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 m³/h Pressure difference 40-300 Pa

external < 2 % (test pressure 250 Pa) Leakage

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 K3G280-AU11-C2

400 V (AC) 3~, EC-type with external

electronics

Radial forward Type of fan blade 1 000 W Nominal power

Fan control eAir control Stepless (supply and extract running

separately)

Heat exchanger

Nominal voltage

Heat exchanger type Rotating heat exchanger

Material Aluminium Heat exchanger surface 175 m²

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

Positioning of a cooling coil

efficiency

9 000 W

Built-in

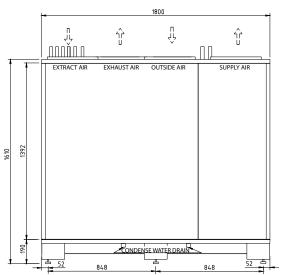
Sound levels

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)
3 .		

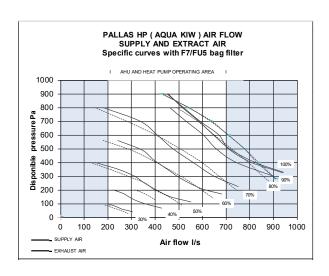
-> 10 m² absorption LpA 56,6-- dB(A)

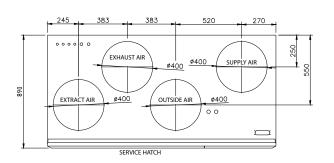


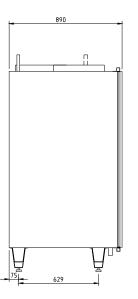
Dimension drawings



Characteristics







Installation

Floor X

Wall

Ceiling

enervent

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