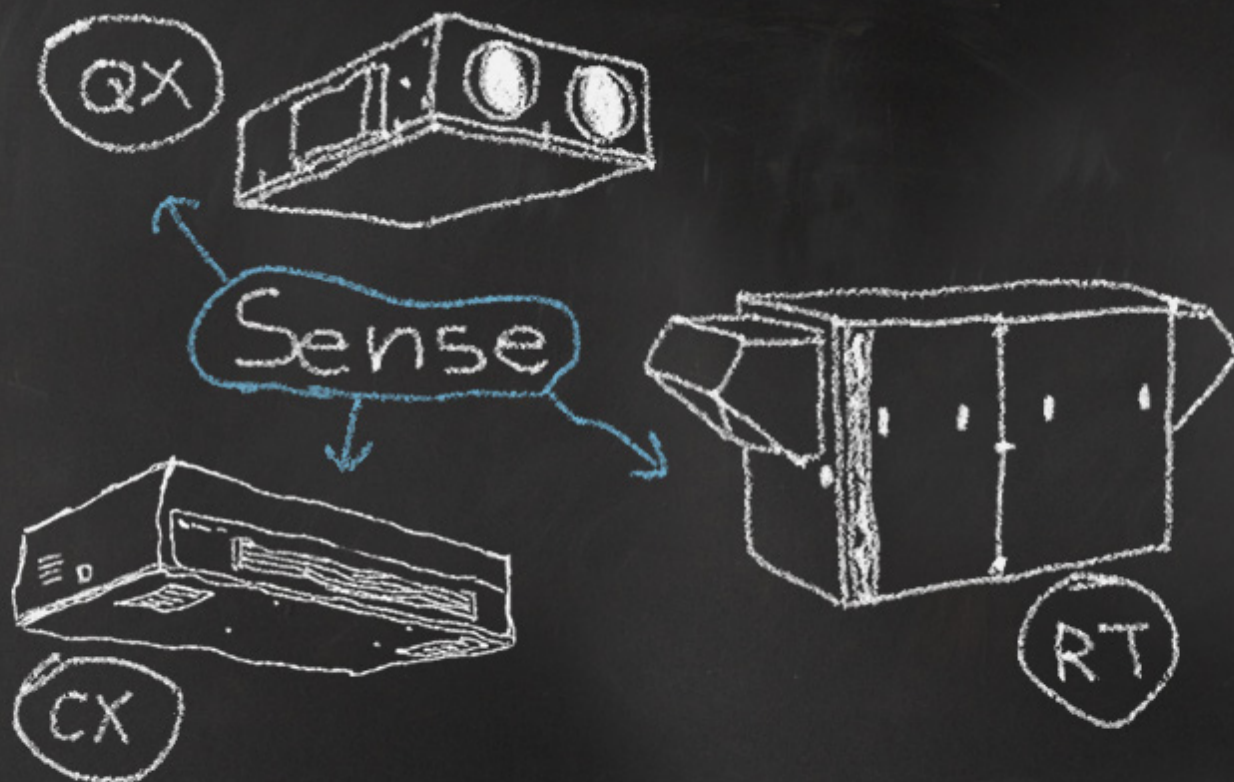


Systemair Sense

Ideal ventilation solution for learning environments





Systemair Sense

Healthy indoor air is the foundation for productive learning. With Systemair Sense, schools get a smart ventilation solution that combines quiet comfort with outstanding efficiency.

Designed for classrooms, these air handling units deliver fresh air evenly throughout the space while operating almost silently. Thanks to the integrated counterflow plate heat exchanger, they ensure energy savings without compromising comfort. The advanced control system adapts to the needs of

students and teachers, while the compact design makes installation easy in both new and existing buildings. Simple to use and maintain, Systemair Sense creates the perfect balance of comfort, efficiency, and reliability for modern education environments.



THAT ALL MAKES SENSE.



Sense CX

Designed for ceiling installation, Sense CX ensures quiet comfort in schools and offices. Equipped with energy-efficient EC fans and a highly effective aluminium or enthalpy heat exchanger, it delivers fresh air without drying the indoor climate too much. With CO₂ monitoring, ventilation rates adapt to real needs, ensuring optimal comfort in classrooms, kindergartens, offices, and conference rooms.



Sense QX

Designed for ceiling installation and short local ducting, Sense QX is the perfect solution where supply and extract air distribution can be adapted to space requirements. With side filter access, left/right versions, an integrated condensate pump, optional pre-/post-heating, and easy maintenance, it offers exceptional versatility. Ideal for meeting rooms, classrooms, open-plan offices, and modular buildings.



Sense RT

Engineered for rooftop installation, Sense RT frees valuable indoor space while simplifying installation and reducing costs. It ensures energy efficiency, comfort, and low operating costs. Perfect for schools and a wide range of commercial applications, including office buildings, shops, restaurants, hotels, and leisure centres.





Sense CX

Decentralised compact air handling unit for ceiling installation

- 3 sizes with air flow **up to 1000 m³/h**
- High heat recovery efficiency
- Humidity regeneration (enthalpy version)
- Quiet operation – **35 dB(A) at 1m distance** (nom. speed)
- Integrated **CO₂ sensor** for CO₂ control
- Energy-efficient **EC motors**

up to 13 people		up to 23 people	up to 33 people
up to 400 m³/h		up to 700 m³/h	up to 1000 m³/h
CX04		CX07	CX10

All-in-One Comfort

Reliable performance with high-efficiency EC fans, certified heat recovery, advanced filtration, integrated heating & cooling, and smart control.

Reliable performance

- Designed for indoor use (+5°C to +40°C)
- IP20 protection rating
- Suitable for clean air
- Dual-layer casing (20 mm insulated sandwich panels + 30 mm melamine foam inner layer)

High-efficiency EC Fans

- Balanced centrifugal fans with backward-curved impellers
- Maintenance-free bearings
- Inlets of the fans are fitted with pressure transmitters
- Built-in thermal protection

Certified heat recovery

- EUROVENT-certified counterflow heat exchanger (aluminium or enthalpy)
- Modulating by-pass damper
- Condensate tray (Condensate pump optional)

Air filtration

- Supply filter: ePM1 60%
- Extract filter: Coarse 60%
- Monitored by pressure transmitters
- Filters are to be changed by bottom service doors.

Integrated heating & cooling

- Electric pre-heaters, water or electric post-heaters
- 1-row & 3-row water coils with anti-freeze protection
- Condensate tray included

Smart control

- Temperature sensors: ODA, SUP, ETA, EHA
- Multi-stage freeze protection
- Analog CO₂ sensor included



Efficient, Quiet, and Smart Air Distribution

■ Sense CX

Designed for under-ceiling airflow using the coanda effect, this unit **ensures even and effective fresh air supply throughout the entire space**. With silent operation, easy maintenance, and intuitive controls, it's ideal for both new and existing buildings.

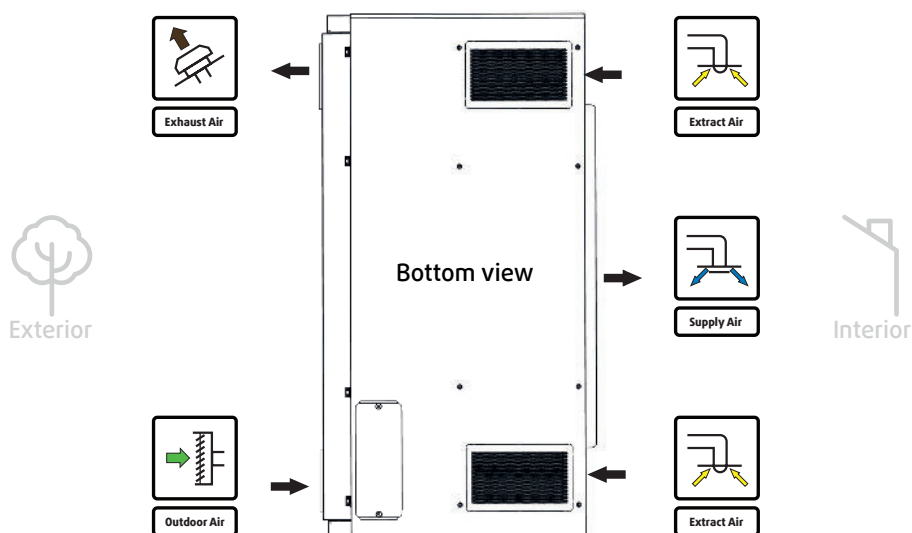
Its quiet operation makes it a **perfect choice for schools, offices and conference rooms**.

Take control of your indoor climate.

The intelligent control solution for maximum performance and flexibility. The fully integrated system features a 3.5" touchscreen display and supports both manual and demand-controlled ventilation modes (CAV and DCV). Whether you need precise temperature regulation or automated energy-saving functions, this solution adapts seamlessly to your needs.

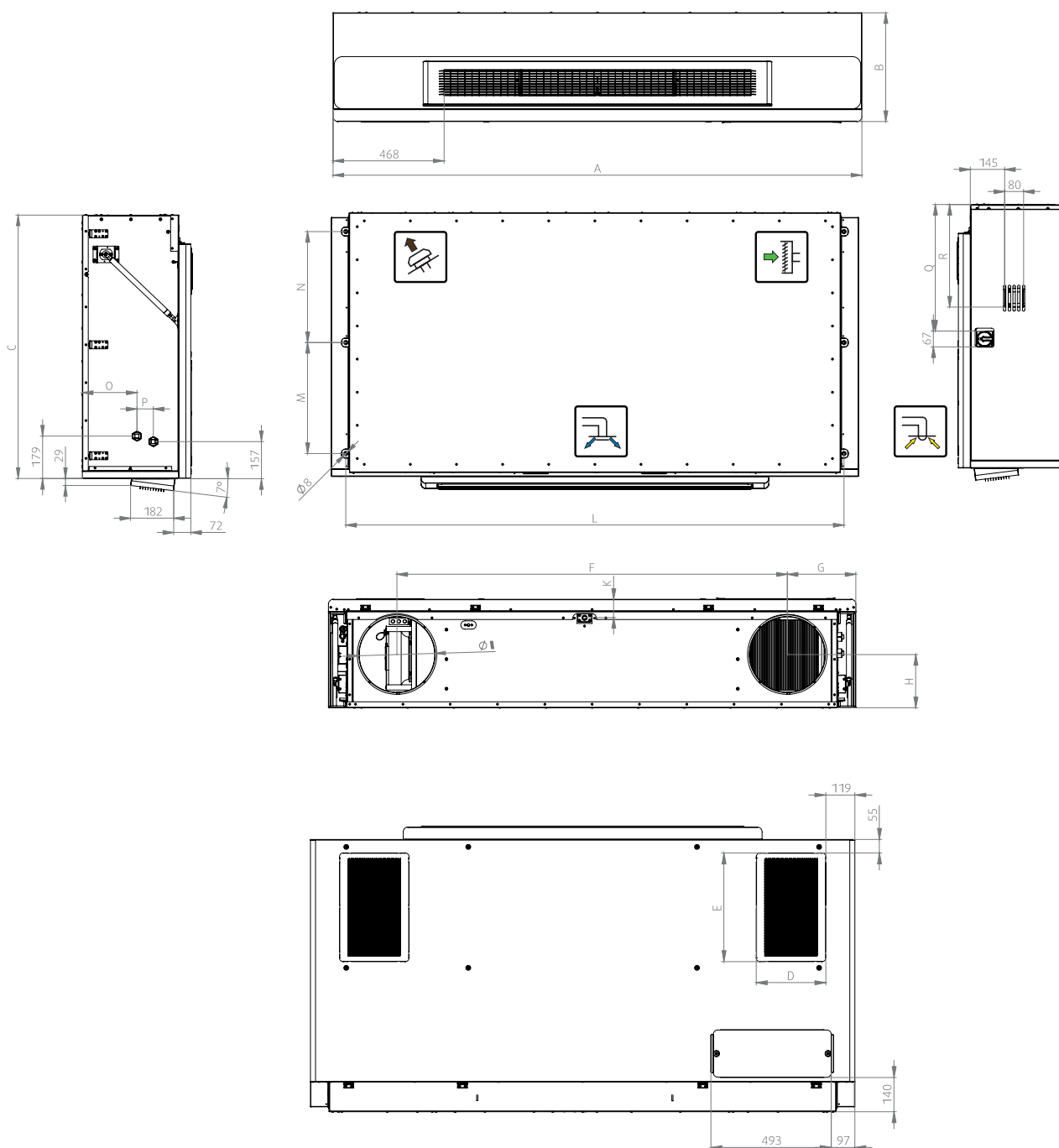
Sense CX

Technical parameters



Type	Voltage [V]	Frequency [Hz]	Total consumption [W]	Total current [A]	Weight [kg]	Weight - Top connection [kg]
SENSE CX04..-XC3	230	50	350	2,45	169	174
SENSE CX04..-XS0	230	50	350	2,45	167	172
SENSE CX04..-XV1	230	50	350	2,45	169	174
SENSE CX04..-XE1	230	50	1850	9	169	174
SENSE CX04..-EC3	230	50	1850	9	170	175
SENSE CX04..-ES0	230	50	1850	9	168	173
SENSE CX04..-EV1	230	50	1850	9	170	175
SENSE CX04..-EE1	230	50	3350	15,51	170	175
SENSE CX07..-XC3	230	50	350	2,45	201	207
SENSE CX07..-XS0	230	50	350	2,45	200	206
SENSE CX07..-XV1	230	50	350	2,45	201	207
SENSE CX07..-XE1	230	50	2600	12,3	202	208
SENSE CX07..-EC3	230	50	2350	11,2	203	209
SENSE CX07..-ES0	230	50	2350	11,2	201	207
SENSE CX07..-EV1	230	50	2350	11,2	203	209
SENSE CX07..-EE1	400	50	4600	9,8	203	209
SENSE CX10..-XC3	230	50	900	4	270	277
SENSE CX10..-XS0	230	50	900	4	267	274
SENSE CX10..-XV1	230	50	900	4	270	277
SENSE CX10..-XE1	400	50	3900	8,3	270	277
SENSE CX10..-EC3	400	50	3900	7,5	270	277
SENSE CX10..-ES0	400	50	3900	7,5	268	275
SENSE CX10..-EV1	400	50	3900	7,5	270	277
SENSE CX10..-EE1	400	50	6900	12,7	270	277
SENSE CX10..-XE0	230	50	2900	12,7	270	277
SENSE CX10..-GC3	230	50	2900	12,7	270	277
SENSE CX10..-GS0	230	50	2900	12,7	270	277
SENSE CX10..-GV1	230	50	2900	12,7	270	277

Dimensions



Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
SENSE CX04	1960	399	957	274	420	1390	260	199	255	968	70	1836	265	627	197	59	378	124
SENSE CX07	2230	461	1114	285	445	1650	290	234	320	1083	77	2106	469	469	231	69	535	433
SENSE CX10	2553	576	1280	410	507	1920	317	289	320	1277	79	2430	519	519	313	69	696	543



Sense QX

Compact ceiling unit with efficient heat recovery,
designed for connection to a short local ducting system.

- Compact monoblock casing with 30 mm insulated panels
- High heat recovery efficiency
- Quiet operation – 33 dB(A) at 1m distance (nom. speed)
- Energy-efficient EC motors
- Low installation height – only 477mm
- Integrated condensate pump

up to
32 people

up to
960 m³/h

QX10

Ceiling-Mounted Comfort with Silent Efficiency

Reliable performance

- Designed for indoor use (+5°C to +40°C)
- IP20 protection rating
- Suitable for clean air applications
- 30 mm sandwich panels with mineral wool insulation

High-efficiency EC Fans

- Balanced centrifugal fans with backward-curved impellers
- Maintenance-free bearings
- Inlets of the fans are fitted with pressure transmitters
- Built-in thermal protection

Certified heat recovery

- EUROVENT-certified aluminium counterflow heat exchanger
- Modulating by-pass damper
- Condensate tray
- Condensate pump

Air filtration

- Supply filter: ePM1 60%
- Extract filter: ePM10 50%
- Monitored by pressure transmitters
- Filters are to be changed by side / bottom service doors

Flexible Heating Options

- Electric pre/post-heaters
- Duct water coil available as an accessory

Smart control

- Temperature sensors: ODA, SUP, ETA, EHA
- Multi-stage freeze protection



Efficient, Whisper-Quiet Comfort

■ Sense QX

Designed for ceiling installation, the SENSE QX provides quiet and energy-efficient heat recovery with short local ducting ensuring even and comfortable air distribution throughout the space.

With its compact height of just 477 mm and silent operation (only 33 dB(A)/1m), it is a perfect fit for classrooms, meeting rooms, offices, and other commercial interiors.

Take control of your indoor climate.

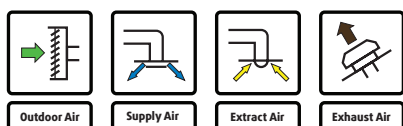
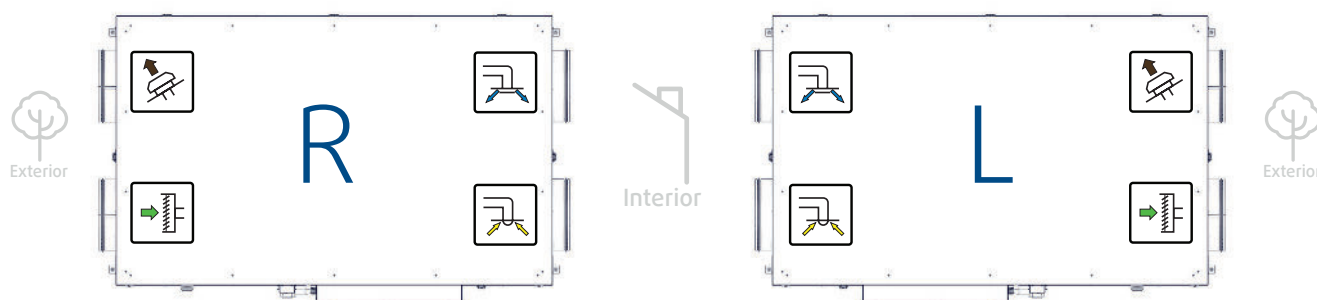
The intelligent control solution for maximum performance and flexibility. The fully integrated system features a 3.5" touchscreen display and supports both manual and demand-controlled ventilation modes (CAV and DCV). Whether you need precise temperature regulation or automated energy-saving functions, this solution adapts seamlessly to your needs.

Sense QX

Technical parameters

Right version

Top view



Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	Total current [A]	Weight [kg]
SENSE QX10...-XS0 Model without electric pre-heater - without coil	230	50/60	0,4	3,0	175
SENSE QX10...-XE1 Model without electric pre-heater - electric coil (post-heater)	230	50/60	1,2	6,5	176
SENSE QX10...-ES0 Model with electric pre-heater - without coil	230	50/60	2,4	11,7	176
SENSE QX10...-EE1 Model with electric pre-heater and post-heater	230	50/60	3,2	15,2	177

Characteristics of electric motors (1 Fan only)

Type	Voltage [V]	Frequency [Hz]	Rated input [W]	Total current [A]	Speed [r/min]	Protection IP	Insulation class
SENSE QX10...	230	50/60	180	1,35	2930	44	B

Characteristics of electric coil

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	ΔT [°C]
SENSE QX10...E1	230	50/60	0,8	2,5

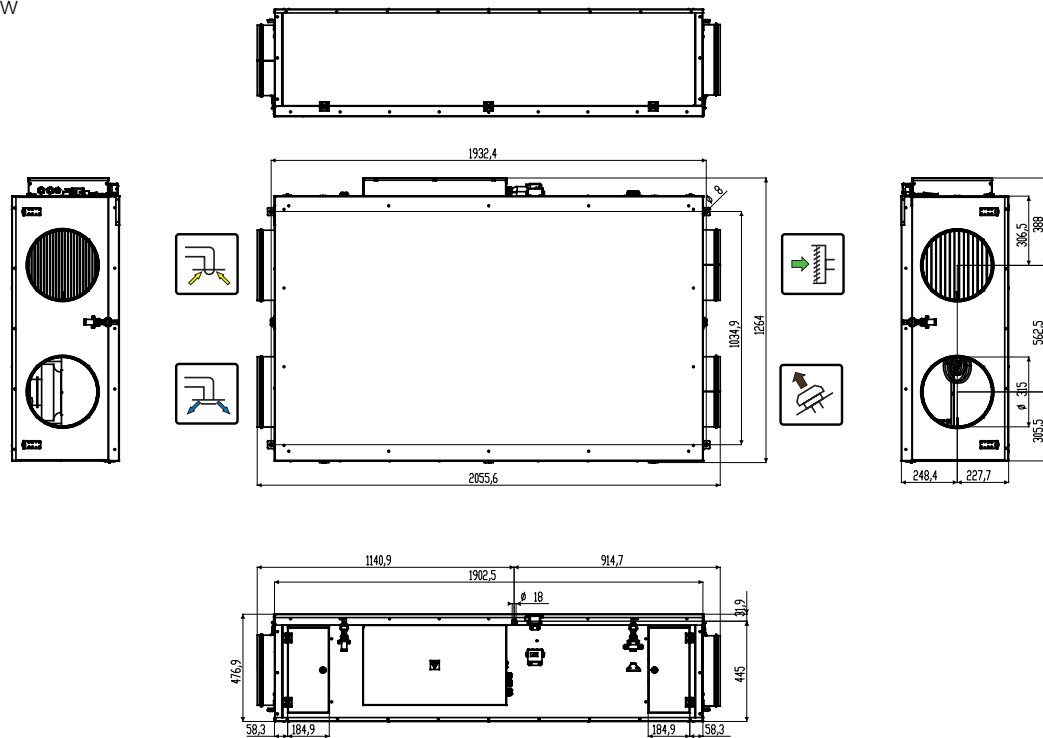
Characteristics of electric preheater

Type	Voltage [V]	Frequency [Hz]	Rated input [W]	ΔT [°C]
SENSE QX10...-E..	230	50/60	2,0	6,2

Dimensions

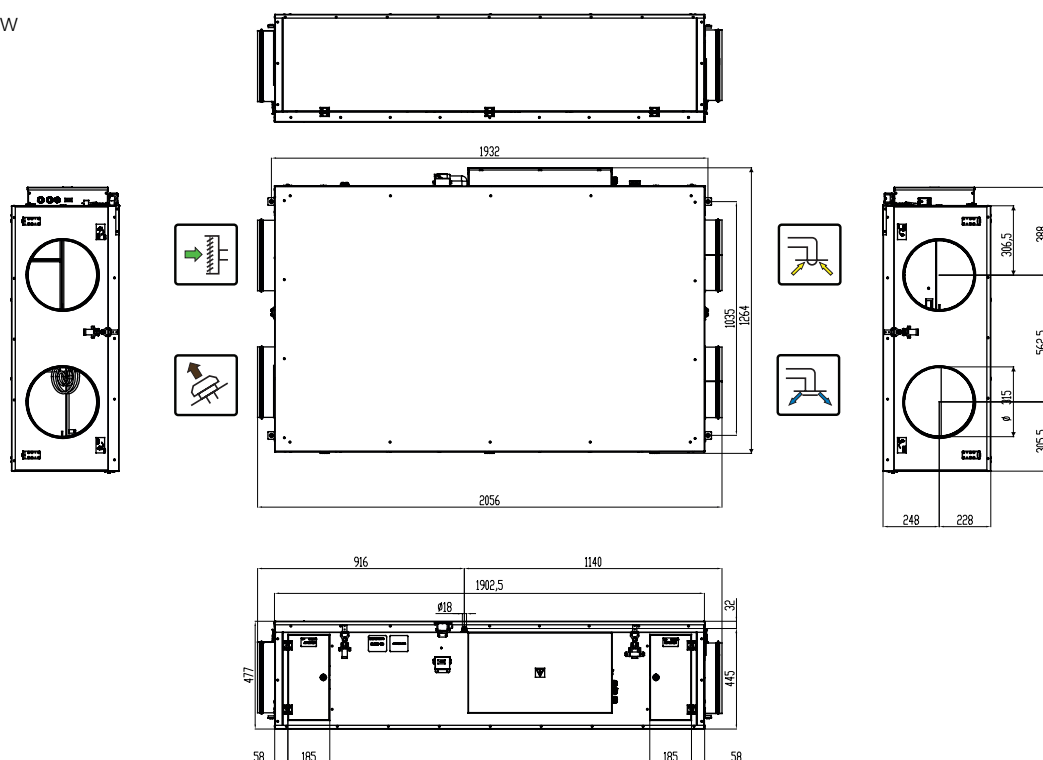
Right version

Top view



Left version

Top view





Sense RT

A compact roof-top ventilation unit with heat recovery

- Compact monoblock casing with **50 mm insulated panels**
- **Outdoor-ready** (roof cover & inlet/outlet hoods)
- Designed for **outdoor use**, -20 °C to +60 °C, IP43
- **Efficient EC fans** with pressure monitoring
- **Smart air filtration** with sensor monitoring
- Integrated temperature sensors with **anti-freeze protection**

up to
160 people

up to
4900 m³/h

RT50

Fresh Air, Straight from the Roof

Reliable performance

- Designed for outdoor use (-20 °C to +60 °C)
- IP43 protection rating
- 50 mm sandwich panels (powder-coated exterior, galvanised interior) and mineral wool insulation

High-efficiency EC Fans

- Balanced centrifugal fans with backward-curved impellers
- Maintenance-free bearings
- Built-in pressure and thermal protection

Certified heat recovery

- EUROVENT-certified counterflow heat exchanger (aluminium or enthalpy)
- Modulating by-pass damper
- Dual condensate trays with drainage connections (EHA & SUP)

Air filtration

- Pre-filter: Coarse 65%
- Supply filter: ePM1 60%
- Extract filter: ePM10 50%
- Monitored by pressure transmitters
- Easy side-door access

Optional Pre-Heater

- Integrated electric pre-heater with SSR switching and safety elements protecting against overheating (operational and safety thermostats with manual reset and temperature sensors).

Smart control

- Temperature sensors: ODA, SUP, ETA
- Multi-stage freeze protection for the heat recovery exchanger.



Durable,
Efficient,
Weather-
Protected

■ Sense RT

Designed for rooftop installation, this compact monobloc **unit delivers reliable performance in outdoor environments, ensuring durability and long-term efficiency.**

The unit provides consistent air management in all conditions and it's built for year-round comfort. Quiet, efficient, and easy to maintain, it's an ideal solution **for offices, schools, and commercial buildings.**

Take control of your indoor climate.

The intelligent control solution for maximum performance and flexibility. The fully integrated system features a 3.5" touchscreen display and supports both manual and demand-controlled ventilation modes (CAV, DCV and VAV). Whether you need precise temperature regulation or automated energy-saving functions, this solution adapts seamlessly to your needs.

Sense RT

Technical parameters



Type	Voltage [V]	Phase [qty]	Frequency [Hz]	Input power [kW]	Current per phase [A]	Protection IP	Weight [kg]
SENSE RT50	400	3	50/60	20,3	29,4	43	750

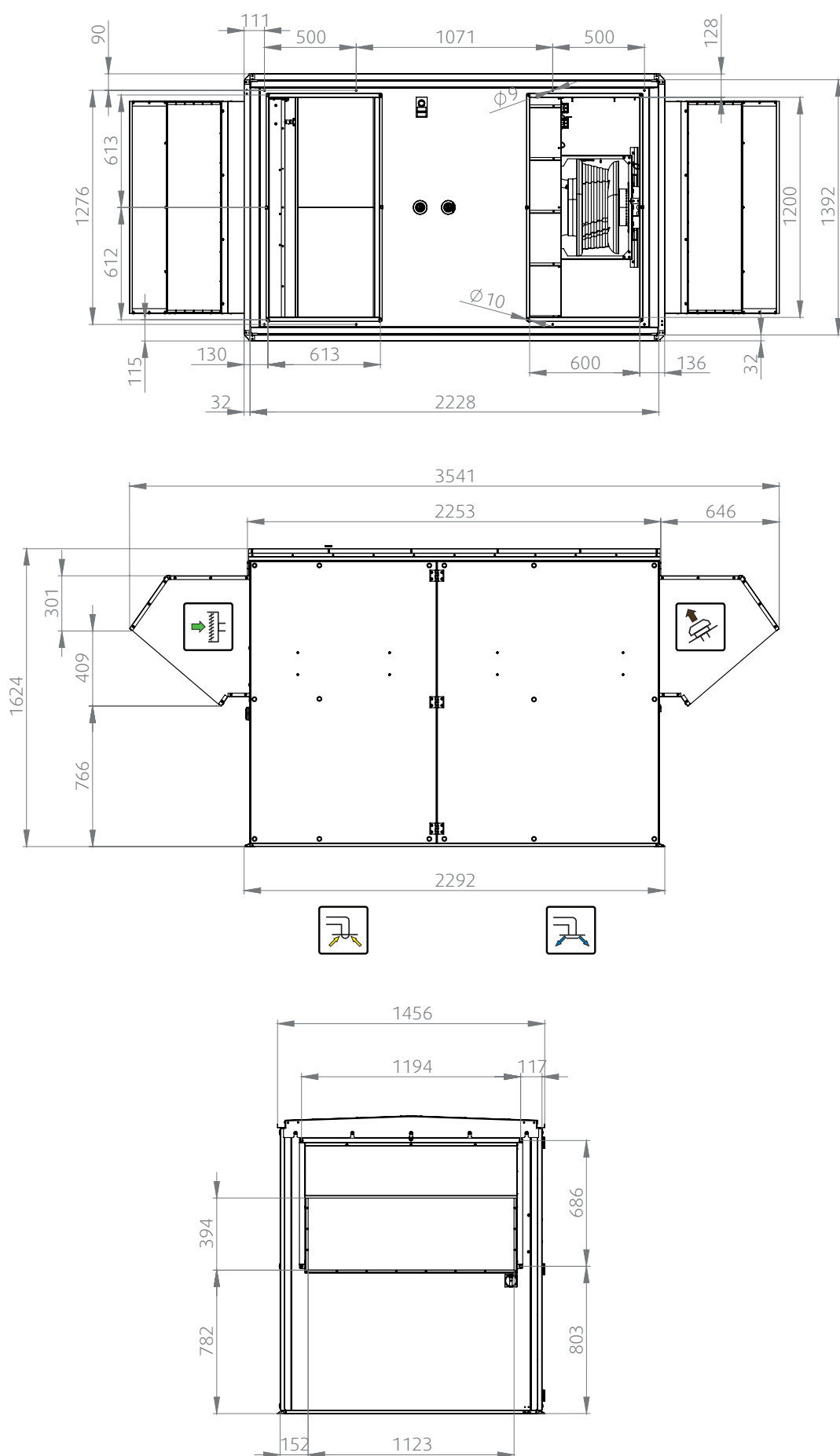
Characteristics of electric motors (1 Fan only)

Type	Voltage [V]	Phase [qty]	Frequency [Hz]	Input power [W]	Current per phase [A]	Speed [r/min]	Protection IP
SENSE RT50	380...480	3	50/60	2300	3,7	2200	55

Characteristics of electric preheater

Type	Voltage [V]	Phase [qty]	Frequency [Hz]	Output power [kW]	Current per phase [A]
SENSE RT50	400	3	50/60	16,8	2,7

Dimensions





Touch-screen display

With intuitive menu

Controls

Built-in Intelligence

Sense units are equipped with intelligent control functions that ensure reliable, efficient, and flexible operation. From stepless fan and heating control to demand-based ventilation, automatic antifreeze protection, and precise filter monitoring, every component is designed for optimal performance and energy savings. These smart features guarantee maximum comfort, safety, and sustainability and ensure your system is future-proof.



Precision Control, Perfect Climate

Airflow control



- **Stepless EC fans** controls by PWM signal - fan offset setting available (underpressure, overpressure)
- **CAV** - manual control (Airflow control in m³/h)
- **DCV** - automatic control (Airflow control based on AQS parameters)
- CO₂ sensor 0-2000ppm (included as standard in Sense CX only)
- AQS - Possibility to connect (CO₂, RH, VOC,...)
- **VAV** (Sense RT only) - automatic control (Airflow control based on the pressure in the supply duct system)

Temperature control



- **Possible sensor selection:**
 - Room range 10-30°C
 - Extract duct (ETA) - range 10-30°C
 - Supply duct (SUP) - range 10-45°C
- **Setable supply duct limits:**
 - Available for temperature control based on a room and ETA sensors
 - Range: 10-45°C
- **Stepless BY-PASS control** Temperature control, anti-freeze protection, free-cooling
- **Electric PRE-heater**
 - Fluent heat output control (PWM, SSR)
 - Anti-freeze protection of heat recovery exchanger only

- **Electric POST-heater**
 - Fluent heat output control (PWM, SSR)
- **Water heater**
 - Fluent heat output control (0-10V)
 - Automatic antifreeze protection
- **WCO (Water Change/Over) coil**
 - Fluent output control (0-10V)
 - Automatic detection of heating / cooling water and anti-freeze protection
- **DX control**
 - External module control by various signal options (ON/OFF, 0-10V....);
 - Heat pump error input, Defrost input, HEAT/COOL output.

Smart Modes, for Every Situation

■ Sense Control

From intensive air exchange with **BOOST** to energy-saving **FREECOOLING** at night, our systems adapt to your needs. **OCCUPANCY** mode ensures airflow only when spaces are in use, while the **TIMER** function lets you plan ventilation with precision. In emergencies, **FIRE** mode provides reliable safety when it matters most.

	CX	QX	RT
 BOOST	✓	✓	✓
 FREECOOLING	✓	✓	✓
 OCCUPANCY	✓	✓	✓
 TIMER	✓	✓	✓
 FIRE	✓	✓	✓



$$\frac{\operatorname{tg} \frac{a}{2}}{2}$$

$$\sqrt{36}$$

$$\frac{1 + \operatorname{tg} \frac{a}{2}}{2}$$

$$\begin{array}{r} 107 \\ + 92 \\ - 75 \\ \hline \end{array}$$

$$= mc^2$$

$$2x^2 + 6x =$$

$$\frac{1}{n} = \sqrt[n]{a}$$

?

$$Fe_2O_3$$

$$\sqrt[3]{8} =$$



Contact your sales representative for a more detailed
unit calculation and technical data.

...this makes sense.

