FONOISOLAMENTI

TECHNICAL DATA SHEET

SH Pod Advanced Chillers soundproofed casing

Description

SH Pod Advanced Chiller is the soundproofed casing for large-size chillers, multipurpose units, and heat pumps, leveraging the synergy of the innovative Slim Hurdle™ and Quiet Leaf™ technologies. Enables a substantial reduction in noise emissions from outdoor units without introducing significant pressure drop, thereby maintaining 100% system performance, within a reduced footprint compared to conventional solutions. Allows routine and major maintenance, via accessible configuration, and minimises summer energy consumption due to protection from solar radiation.

Intended use

The SH Pod sound-absorbing casing can be installed:

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

Features

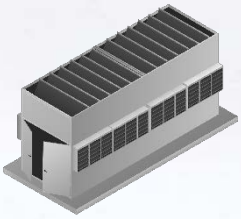
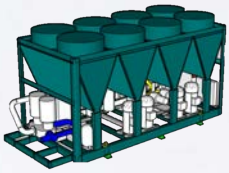
- Internal baffles Thickness: 20 mm
- Net open area: up to 100%
- External Cladding Thickness: 13 mm
- Distance from the unit: 100–150 mm
    - SH Pod can always be positioned within the required clearance distances (tested)
- Internal sound-absorbing layer: Noise Layer™ 10 Black – 918 gr/m2.
- Shear 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

- Data centres
- Commercial buildings, offices and business centres
- Modern residential buildings

- Industrial plants and production facilities
- Healthcare environments

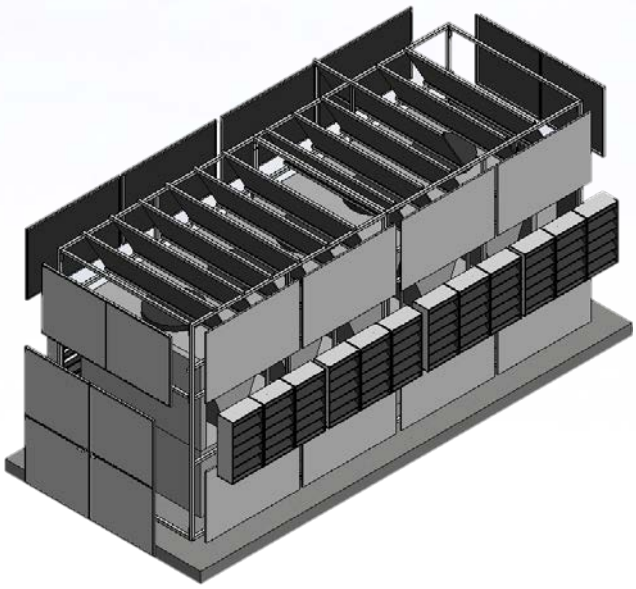
Variants

Product	Casing dimensions	Model	Equipment dimensions	Equipment
SH Pod Chiller	L: 2700-15450 D: 3150 H: 1050		L: 2500-15000 D: 2400 H: 2700	

Accessories

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

Detailed layout



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 Advanced Chiller	Calculation results	
Gas velocity in the duct	4.2	m/s
Internal wall roughness	0.012197	r/d
Reynolds number	75890	
Friction coefficient (Colebrook)	0.0413	
Distributed pressure drop	1,73	Pa
Localised pressure drop	8,58	Pa
Total dynamic pressure drop	**10,31**	**Pa**

Actual pressure drop: **10,3 Pa**

Acoustic Performance

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

→ R_w= 19 dB(A).

- **Also available in enhanced version: +3 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.