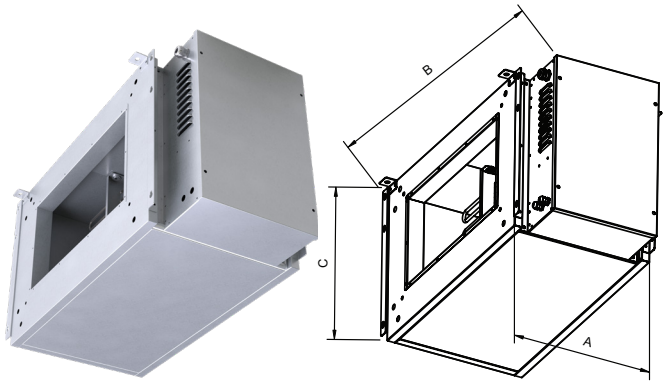
CX3000 – Accessories

HE - Electric heating coil

The electric heating coil is a supplement to the CX3000 air handling unit. It is supplied in an insulated enclosure (50 mm) and offers flexible installation options. It can be placed either directly on the air handling unit or in the supply air duct. The after-heating coil has two important functions: comfort temperature control of the supply air and anti-icing protection of the counterflow heat exchanger.

The insulated enclosure ensures optimum thermal insulation and minimises energy losses. The versatile placement options make it possible to adapt the heating coil to the specific requirements of the system.

HE - Electric heating coil



Technical specifications

Item no.	Unit size	Power consumption [kW]	Min. airflow [m³/h]	Heating level	Regulation	Power supply	Max. absorbed power [A]	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058273	CX3010 - Right	3.0	305	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	4.34	28	425	587	370
A11058279	CX3010 - Left	3.0	305	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	4.34	28	425	587	370
A11058280	CX3020 - Right	5.0	505	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	7.23	31	425	712	700
A11058281	CX3020 - Left	5.0	505	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	7.23	31	425	712	700
A11058300	CX3030 - Right	4.0	520	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	5.78	39	425	890	480
A11058304	CX3030 - Left	4.0	520	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	5.78	39	425	890	480
A11058307	CX3030 - Right	8.0	780	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	11.56	43	425	890	480
A11058309	CX3030 - Left	8.0	780	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	11.56	43	425	890	480
A11058311	CX3040 - Right	5.50	820	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	7.95	43	425	964	565
A11058312	CX3040 - Left	5.50	820	1	0-10 V	3 x 400 V + N + PE ~ 50 Hz	7.95	43	425	964	565
A11058313	CX3040 - Right	11.0	1075	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	15.90	47	425	964	565
A11058328	CX3040 - Left	11.0	1075	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	15.90	47	425	964	565
A11058334	CX3050 - Right	7.0	895	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	10.12	46	425	964	580
A11058335	CX3050 - Left	7.0	895	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	10.12	46	425	964	580
A11058336	CX3050 - Right	14.0	1365	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	20.23	50	425	964	580
A11058338	CX3050 - Left	14.0	1365	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	20.23	50	425	964	580
A11058339	CX3060 - Right	9.0	1215	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	13.01	49	425	1125	580
A11058340	CX3060 - Left	9.0	1215	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	13.01	49	425	1125	580
A11058341	CX3060 - Right	18.0	1755	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	26.01	53	425	1125	580
A11058342	CX3060 - Left	18.0	1755	2	ON/OFF + 0-10 V	3 x 400 V + N + PE ~ 50 Hz	26.01	53	425	1125	580

CX3000 – Accessories

CW – Water change-over coil

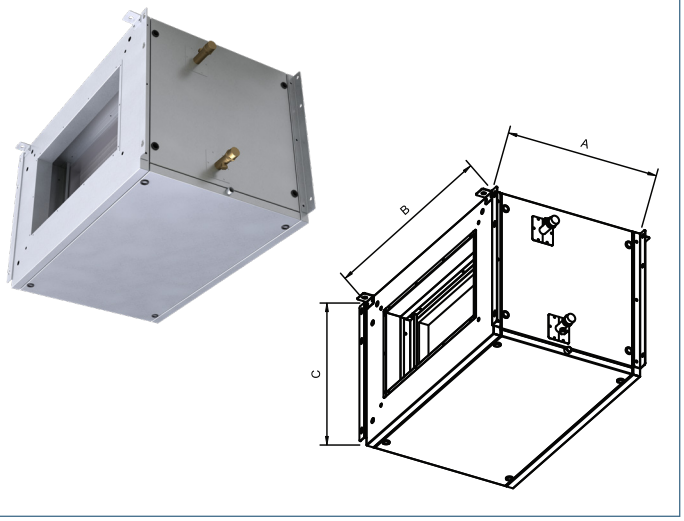
The water change-over coil is an extremely versatile solution for the CX3000 ventilation system. It is supplied in an insulated enclosure (50 mm) and can be placed directly on the air handling unit or in the supply air duct.

The change-over coil is used for precise supply air temperature control and provides hot water in winter and cold water in summer.

The insulated enclosure ensures optimum thermal insulation and minimises energy losses. In addition, the coil has a stainless steel condensate tray in the bottom, which has an outlet to the outside to ensure efficient drainage of condensate during cooling operation.

For inspection and cleaning purposes in accordance with VDI6022, the coil housing can be easily opened for easy maintenance. Precise capacity control is ensured by the required 3-way control valve, which can be calculated using the user-friendly online product selection program EXselectPro.

CW - Water change-over coil



Technical specifications

Item no.	Unit size	Testing pressure [kPa]	Max. opr. pressure [kPa]	No of tubes [pcs.]	No. of channels [pcs.]	Inlet WxH [mm]	Connection dimension	Blade spacing [mm]	Weight (no water) [kg]	Water content [l]	Power consumption* heating/cooling [kW]	A [mm]	B [mm]	C [mm]
A11058387	CX3010 - Right	3000	1000	3	1	200 x 254	DN15 1/2"	2.50	5.6	0.9	4.06/1.48	500	450	370
A11058388	CX3010 - Left	3000	1000	3	1	200 x 254	DN15 1/2"	2.50	5.6	0.9	4.06/1.48	500	450	370
A11058389	CX3020 - Right	3000	1000	3	2	325 x 254	DN15 1/2"	2.50	6.6	1.2	6.77/2.33	500	575	400
A11058390	CX3020 - Left	3000	1000	3	2	325 x 254	DN15 1/2"	2.50	6.6	1.2	6.77/2.33	500	575	400
A11058391	CX3030 - Right	3000	1000	3	3	490 x 318	DN15 1/2"	2.80	9.0	2.1	10.95/3.94	500	750	480
A11058397	CX3030 - Left	3000	1000	3	3	490 x 318	DN15 1/2"	2.80	9.0	2.1	10.95/3.94	500	750	480
A11058398	CX3040 - Right	3000	1000	3	6	570 x 381	DN15 1/2"	2.50	11.5	2.8	17.30/5.22	500	825	565
A11058409	CX3040 - Left	3000	1000	3	6	570 x 381	DN15 1/2"	2.50	11.5	2.8	17.30/5.22	500	825	565
A11058424	CX3050 - Right	3000	1000	3	4	570 x 444	DN15 1/2"	2.80	12.0	3.3	19.42/7.22	500	825	580
A11058426	CX3050 - Left	3000	1000	3	4	570 x 444	DN15 1/2"	2.80	12.0	3.3	19.42/7.22	500	825	580
A11058427	CX3060 - Right	3000	1000	3	4	730 x 444	DN15 1/2"	2.80	13.9	4.0	25.98/9.97	500	985	580
A11058428	CX3060 - Left	3000	1000	3	4	730 x 444	DN15 1/2"	2.80	13.9	4.0	25.98/9.97	500	985	580

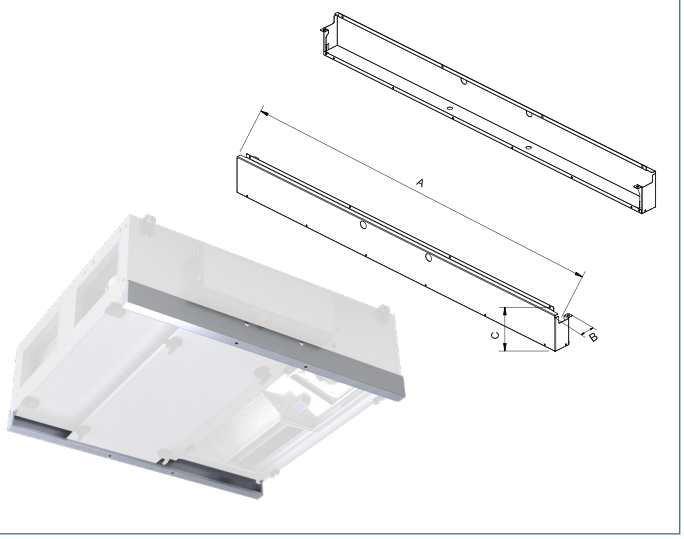
* At max. flow and media temperature "Heating" 60/40°C - "Cooling" 7/12°C

Rail system

The optionally available rail system offers a practical solution for easy disassembly and space-saving revision of the double-hinged doors. It can be easily attached to the prepared fixtures. The rail system makes it easy to remove the doors completely and slide them sideways underneath the unit without having to open them downwards.

The rail system is made of high-quality galvanised sheet steel, which is also painted black.

Rail system



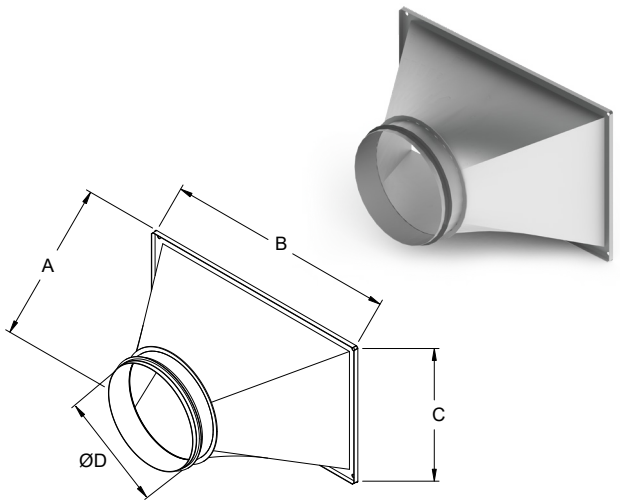
Technical specifications

Item no.	Unit size	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058429	CX3010	10	1499	84	152
A11058430	CX3020	11	1599	84	152
A11058433	CX3030	12	1799	84	152
A11058439	CX3040	13	1999	84	152
A11058440	CX3050	16	2099	84	152
A11058454	CX3060	20	2249	84	152

Duct transition piece rectangular-round

The rectangular-round duct transition piece is made of high-quality galvanised sheet steel and is used to connect the ventilation unit to round duct systems. It is used when a change from a square device or coil connection to a round duct connection is required. The transition piece has a METU-flange on the rectangular side and a rubber lip seal on the round side to ensure a reliable seal of the connection.

Duct transition piece



Technical specifications

Item no.	Unit size	Number [pcs.]	Weight [kg/pcs.]	A [mm]	B [mm]	C [mm]	D [mm]
A11058476	CX3010	1	2	400	250	220	Ø200
A11058477	CX3020	1	3	400	350	270	Ø250
A11058478	CX3030	4	3	400	550	300	Ø315
A11058479	CX3040/3050	4	3.5	450	600	400	Ø400
A11058480	CX3060	4	4	450	750	400	Ø500

MS PRO - Flexible connection

The MS PRO is the ideal solution for vibration decoupling between your ventilation system and the round ventilation duct. It is available in 6 different diameters (from 200–500 mm) and thus offers versatile application possibilities.

Made of high-quality canvas (construction material class M0/A0), the cuff has a metal tensioning strap on both sides. This allows it to be securely and firmly attached to the ventilation duct to ensure a reliable seal (sealing class C).

Application range: pressures from 0–2500 Pa/continuous temperature: -30 °C to + 250 °C; max. +400 °C

MS PRO - Flexible connection

Technical specifications

Item no.	Unit size	Diameter [mm]	Length [mm]
A11094296	CX3010	Ø200	200
A11094297	CX3020	Ø250	200
A11094298	CX3030	Ø315	200
A11094300	CX3040	Ø400	200
A11094300	CX3050	Ø400	200
A11094301	CX3060	Ø500	200

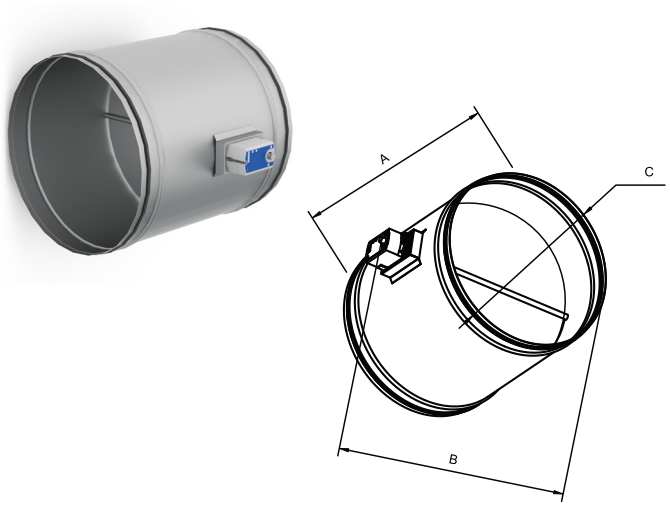
CX3000 – Accessories

Damper with motor - Round

The damper can be installed directly on the unit or in the duct. It is equipped with a spring return motor, which ensures that the connections to the outside (outside air and exhaust air) are closed when the unit is switched off or in the event of a power failure.

This ensures optimal function and safety of your ventilation system. The spring return motor ensures that the damper automatically returns to the closed position when there is no voltage or the unit is switched off.

Damper with motor



Technical specifications

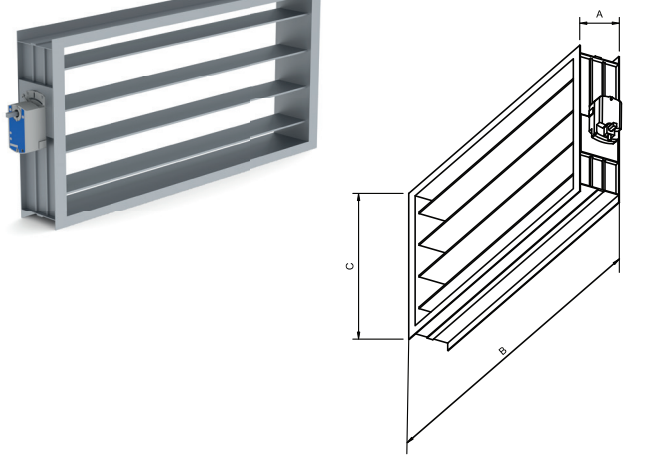
Item no.	Unit size	Protection category	Technical specs sheet	Protection index	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058481	CX3010	4	24 V DC /5 W	IP54	3.1	280	320	200
A11058482	CX3020	4	24 V DC/5 W	IP54	4.6	280	370	250

Damper with motor - Rectangular

The damper can be installed directly on the unit or in the duct. It is equipped with a spring return motor, which ensures that the connections to the outside (outside air and exhaust air) are closed when the unit is switched off or in the event of a power failure.

This ensures optimal function and safety of your ventilation system. The spring return motor ensures that the damper automatically returns to the closed position when there is no voltage or the unit is switched off.

Damper with motor



Technical specifications

Item no.	Unit size	Protection category	Technical specs sheet	Protection index	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058483	CX3030	4	24V DC / 5W	IP54	6	125	720	362
A11058489	CX3040-3050	4	24V DC / 5W	IP54	8	125	720	362
A11058490	CX3060	4	24V DC / 5W	IP54	9	125	720	362

CX3000 – Accessories

Water trap (Syphon)

Our syphon makes it easy to connect 32 mm PVC pipes. With a flexible and space-saving design it can be installed horizontally or vertically. The use of thermoplastic elastomer for the body and silicone for the membrane ensures reliability.

In addition, the syphon offers an anti-backflow mechanism for hygienic applications.

Water trap (Syphon)

Technical specifications

Item no.	Connection [mm]	Length [mm]
A11023483	Ø 32	211

Duct smoke detector

The duct smoke detector is used to reliably prevent smoke from being drawn in via the ventilation system and blown into the premises.

To ensure effective function and minimise contamination, it is recommended that the smoke detector is placed in the supply air duct.

However, it is important to determine the exact positioning in consultation with the responsible project manager.

Duct smoke detector

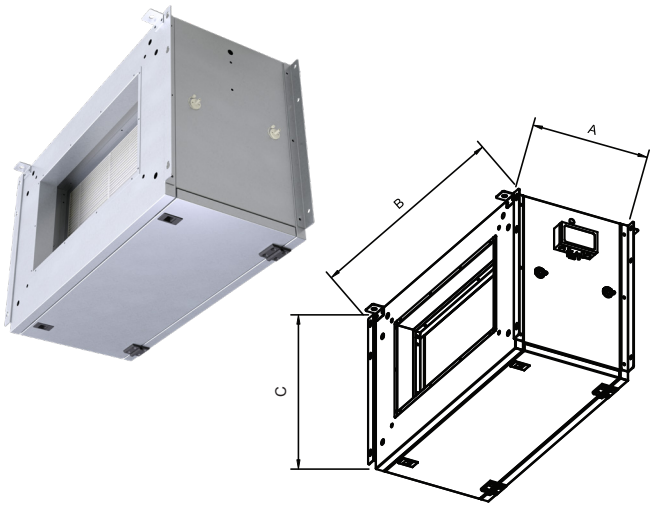
Technical specifications

Item no.	Detektion	Technical specs sheet	Protection index
A11059212	Reflection principle	16-30 V DC	IP20

Filter box

In addition to the first filter stage of class ISO ePM_1 50% - F7 already included in the device, a second filter stage can be used. The filter box consists of an insulated (50 mm) housing and contains a high-quality filter of class ISO ePM_1 80% (F9). The maintenance door of the filter box can easily be opened downwards for easy filter replacement. A special mechanism protects the filter from falling down. A differential pressure sensor connected to the appliance control on the outside of the housing ensures reliable filter monitoring.

Filter box



Technical specifications

Item no.	Unit size	Weight [kg]	A [mm]	B [mm]	C [mm]
A11058359	CX3010	21	420	510	381.5
A11058366	CX3020	23	420	635	411.5
A11058377	CX3030	33	420	810	491.5
A11058378	CX3040	36	420	885	576.5
A11058379	CX3050	39	420	885	591.5
A11058386	CX3060	42	420	1045	591.5

CX3000 – Accessories

2“ Touchpanel (room)

The 2“ touchpanel for flush mounting offers the user user-friendly operation of the central unit. This panel makes it easy to set and adjust important parameters such as airflow and temperature setpoint. In addition, relevant information, such as pending alarms, is clearly displayed.

The 2“ HMI touchpanel includes a room temperature sensor.

No additional room temperature sensor can be connected when using this display.

An HMI connection cable (25 m) with RJ12 connector is available as an accessory.

Technical specifications

Item no.	Description	Dimensions [mm]	Protection index
A11059210	2“ HMI touchpanel	82 x 82 x 40	IP20
A11058497	HMI Cable	25000	-

2“ HMI touchpanel (room)

Pressure transmitter kit for constant pressure control

The pressure transmitter set for constant pressure control consists of a pressure transmitter and a measuring point placed in the ventilation duct. A measuring hose is supplied to connect these components. With this set, both the supply air and exhaust air flow can be controlled separately.

Please note that two sets are required per device.

Pressure control allows automatic adjustment of the central unit’s airflow based on the installed flow controllers in the system.

Technical specifications

Item no.	Pressure ranges	Technical specs sheet	Protection index
A11059206	0-2500 Pa	13.5 - 28 V DC	IP55

Pressure transmitter kit for constant pressure control

CO_2 sensor

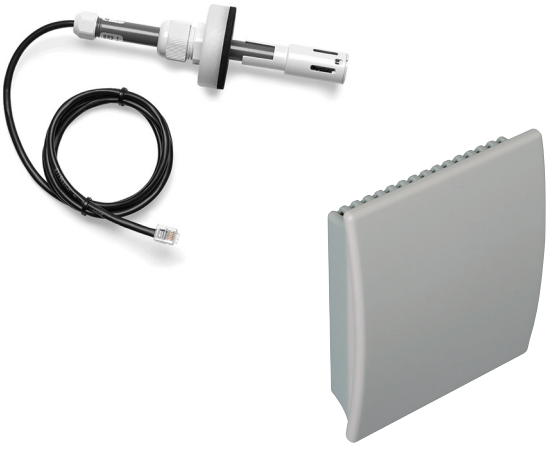
Demand-driven control not only makes sense, but is in many cases also essential to ensure optimal and efficient air quality. The CO_2 content of the air serves as a reliable indicator of sufficient air exchange. A CO_2 sensor enables precise control of the air output. In our accessories range, we offer two different CO_2 sensors to choose from.

The room sensor is placed directly in the room and enables demand-based control of the air capacity in the room. The duct sensor is installed in the duct system and is suitable for ventilation of several rooms. In this case, a mixed concentration of all rooms is recorded.

Technical specifications

Item no.	Description	Measuring area	Technical specs sheet	Protection index
A11059209	Duct sensor	450-2000 ppm	24 V DC	IP32
A11017090	Room sensor	450-2000 ppm	24 V DC	IP32

CO_2 sensor



CX3000 – Accessories

Temperature sensors

By installing external temperature sensors, the system enables a more accurate measurement of the temperature, even when it is not active.

We offer two different sensors in our range of accessories.

When activated, the internal extract air and outdoor air sensors are deactivated.

1. Room temperature sensor: This sensor enables accurate measurement and control of the room temperature in a specific control room.
2. Outside temperature sensor: This sensor measures the actual outside temperature even when the system is switched off.

Temperature senors

Technical specifications

Item no.	Description	Dimensions WxHxD [mm]	Measuring area	Protection index
A11069100	Temperature sensor Room (Modbus)	81.5x81.5x23.6	-10/+40 °C	IP20
A11059208	Temperature sensor Outdoor (Modbus)	63x97x33.5	-30/+50°C	IP65

PIR Sensor

The motion detector is positioned in the room, ideally so that it covers a large detection area. It has the function of automatically switching on the ventilation unit to the set level as soon as movement is detected. This is particularly useful in rooms that are used irregularly to ensure that the desired ventilation situation is automatically adjusted. It is possible to configure an adjustable on and off delay of 10, 30, 60 or 120 minutes.

PIR Sensor

Technical specifications

Item no.	Detection angle/range	Technical specs sheet	Protection index
A11059210	110° / 15m	24 V AC/DC	IP20

3-way control valves

The 3-way control valves are used for capacity control of the integrated water heating coil (HW) or change-over coil (CW). The matching actuator is controlled via the integrated EXcon control system.

The correct valve size is calculated in the design program EXselectPro.

Actuator/valve motor **3-way control valves**

Technical specifications

Item no.	K_{vs}	DN	Control ratio (K_{vs}/K_{vr})	Max dps (kPa)
A11068996	0.63	DN15	>50	350
A11068995	1.6	DN15	>50	350
A11068994	2.5	DN15	>50	350
A11068993	4	DN20	>100	350
A11068992	6.3	DN20	>100	350

Actuator/valve actuator for 3-way motorised valves

Item no.	Control signals	IP-classification	Type of control
A11068989	0-10V	IP54	Modulating

CX3000 – Accessories

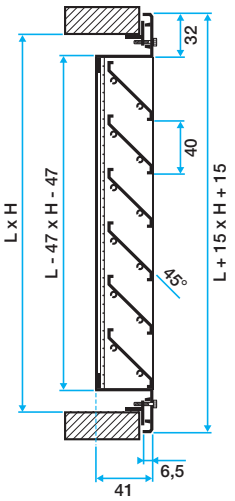
Weather protection grille – rectangular

The rectangular AG 638 series weather protection grille made of extruded aluminium is designed for exhaust and outdoor air from ventilation systems. The grille has horizontal, rain-repellent slats with a spacing of 40 mm. Inside the grille is a square galvanised steel mesh grid with a mesh size of 12 mm x 12 mm and a diameter of 1.2 mm. This protects against the ingress of foreign objects into the ventilation system.

Installation is carried out using the F10 mounting frame included in the scope of delivery. Fastening is done visibly with screws that are already pre-drilled. It is designed for mounting on external walls and ensures efficient air circulation while protecting against environmental influences.

Other sizes are available on request.

AG 638



Technical specifications

Item no.	Unit size	Connection dimension [mm]	Grid dimensions L x H [mm]	Max. air flow rate [m³/h]
A11052005	CX3010	Ø200	300 x 400	520
A11052007	CX3020	Ø250	400 x 400	760
A11052009	CX3030	550 x 300	500 x 600	1.600
A11052017	CX3040	600 x 400	600 x 600	2.000
A11052018	CX3050	600 x 400	600 x 800	2.700
A11052019	CX3060	750 x 400	600 x 1000	3.300

Roof terminals for exhaust air outlet and fresh air inlet

The EXHAUSTO roof terminal THAV incl. automatic shut-off damper is used for exhaust air outlet, the THFV for fresh air inlet.

The roof terminals impress with their harmonious design, provide an optimal ventilation finish to the duct system on the roof and are also easy to install in different roof constructions.

Their low noise level makes them particularly suitable for densely populated areas and high environmental requirements.

The vertical air discharge of the THAV roof terminal prevents precipitation of the polluted exhaust air in the environment and contamination of the roof surface. For optimum roof integration, the terminals are available incl. different flange types (perform or zinc flange). For this purpose, the corresponding roof pitch must always be specified.

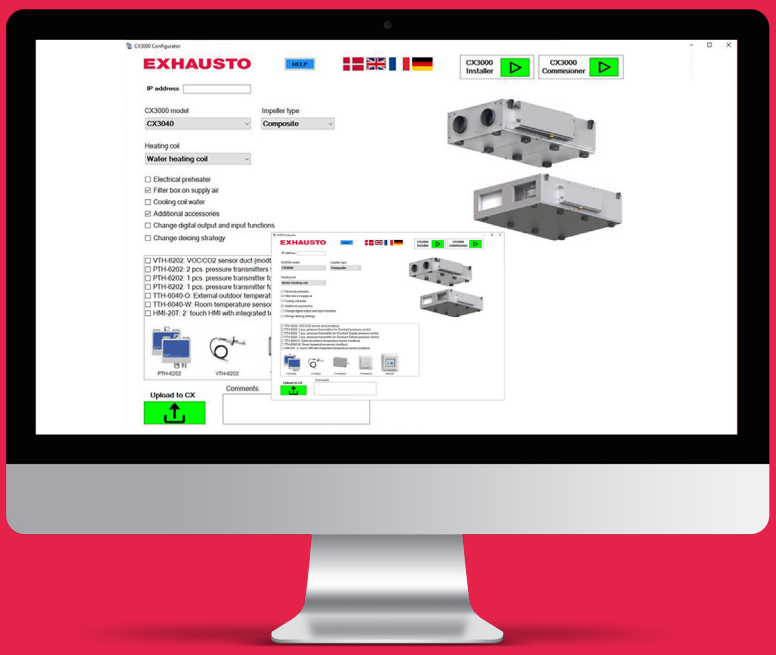
Due to the wide range of configuration options, please refer to our order form and design program at www.exhausto.com.

THAV / THFV

I CX3000 – Configurator

EASY SET UP AND CONFIGURATION

The CX3000 configurator is a program for easily set up and configure a CX3000 unit with built-in Excon Master. With a few selections you can quickly find the correct accessories and automatically configure the CX3000 accordingly.
With just a few clicks and upload = finished!
Download it from the EXHAUSTO homepage or use the QR code below. The program is downloaded as a ZIP file. The program does not need to be installed as it is executable i.e. it can be opened directly without installation. This also means that you can open the program directly from the ZIP file by double-clicking on the .exe file.



EXSELECTPRO
Design presentation

DESIGN PROGRAM OF THE FUTURE

With EXHAUSTO's product design program EXselectPRO, you can quickly and easily configure an air handling unit for your current project. You will receive all the necessary technical data, dimensional drawings, energy calculations and the values for the EcoDesign Directive.

EASY AND FAST DESIGNED FOR:

- ✓ Project-related device configuration
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QUESTIONS ABOUT THE PROGRAM?

Our consultants will be happy to assist you with the design program on request. To do so, please contact your sales contact or simply register on our website to receive your personal access.


EXSELECTPRO
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Supply unit
Airflow 1500 m³/h
External pressure drop in 50 Pa
External pressure drop out 200 Pa
Extract unit
Airflow 1500 m³/h
External pressure drop in 200 Pa
External pressure drop out 50 Pa
Unit construction
Air streams Two flow (1 Unit)
Unit orientation Horizontal Vertical Ceiling Top
Installation Indoor Outdoor
Hygiene level Standard VDI 6022
Heat exchanger
Plate
Twin coil
None
Compact
Panel
Dampers
Fluid
Fluid
Mixing
+1
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Integrated cooling
Arrangements
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EXHAUSTO

SUPPLIER OF VENTILATION SOLUTIONS SINCE 1957

High performance and low energy consumption

At EXHAUSTO, we do not compromise on quality. We are experts with many years of experience. Here you can not only be sure to get the optimal ventilation solution. You also have the security of an experienced and competent partner.

EXHAUSTO develops and produces professional ventilation technology for an optimal indoor climate in all areas, from offices, shops, schools and institutions to industrial buildings and hotels. With high performance and low energy consumption, we set new standards for well-being and economy.

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