FONOISOLAMENTI

TECHNICAL DATA SHEET

SH Pod Advanced Heat Pump
soundproofed casing for heat pumps

Description

SH Pod Advanced Heat Pump is the soundproofed casing for medium-to-large-size heat pumps, leveraging the innovative Slim Hurdle™ and Quiet Leaf™ technologies. Enables a substantial reduction in noise emissions from outdoor units without introducing significant pressure drop, thus maintaining 100% system performance, in a compact footprint. Independent from the equipment, features removable components for easy maintenance access.

Intended use

The SH Pod sound-absorbing casing can be installed:

- To attenuate noise emissions from outdoor units while preserving system performance.
- To protect units against weathering effects, including hail.
- For screening outdoor units, enabling full colour customisation.

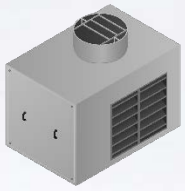
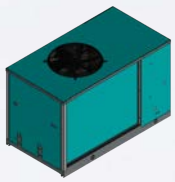
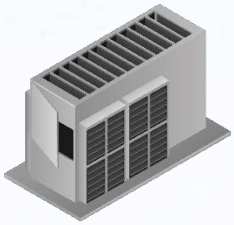
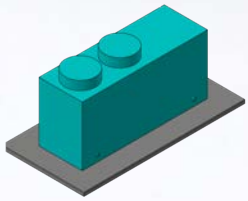
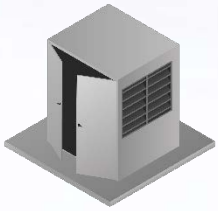
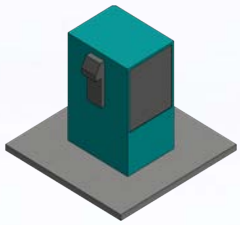
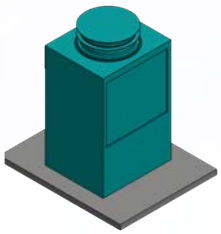
Features

- Internal baffles Thickness: 20 mm
- Net open area: up to 100%
- External Cladding Thickness: 13 mm
- Distance from the unit: 100–150 mm
  SH Pod can always be positioned within the required clearance distances (tested)
- Internal sound-absorbing layer: Noise Layer™ 10 Black – 918 gr/m2.
- Shear Damping Mass: Damping Bulk™ 7 Mag. – 5,1 kg/m2
- Operating Temperature Range: from -20°C to +70°C
- Sound Absorption Coefficient (αw): 0,90 – 0,95

Applications

- Commercial buildings
- Offices and business centres
- Residential buildings
- Industrial plants and production facilities
- Healthcare environments

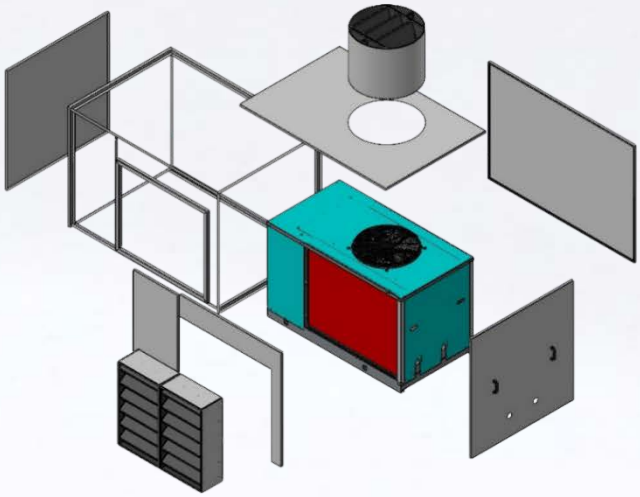
Variants

Product	Casing dimensions	Model	Equipment dimensions	Equipment
SH Pod HP 1	L: 2150 D: 1450 H: 1750		L: 1850 D: 1000 H: 1300	
SH Pod HP 2	L: 3900 D: 1850 H: 2500		L: 3500 D: 1250 H: 1950	
SH Pod HP 3	L: 1700 D: 1400 H: 2100		L: 1300 D: 1000 H: 1900	
SH Pod HP 4	L: 2100 D: 1650 H: 3000		L: 1450 D: 1250 H: 2500	

Accessories

- Handles to facilitate panel removal
- Lever lock with key on hinged access doors

Detailed layout HP 1



Enhanced aesthetic finish
All casing components are made of galvanised steel.
Coating available in 3 finishes (gloss, matte, and textured), customised in any colour from the full RAL chart.

Pressure drop

SH Pod M	Calculation results	
Gas velocity in the duct	2.938	m/s
Internal wall roughness	0.064484	r/d
Reynolds number	70417	
Friction coefficient (Colebrook)	0.0813	
Distributed pressure drop	1,65	Pa
Localised pressure drop	6,95	Pa
Total dynamic pressure drop	8,60	Pa

Actual pressure drop: 8,6 Pa

Acoustic Performance

Tests performed on an experimental model in our in-house R&D laboratories.

R_w= 18 dB(A).

To ensure optimal results, the product must be installed following a thorough technical/acoustic assessment of the noise source. The unit must be installed at the correct distance from the rear wall, and all pipe passages must be properly sealed. For maximum effectiveness, installation by specialised personnel is strongly recommended.

The user is solely responsible for ensuring compliance with applicable laws and for obtaining necessary permits and authorisations.