

Dantherm[®]
CLIMATE SOLUTIONS



DanX 1/2/3
For swimming pools & wellness centres

DANTHERMGROUP

AIR HANDLING UNITS WITH HEAT RECOVERY

DANX 1-2-3 XD



DANX 1/2/3 XD

DanX XD with double crossflow heat exchanger

The DanX XD is a very effective ventilation system that uses outdoor air to provide dehumidification using a double heat exchanger that delivers up to a 95% heat recovery. This reduces energy consumption and total operating costs, thus making the unit perfect for managing humidity and temperature in the pool room.

For both DanX HP and DanX XD

The built-in mixing function takes care not to add any more outdoor air than necessary to provide a comfortable indoor climate. Free cooling is also an option during the summer, where the unit can add up to 100% outdoor air into the pool area through a bypass. The unit's compact, integrated design enables optimal installation in the technical room. Convenient top or side connections ensure easy access to ducts.

Optional accessories

- Water trap - 092447
- Fire thermostat 40 °C / 70 °C - 101277
- Attendance transmitter - 076092
- Outdoor sensor - 018092
- Frost thermostat for LPHW coil Auto reset - 101953
- Frost thermostat for LPHW coil MAN reset - 102092
- 3,5" Control panel, touch screen - 109404



- Built-in user friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity. The custom-built software runs the unit as efficiently as possible under different conditions.
- Double crossflow heat exchangers with a high efficiency of more than 95% and a low pressure drop.
- Built-in bypass for free cooling in summertime.
- Highly energy-efficient EC plug fans.
- Efficient M5/ePM10 70% and F7/ePM1 55% compact filters with low pressure drop.
- Self-bearing cabinet with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, heating coil with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts, nuts.
- Two large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- All-in-one box solutions for easy and quick installation – all sensors and electrical components pre-connected.
- BMS communication with either Modbus or BACnet.

Specifications	Units	DANX 1 XD	DANX 2 XD	DANX 3 XD
Nominal air volume	m ³ /h	1,000	1,750	2,750
Max. air volume	m ³ /h	1,300	2,100	3,700
Max. external duct pressure*	Pa	350	350	350
Outdoor air volume	%	0-100	0-100	0-100
Dehumidification capacity VDI 2089**	kg/h	7	11	18
Max. power consumption	kW	1.1	1.2	1.9
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Product size (w x d x h)	mm	1750 x 515 x 1570	1750 x 780 x 1570	2250 x 890 x 1990
Weight	kg	254	344	465

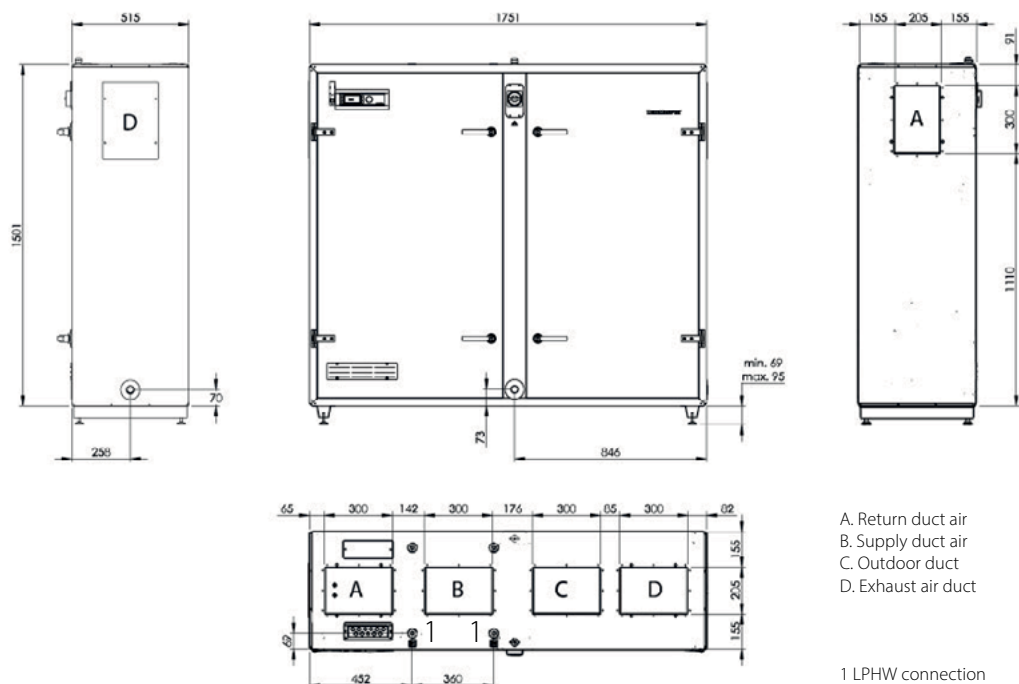
* at nominal air volume, ** at 30°C/54% indoor

AIR HANDLING UNITS WITH HEAT RECOVERY

DANX 1-2-3 XD

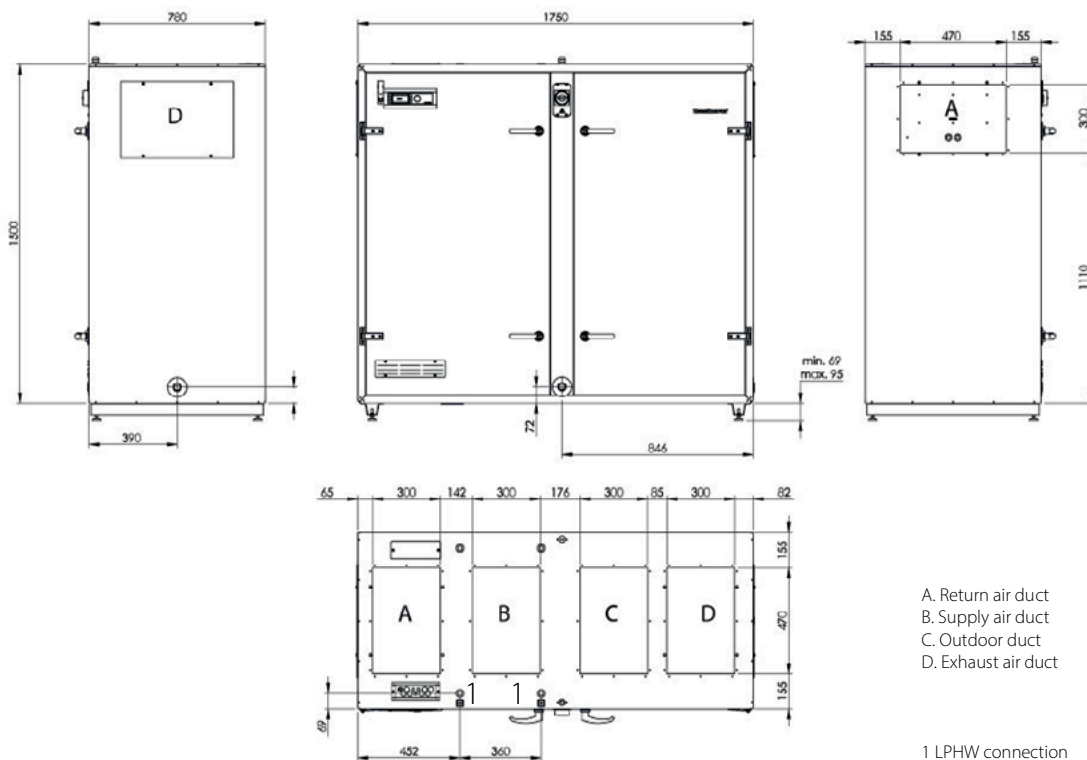


DanX 1 XD dimensions (mm)



The unit shown in the picture is left hand position.

DanX 2 XD dimensions (mm)

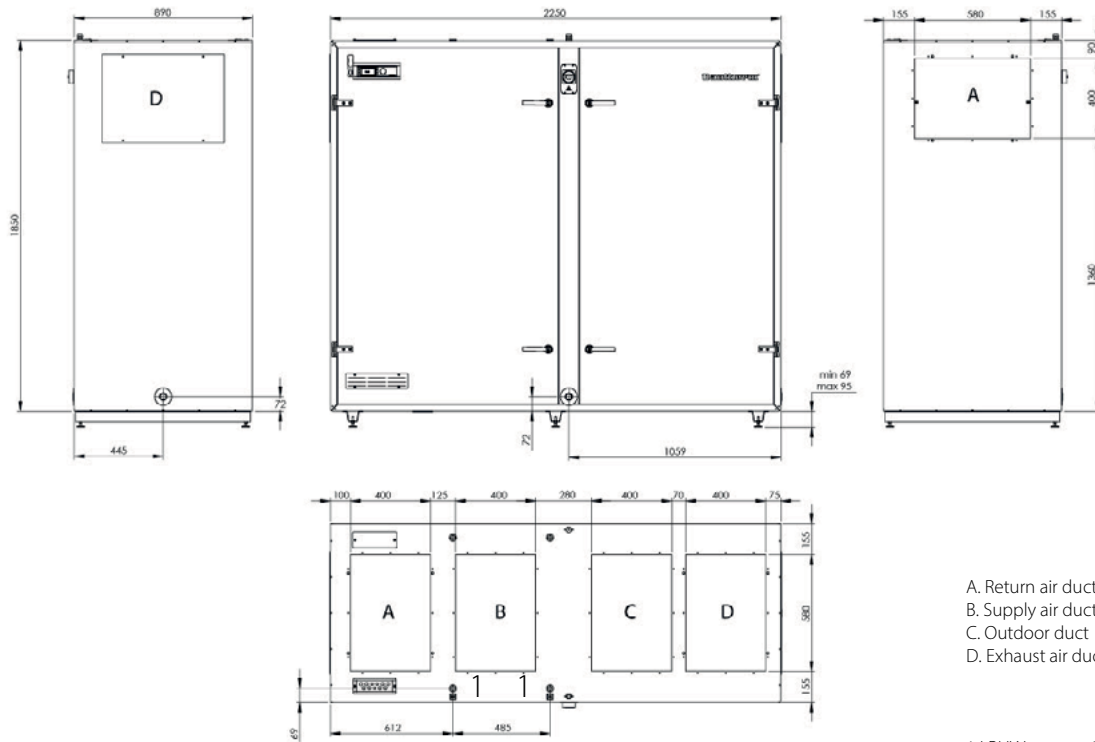


The unit shown in the picture is left hand position.

AIR HANDLING UNITS WITH HEAT RECOVERY DANX 1-2-3 XD



DanX 3 XD dimensions (mm)



- A. Return air duct
- B. Supply air duct
- C. Outdoor duct
- D. Exhaust air duct

1 LPHW connection

The unit shown in the picture is left hand position.

DANX 1-2-3 HP



DANX 1/2/3 HP

DanX HP with double crossflow heat exchanger and heat pump

The DanX HP combines the strengths of a heat pump system with a system that dehumidifies using outdoor air. The combined heat pump and highly effective double crossflow heat exchanger precisely regulate both humidity and temperatures in the pool room. In addition to heat recovery exceeding 100% the heat pump optimises dehumidification, so that the proportion of outdoor air never exceeds what is necessary to ensure comfort. For further energy optimization, a water-cooled condenser can be integrated into the heat pump. This allows the excess heat to be transferred to the pool or the hot water supply, where it is reused.

Optional accessories

- Water trap - 092447
- Fire thermostat 40 °C / 70 °C - 101277
- Attendance transmitter - 076092
- Outdoor sensor - 018092
- Frost thermostat for LPHW coil Auto reset - 101953
- Frost thermostat for LPHW coil MAN reset - 102092
- 3,5" Control panel, touch screen - 109404



- Built-in heat pump with rotary compressor and high COP. Optional built-in water cooled condenser for heating of the pool or domestic water.
- Built-in user friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity.
- Double crossflow heat exchangers with a high efficiency of more than 85% and a low pressure drop.
- Built-in bypass for free cooling in the summertime.
- Highly energy-efficient EC plug fans.
- Efficient M5/ePM10 70% and F7/ePM1 55% compact filters with low pressure drop.
- Self-bearing cabinet with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, coils with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts and nuts.
- Two large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- All-in-one box solutions for easy and quick installation with all sensors and electrical components already connected.
- BMS communication with either Modbus or BACnet.

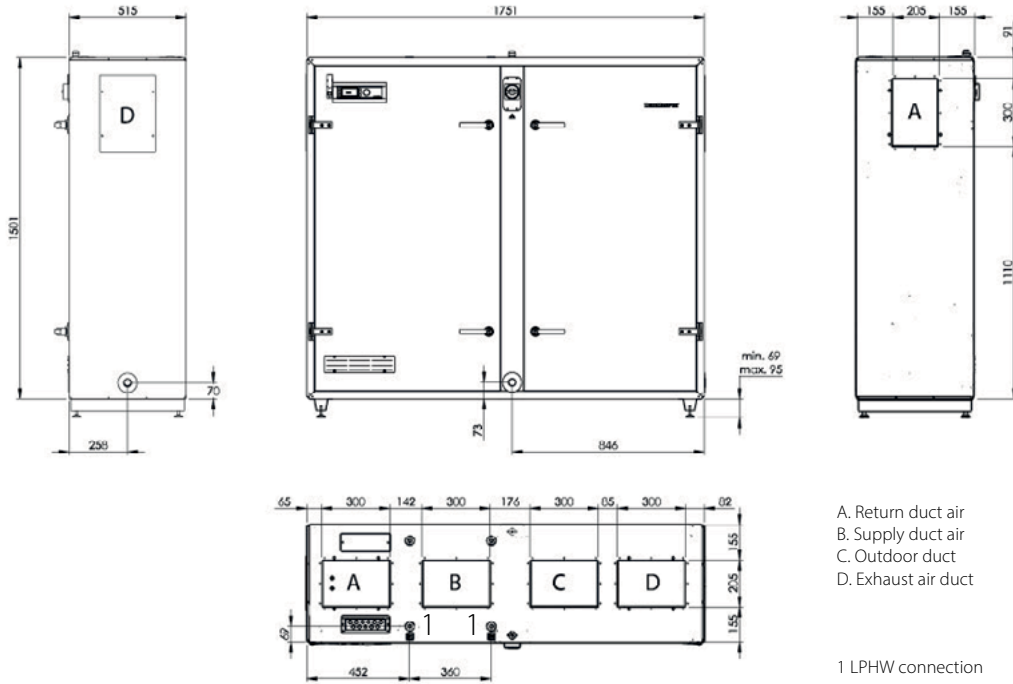
Specifications	Units	DANX 1 HP	DANX 2 HP	DANX 3 HP
Nominal air volume	m ³ /h	1,000	1,750	2,750
Max. air volume	m ³ /h	1,300	2,100	3,500
Max. external duct pressure*	Pa	350	350	350
Outdoor air volume	%	0-100	0-100	0-100
Dehumidification capacity recirculation**	kg/h	1.7	4.2	6.9
Dehumidification capacity VDI 2089**	kg/h	7	11	18
Power consumption compressor**	kW	0.6	1.2	1.9
Max. power consumption	kW	1.7	2.9	4.6
Power supply	V/Hz	230/1ph/50	400/2ph/50	400/2ph/50
R407C gas weight/CO2 equivalent	kg/t	1.0/1.77	1.6/2.84	4.0/7.10
Product size (w x d x h)	mm	1750 x 515 x 1570	1750 x 780 x 1570	2250 x 890 x 1990
Weight	kg	279	379	500

* at nominal air volume, ** at 30°C/54% indoor

AIR HANDLING UNITS WITH HEAT RECOVERY AND HEAT PUMP DANX 1-2-3 HP



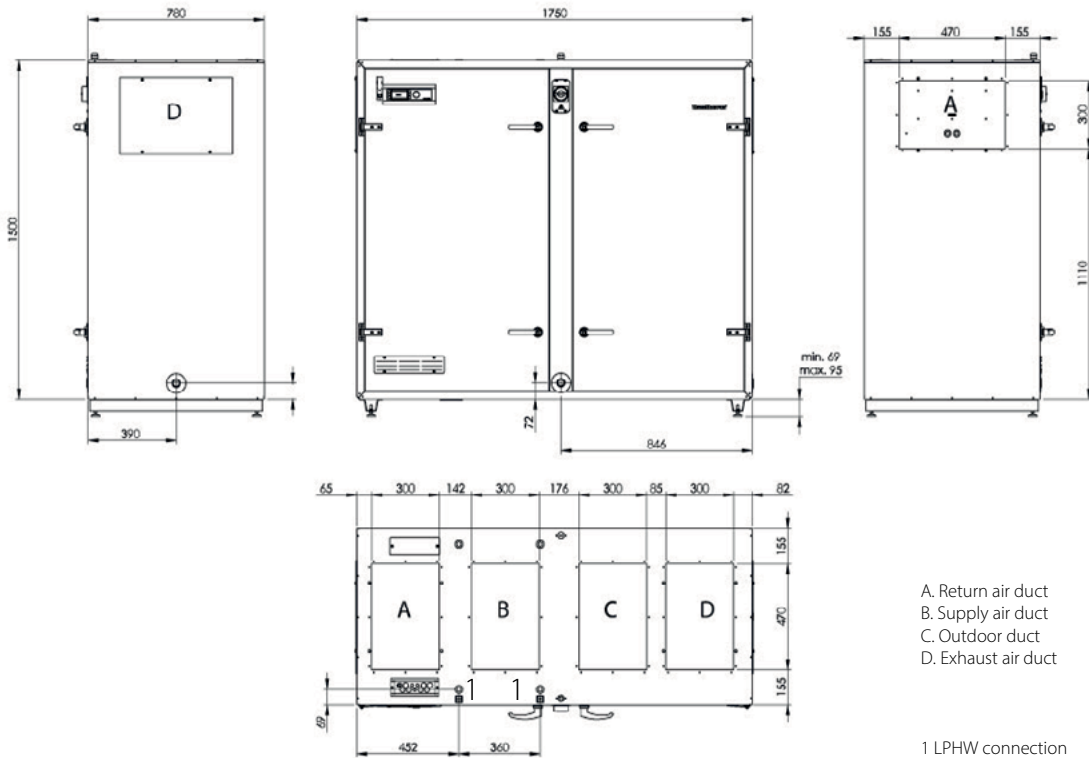
DanX 1 HP dimensions (mm)



- A. Return duct air
- B. Supply duct air
- C. Outdoor duct
- D. Exhaust air duct

The unit shown in the picture is left hand position.

DanX 2 HP dimensions (mm)



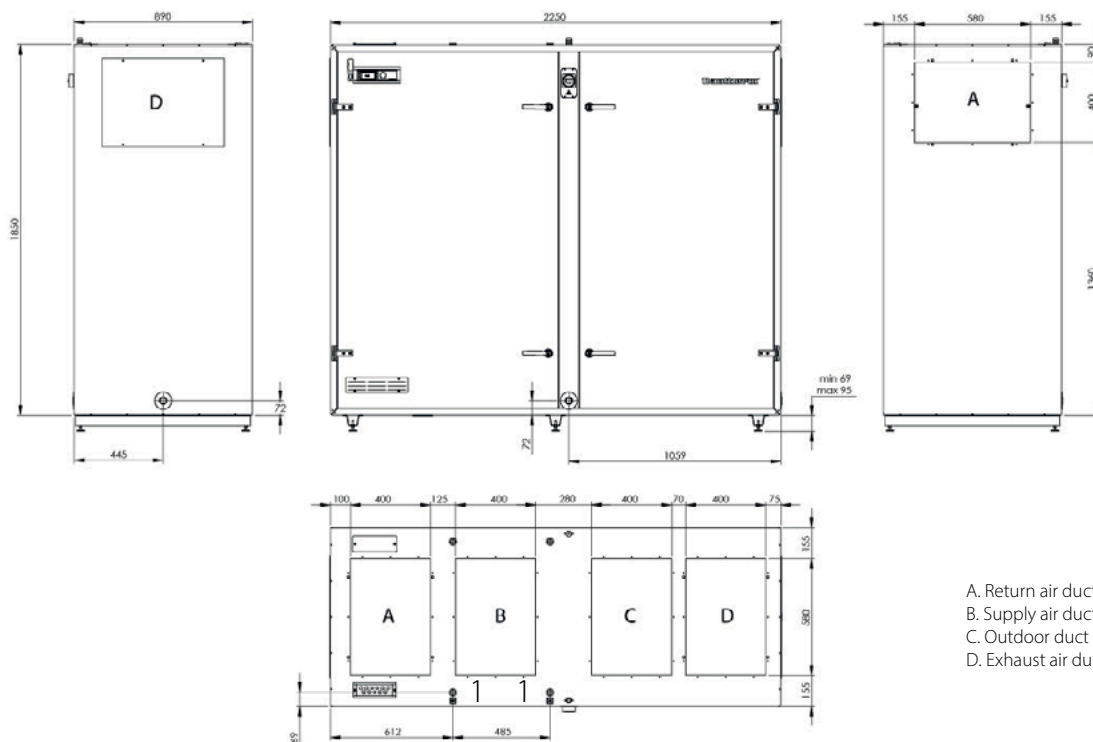
- A. Return air duct
- B. Supply air duct
- C. Outdoor duct
- D. Exhaust air duct

The unit shown in the picture is left hand position.

AIR HANDLING UNITS WITH HEAT RECOVERY AND HEAT PUMP DANX 1-2-3 HP



DanX 3 HP dimensions (mm)



- A. Return air duct
- B. Supply air duct
- C. Outdoor duct
- D. Exhaust air duct

1 LPHW connection

The unit shown in the picture is left hand position.