TNHR - Cabin Unit w/diffusor - 100/200 and 125/200

Cabin Unit with optional heating

Copra TNHR Cabin Units are delivered with optional pre-installed heating elements and silencer for enhanced performance and reduced installation time. The Cabin Units are delivered with both automatic and manual safety switches where heating elements are installed.

The diffusor (D1) can be delivered with adjustment knob (+K) or without.

COPRA DRIFT AS

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Key features of COPRA TNHR Cabin Unit:

Flexible Options
You have the choice of either 100mm or 125mm diameter inlet pipes, along with a standard 200mm diameter outlet. Depending on your needs, we offer heating element options of:

- 400w
- 800w
- 1200w
- No heating

Precision-Engineered Diffusor
Special designed, powder-coated diffusor to ensure consistent and silent airflow distribution within the cabin.

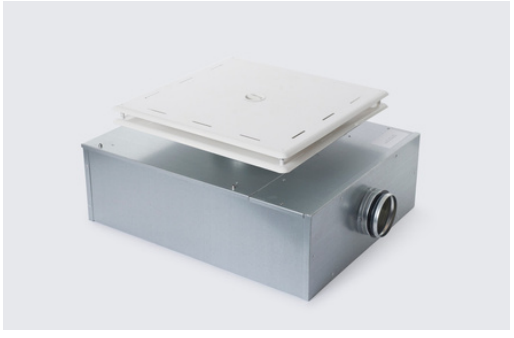
Robust Build
Our Cabin Units are constructed to withstand the challenging conditions of maritime environments. They feature high-quality galvanized steel plating and inner insulation with both glass fiber and dust-proof fiber cloth, ensuring durability. With first class built in Sound Attenuator (silencer) capabilities.

Adjustable Airflow and Temperature
You can easily customize the cabin's airflow using our air volume adjustment function. Additionally, our units can be connected to room thermostats, which activate the heating element when necessary, allowing precise climate control.

Standard Voltage
Our units operate on a standard voltage of 230V – 50/60 Hz, meeting international standards for maritime applications.

Colors
RAL 9016 is standard on diffusor, custom color options can be provided upon request.

The diffusor can be customized to match customer specific RAL colors. It can be supplied with or without an adjustment knob as per customer preference.



The box includes heating element, silencer, regulator and both automatic and manual safety switch.

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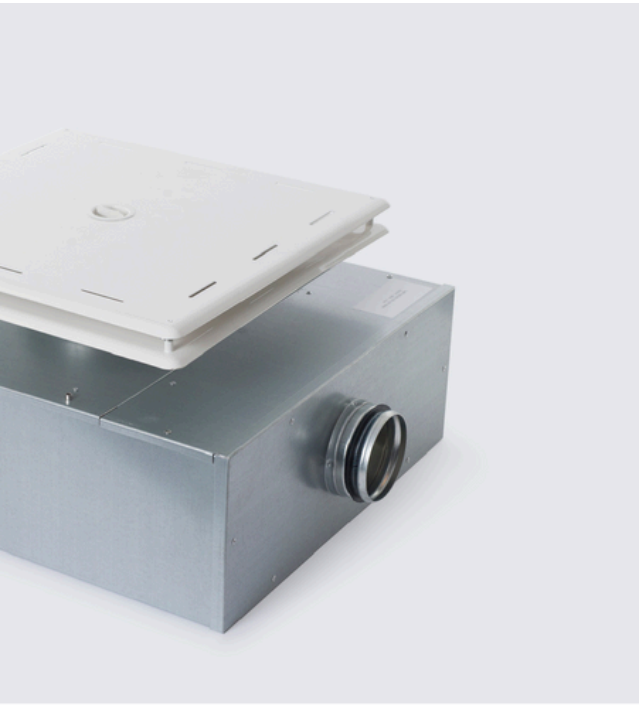
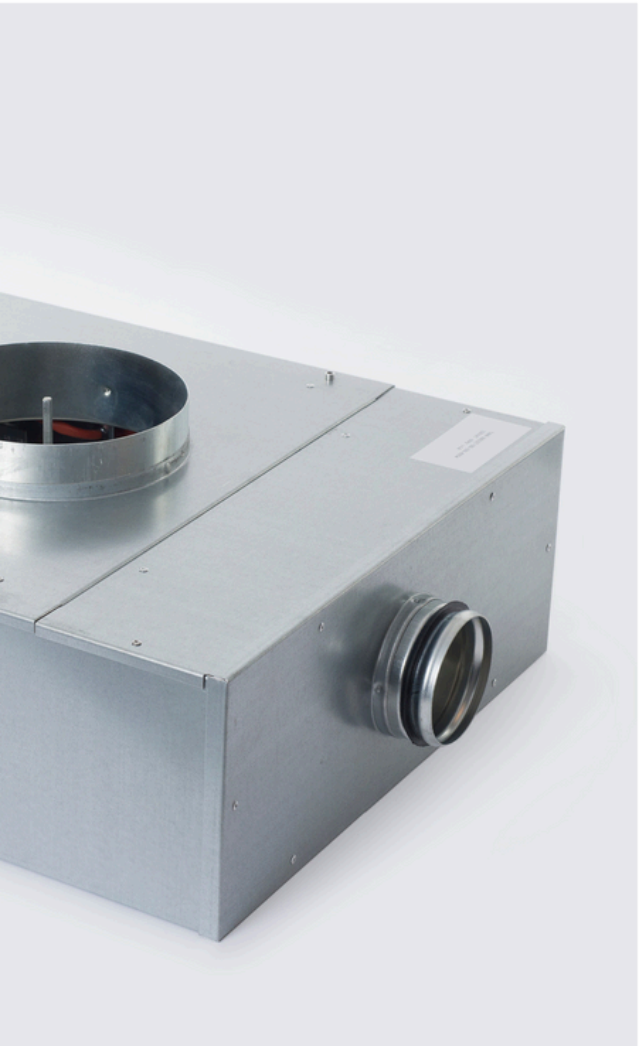
Technical specifications and certifications





Technical Specifications

- **Air Box Piece Mark:** TNHR
- **Weight:** 16 kg (19 kg w/diffusor)
- **Casing Material:** Galvanized steel sheet
- **Casing Thickness:** 1.0 mm

Insulation

- Material: Mineral wool (non-combustible)
- Thickness: 25 mm
- Density: 80 kg/m^3
- Insulation Certification (B15 certified)
- Insulation Protection: Dust-proof glass fiber cloth (non-flammable)
- IP Rating: IP54

Managing and Quality Specifications

- **Marking:** TNHR and material code marked on the component
- **Certificates:** BV certificate for use in B-0 and B-15 class ceiling
- **Package:** COPRA standard
- **Declaration of Conformity:** ISO/IEC17050/1

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Noise Attenuation and Sound Pressure

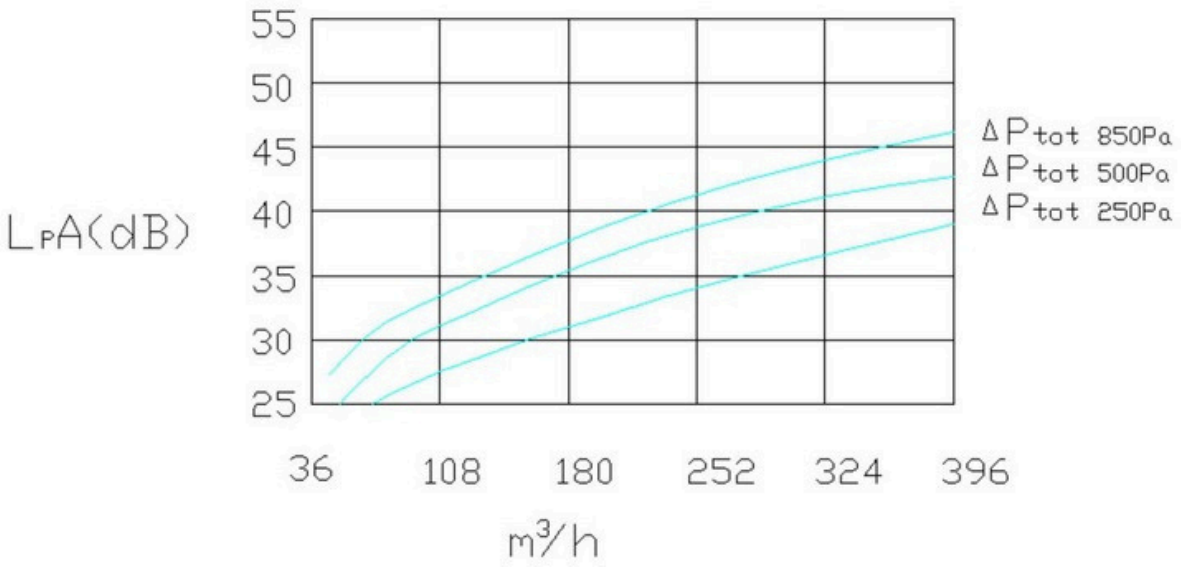
Noise Attenuation for TNHR 125/200

f (Hz)	63	125	250	500	1000	2000	4000	8000
dB	4,7	9,8	17,2	25,4	33,9	35,9	35,7	34,3

Sound Pressure Level TNHR 125/200 diagram

The tests were conducted at three different pressure levels: 250PA, 500PA and 850PA. The sound data for the model with and without adjusting mechanism presented in a single diagram.

The three lines on the diagram represent data collected under three distinct pressure conditions and are unrelated to the presence or absence of an adjustment mechanism.



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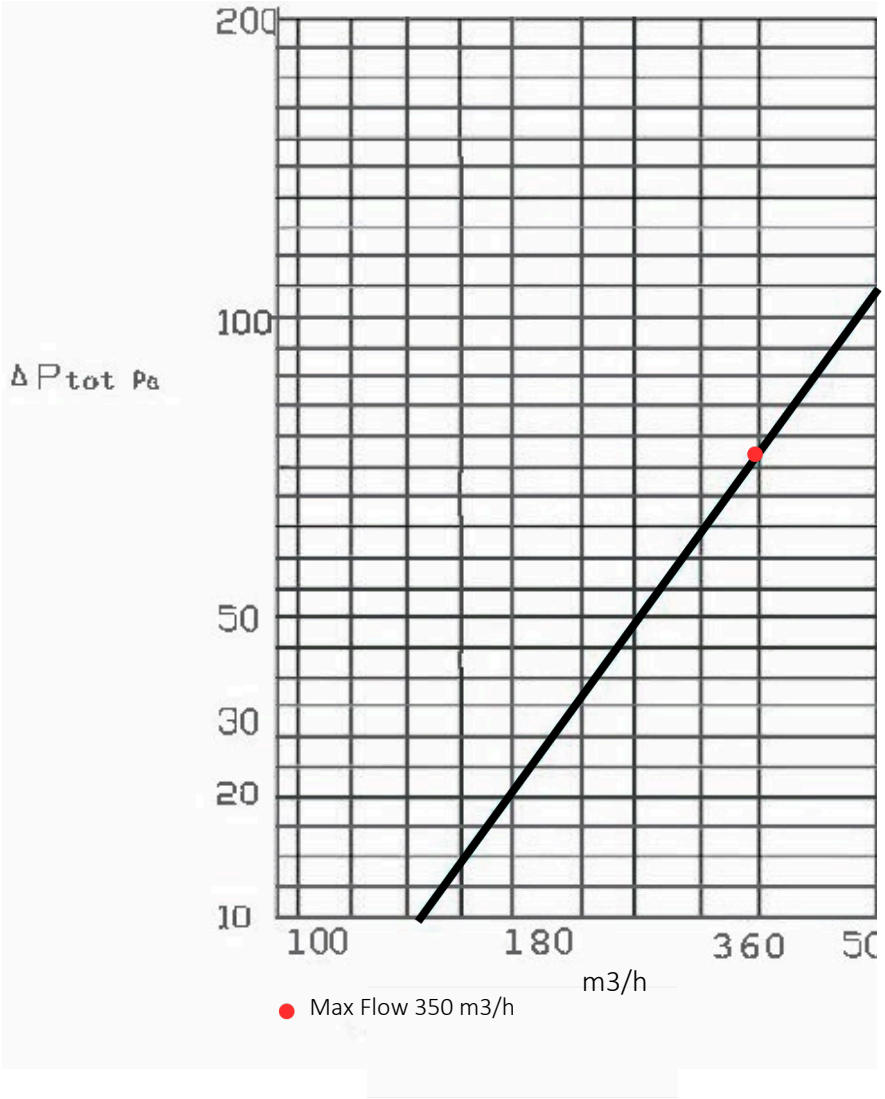
Performance Curve

Curves for TNHR 125/200 - Max Air Flow 350 m3/h - Performance Curve



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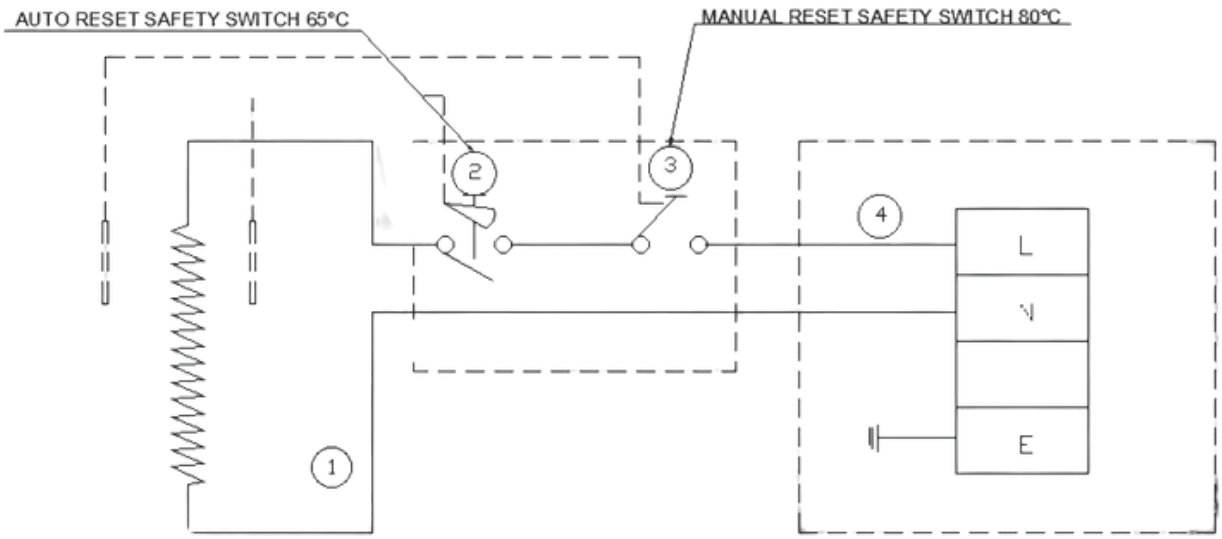
El-Diagram and Room Thermostat



1. *Heating element*
2. *Auto Reset Safety Switch 65 °C ± 5 °C*
3. *Manuel Reset Safety Switch 80°C ± 5 °C*
4. *Junction Box with Connection Terminals*

The Cabin Unit is equipped with two safety switches, one set at 65°C and the other at 80°C, providing temperature control redundancy. When either thermostat is triggered, it deactivates the circuit.

The safety switch set at 65°C features an automatic reset function when temperature decreases below 65 degrees. Should this safety switch stop working, the second safety switch will be activated at 80°C and the heating element will turn-off completely. This safety switch needs to be manually reset by pushing the reset knob on the safety switch. After such a sequence, it's advisable to verify that the automatic switch function is still operational. If necessary, replace the safety switch.

COPRA suggest to use Micromatic MTC3/4 as room thermostat for the cabin unit. These are sold separately.

Thermostat Micromatic MTC3/4 as control unit for heating element