

Enervent Pallas



ENERVENT PALLAS

General information

The Enervent Pallas is best suited for public spaces, such as offices, coffee shops, schools, industrial facilities, in addition to blocks of flats. Pallas can be used as a single unit, if the efficiency allows, or as a part of a de-centralized ventilation system, i.e. as a fire zone specific unit. In blocks of flats, Pallas is well suited as a floor or stairway specific unit.

Whenever possible a rotating heat exchanger is used for heat recovery. If local regulations require otherwise, a fluid heat exchanger with a heat pump is used as heat recovery method.

Pallas can be fitted with a built-in extract air heat pump (HP). All heating and cooling coils, as well as the heat pump unit, are built-in to the unit. The Pallas HP with a built-in heat pump effectively cools and heats the air on demand. The cooled and heated air is evenly distributed throughout the building via the ventilation ducts (not local point formed distribution, as in traditional heat pumps). In addition, the heat pump offers the unique feature of heating water. The water can be used as domestic hot water or in a water-borne heating system. Enervent EnergyBUS (pat.pend.) is an ideal solution for a decentralized ventilation system. With EnergyBUS, the building's energy flow and energy consumption can be optimized by moving energy in time and space. This is enabled by a network of ventilation units with built-in heat pumps connected to each other.

Enervent Pallas is a 'non-residential ventilation unit' (NRVU) according to the EU Commission Regulation No 1253/2014. Ventilation units with maximum flow rate between 250 and 1 000 m³/h which the manufacturer has not declared intended as being exclusively for a residential ventilation application are called non-residential. Non-residential ventilation units (NRVUs) are excluded from EcoDesign labelling.

Our calculation software Energy Optimizer, located on our website www.enervent.com, reports whether the chosen NRVU unit fulfills the EcoDesign requirements or not for the intended project.

Technical information

Air volume flow	720...2 160 m ³ /h
Pressure difference	40–300 Pa
Leakage	external < 2 % (test pressure 250 Pa) internal < 4 %
Duct size	Ø 400 mm
Weight	450–500 kg
Standard filters, 2 x bag filter	F7/M5
Filter dimensions (WxHxD)	Supply 340 x 810 – 305 mm Extract 340 x 700 – 340 mm
IP class	IP44 (external control IP20)
Nominal voltage	400 V (AC) 3~
Nominal current	Motors 3,2 A total Electrical after heater 3 x 7,5 A
Fans	
Supply and extract air fan type	Ebm-Papst
Supply and extract air motor type	K3G280-AU11-C2
Nominal voltage	400 V (AC) 3~, EC-type with external electronics
Type of fan blade	Radial forward
Nominal power	1 000 W
Fan control eAir control	Stepless (supply and extract running separately)
Heat exchanger	
Heat exchanger type	Rotating heat exchanger
Material	Aluminium
Heat exchanger surface	175 m ²
Heat exchanger dimensions	720 x 200 mm (60 µ)
Heat exchanger motor	54 W
Heat exchanger efficiency	75 – 85 % p.a.
Other information	
Material inside cover	Steel sheet, zinc coated
Material outside cover	Steel sheet, zinc coated
Standard electric after heater efficiency	9 000 W
Positioning of a cooling coil	Built-in

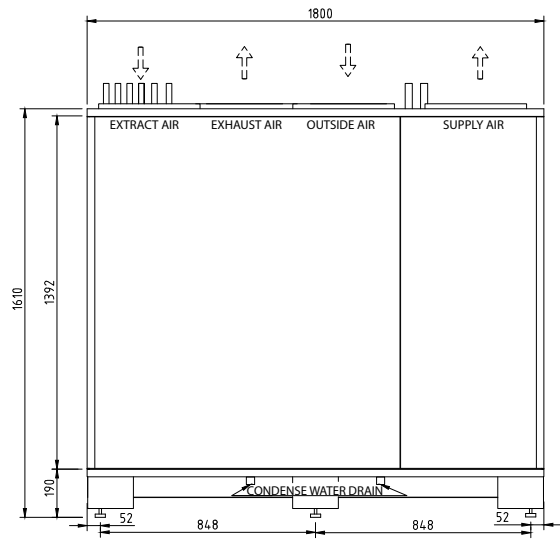
Sound levels

Soundlevels	L _w	L _{wA}
Supply air duct	75,7 dB	73,4 db(A)
Extract air duct	65,4 dB	56,2 db(A)
Outdoor air duct	62,6 dB	54,0 db(A)
Exhaust air duct	76,0 dB	74,4 db(A)
Through casing	68,6 dB	60,6 db(A)
-> 10 m ² absorption LpA	56,6-- dB(A)	

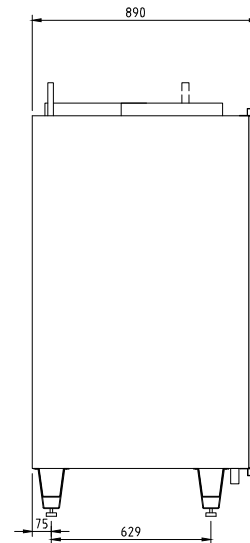
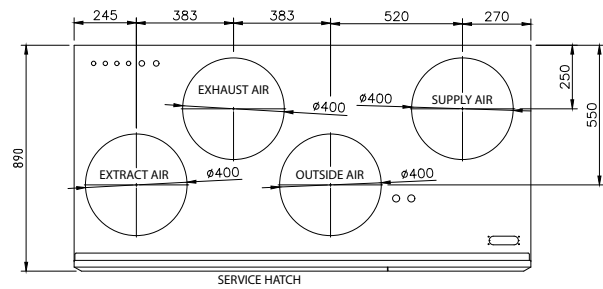
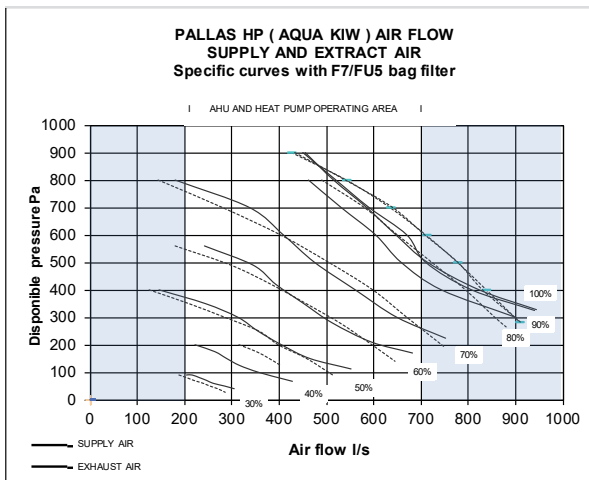
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Dimension drawings



Characteristics



Installation

Floor X

Wall

Ceiling

enervent

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