

Type SCHOOLAIR-D



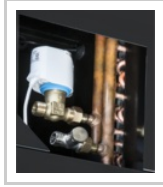
SUPPLY AND EXTRACT AIR UNIT WITH HEAT EXCHANGER AND HEAT RECOVERY, SECONDARY AIR OPTION (BASED ON AIR QUALITY), FOR INSTALLATION BELOW THE CEILING SLAB

Ready-to-operate decentralised ventilation unit that provides good comfort levels, used for the ventilation and extract ventilation of rooms such as classrooms in schools

- Acoustically optimised EC fans with low specific fan powers, SFP-1 according to EN 13779
- Plate heat exchanger for heat recovery (air/air), including bypass damper with electric actuator (open-close)
- Heat exchanger for heating and cooling as 2-pipe or 4-pipe system
- Reduction of fine dust and pollen contamination due to integral filters; F7 fresh air filter
- The condensate drip tray is useful if the temperature temporarily falls below the dew point
- Motorised shut-off dampers, normally closed (NC)
- Installation without interruption to the operations of the respective school
- Easy filter change, no tools required

Optional equipment and accessories

- Modular control system FSL-CONTROL II, specially for decentralised ventilation systems
- Demand-based fresh air volume, free cooling and night purge, depending on control strategy
- Automatic switching to secondary air mode (based on air quality)
- Variable heat recovery
- Powder-coated RAL 9005 (black, casing) or RAL 9010 (white, cover)



Application

- Ventilation and extract ventilation of rooms with a depth up to approx. 6 m
- 2-pipe or 4-pipe heat exchangers enable good comfort levels
- Supply air discharge from supply air slots
- Energy-efficient solution since water is used for heating and cooling
- For new buildings, refurbishment projects and revitalisation projects
- Installation below the ceiling slab and near an external wall
- Typical applications include classrooms in schools, playrooms in daycare facilities, smaller meeting rooms and offices with a high air change rate

Special characteristics

- Decentralised ventilation unit for high volume flow rates
- Air-water heat exchanger as 2-pipe or 4-pipe system, with G $\frac{1}{2}$ " union nuts and flat seals
- Cross flow heat exchanger for heat recovery, including bypass damper with electric actuator
- Motorised shut-off dampers for fresh air and exhaust air, normally closed (NC) in order to prevent uncontrolled airflows
- The condensate drip tray is useful if the temperature temporarily falls below the dew point
- Ceiling plate with height-adjustable frame (up to +29 mm) and integral supply and extract air slots
- 2 energy-efficient and acoustically optimised EC fans with low specific fan powers, SFP-1 according to EN 13779
- Meets the hygiene requirements of VDI 6022
- Recuperative heat recovery with motorised variable bypass all year round
- Compact construction, hence particularly suitable for refurbishment projects
- Demand-based ventilation and extract ventilation is possible by means of monitoring the room air quality and with dedicated control equipment
- Automatic switching to secondary air mode (only with an air quality sensor) if the room air quality (measured with the integral VOC sensor, for example) is between the previously defined range. The unit always starts in secondary air mode, which is more energy efficient.

Nominal sizes

- 1640 × 400 × 800 mm (B × H × T)

Variants

- SCHOOLAIR-D – volume flow rates: 150, 200, 250 and 300 m³/h, with cross flow plate heat exchanger for heat recovery

Construction

- Powder-coated RAL 9005, black

Useful additions

- Modular control system FSL-CONTROL II, specially for decentralised ventilation systems
- Connecting hoses

Construction features

- 2 energy-efficient EC fans with low specific fan powers, SFP = 1 according to EN 13779
- The supply air is discharged to the room as an inducing displacement flow from the supply air slots
- The extract air is removed through slots

Materials and surfaces

- Casing, ceiling plate, filter chamber cover, fans and hanging brackets are made of galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Plate heat exchanger (heat recovery) made of aluminium
- Casing powder-coated, black (RAL 9005)
- F7 filter medium made of moisture-resistant glass fibre paper (certified by Eurovent)
- Mineral wool lining to DIN 4102, fire rating class A, faced with glass fibre fabric as a protection against erosion, effective with airflow velocities up to 20 m/s
- Closed cell sealing strips
- Ceiling plate powder-coated pure white (RAL 9010)
- Supply and extract air slots made of aluminium, air control blades made of polystyrene

Standards and guidelines

- Façade ventilation units of Type SCHOOLAIR-D conform to VDI 6035 and VDMA 24390
- Hygiene certificate to VDI 6022
- Heating/cooling fluid conforms to VDI 2035
- Meets the requirements of EU directive 1253/2014 (ErP)

Maintenance

- VDI 6022, Part 1, applies (Hygiene requirements for ventilation and air-conditioning systems and units)
- The heat exchanger can be vacuumed with an industrial vacuum cleaner if necessary
- It can also be cleaned with commercial, non-aggressive cleaning agents

TECHNICAL INFORMATION

Function, Technical data, Quick sizing, SPECIFICATION TEXT, Order code, Related products 

Dimensions and weight ▼

Installation examples, Installation details, Basic information and nomenclature ▼

TROX UK Ltd



Caxton Way,
Thetford, Norfolk, IP24 3SQ, UK
Tel: +44 (0) 1842 754545
Fax: +44 (0) 1842 763051

General Enquiries –
info@troxuk.co.uk
Sales & Customer Services –
sales@troxuk.co.uk
Accounts –
accounts@troxuk.co.uk

Online-Services

- [TROX Academy](#)

- [Your contact partner](#)

- [Our Office London](#)

- [Our Office Thetford](#)

Service-Hotlines

Sales:
+44 (0)1842 754545
[Contact](#)

Service:
+44 (0)1842 754545
[Contact](#)

Technical service
+44 (0)1842 754545
[Contact](#)

TROX SOCIAL MEDIA
