# Hi-Pres® Air handling unit Type ZCR Product Description



# Significant advantages

Very flexible program High efficient fans High insulated casing

Round edges and wide opening doors Total concept with air, piping and controls

# **Customer benefits**

- Can fit any space available
- Low operation cost
- Very low sound levels
- Easy to maintain
- Plug and play

# **PRODUCT DESCRIPTION**

The marine air handling unit type ZCR is specially designed for marine and offshore installations for air conditioning. The unit is developed in close cooperation with major customers, and able to meet the most demanding requirements. Therefore, the air handling unit type ZCR is compact and flexible for a large combination of air handling components into complete units.

The air handling unit is designed with a rigid frame construction with 50 mm thick insulated, both sides steel sheeted panels. The panel core consists of special high performance mineral wool securing the thermal insulation as well as the exeptional sound reduction.

The air handling unit is availabel in different material qualities

(f.ex. alu-zinc, stainless steel AISI 316, sea water ressitant

steel or painted). The units are also available in an ex-proof version.

The unit is designed for optimal energy recovery with available functions such as enthalpy exchangers or return air, with high performance fans for low power consumption.

The unit is designed for easy maintenance with soft rounded edges and wide access doors for all components requiring maintenance.

For the modern requirements about constant duct pressure the unit can be provided with pressure regulation, normally by using frequency converters.

A customized standard control system can be included even with premounting and prewiring.



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# **SCOPE**

The air handling units are available in 10 sizes, with air flows from 0.3 to 9m³/s., maximum negative pressure 2000Pa and maximum positive pressure 1500Pa in casing. The discharge section, however, has 2500 Pa.

### **DESIGN**

The frame construction with insulated panels is divided into sections with built-in, easily accessible air handling components (functions).

# MATERIAL AND SURFACE TREATMENT

- Frame: 2 mm alu-zinc steel profiles or 1.5 mm stainless steel AISI 316L.
- Panels: 0.7 mm alu-zinc steel plates or 0.7-1.5 mm stainless steel AISI 316L.
- Insulation in panels: Mineral wool, 70 kg/m³.
- Temperature: ÷20 to +50°C with standard motor. ÷35 to +70°C with special motor.

# **CLASSIFICATIONS**

Mechanical performance EN 1886.

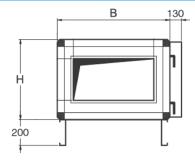
- Casing strength: Class D2.
- Casing air leakage, 400 Pa negative pressure: Class L3. 1.32 l/s per m² surface in the AHU.
- Casing air leakage, 700 Pa positive pressure: Class L3.
  1.90 l/s per m² surface in the AHU.
- Filter by-pass leakage: Filter class F8.
- Thermal transmittance: Class T3.
- Thermal bridging factor: Class TB4.

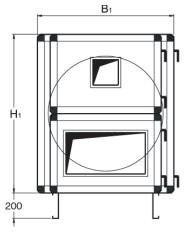
Novenco is certified according to ISO 9001, EN 29001 and BS 5750 Part 1.

# **DIMENSIONS**

The principal dimensions for standard sizes (mm) are listed in the table below. In principle any combination of width and hight is possible.

# **TYPE ZCR**





DATA				
ZCR	В	Н	B1	H1
9/4	1027	517		1034
9/6	1027	667		1334
9/8	1027	917		
13/6	1417	667		1334
13/8	1417	917		1834
13/12	1417	1317		
18/8	1947	917		1834
18/10	1947	1117		2234
18/12	1947	1317	2377	2634
18/15	1947	1617	2637	3234

### **FANS**

The air handling unit can be supplied with the following fan types:

- Belt driven double inlet.
- Direct driven single inlet.
- Direct driven plug fan.
- Direct driven double inlet with flex coupling.
- Direct driven axial flow fan.

The fans can be galvanised, painted or made in stainless steel and executed with marine or offshore motor.

