JB-NF / JD-NF / JC-NF / JH-NF series

evaporating units

Evaporating units for refrigeration applications at high, medium and low temperature.

Each evaporating unit consists of a ventilated evaporator with inbuilt regulation valves and thermostatic expansion valve, and controlled by a prewired electronic control board.

Every model has been designed and adjusted in order to optimize the R-404A refrigerant dry expansion, in a wide range of temperature applications.

- High efficiency coils.
- Inbuilt thermostatic expansion and solenoid valves.
- Electronic control.
- 100% factory tested and adjusted units for the highest performance.
- Minimum maintenance needs, with simple access through folding panels.
- Operation with R-404A and R-507A refrigerants.

MJB-NF / BJB-NF series

Slim-type commercial evaporating units.

AJD-NF series

Double-flow low-profile evaporating units.

MJC-NF / BJC-NF series

Cubic-type evaporating units.

MJH-NF / BJH-NF series

Industrial cubic-type evaporating units.

Slim-type evaporating unit

- High efficiency coils.
- Inbuilt thermostatic expansion and solenoid valves.
- 100% factory tested and adjusted units for the highest performance.
- Prewired electronic control.
- Operation with R-404A and R-507A.

Description

Slim-type commercial evaporating units, with inbuilt regulation valves and prewired electronic control, built in galvanised steel shell with polyester coating, for positive and negative temperature cold rooms.

Features

- 230V-I-50Hz power supply.
- High efficiency coils, built in copper pipes and aluminium fins, with 5 or 6 mm fin spacing.
- Stainless steel folding drain tray.
- Defrosting heaters in drain tray and imbricated in coil for negative temperature models and air defrosting for positive temperature models (electrical heater defrosting as an option).
- Flexible drain pipe heater (for negative temperature models).
- High flow axial motor-fans.
- Refrigeration circuit optimized for R-404A and R-507A refrigerants.
- Refrigeration circuit optimized for R404A and R507C refrigerants.
- Ready-to-solder cooling connections, with inbuilt suction trap.
- Electronic controller with relays for fan, soilenoid valve coil and electrical heaters, and temperature probes, with 5 metres long electrical connection wires and 3 metres long power supply wires.

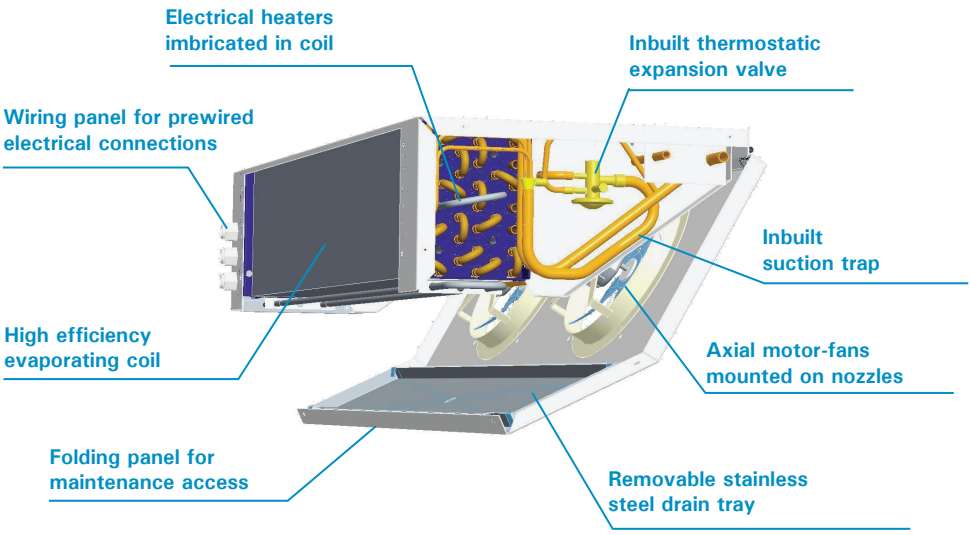
Series

MJB-NF - Medium and high temperature (-5 °C... + 15 °C)
Evaporating units designed for positive temperature applications at small size cold rooms, featuring air defrosting (electrical heater defrosting as an option).

BJB-NF - Low temperature (-30 °C... -15 °C)
Evaporating units designed for negative temperature applications at small size cold rooms, featuring electrical heater defrosting.

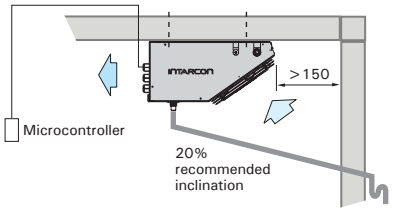
As an option

- Electrical heater defrosting (for MJB-NF series opertaing between -5 °C and + 5 °C).
- Electronic fans.
- Anti-corrosion coil coating.



Installation diagram

The following recommendations should be observed for the installation of the evaporating units inside a cold room:



- Place the unit at the end of the cold room, and avoid placing it above the door. Preferably place the unit so the air flows lengthwise along the cold room and crosswise to the entrance door.
- Respect the air flow direction, keeping a 150 mm separation to the wall panel.
- Install a draining pipe and place a water trap on the outside of the cold room.
- In negative temperature cold rooms it is recommended to insulate the drain pipe with thermal insulation fabrics, giving a 20% inclination to the pipe and getting sure that the flexible heater cable covers the full length of the pipe.

Low-profile double-flow evaporating units

- High efficiency coils.
- Inbuilt thermostatic expansion and solenoid valves.
- 100% factory tested and adjusted units for the highest performance.
- Prewired electronic control.
- High comfort: Low-noise level and laminar air flow.
- Operation with R-404A and R-507A.

Description

Double-flow evaporating units, in a low-profile design, with inbuilt regulation valves, and prewired electronic control, built in galvanised steel shell with polyester coating.

Features

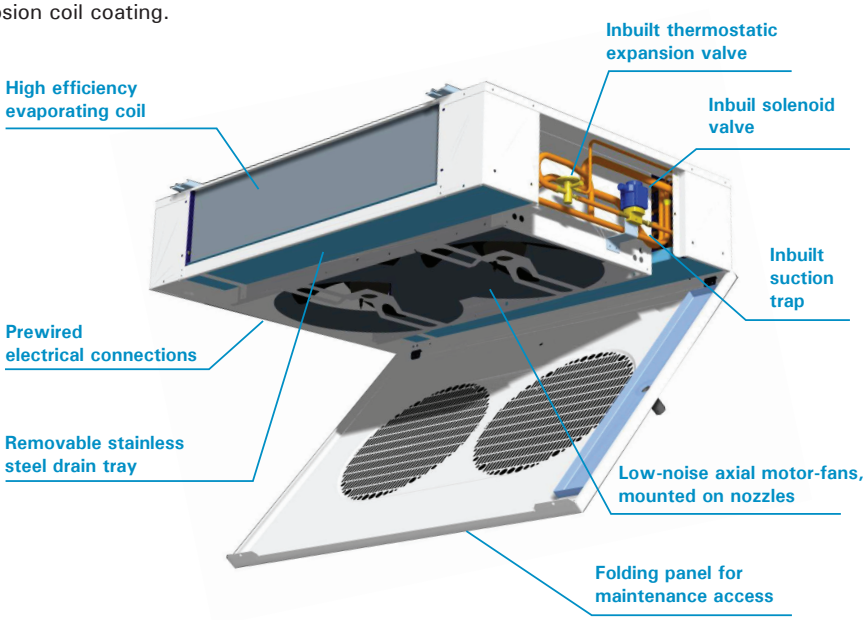
- 230V-I-50Hz power supply.
- High efficiency coils, in copper pipes and aluminium fins, with 5 or 6 mm fin spacing.
- Defrosting by air (electrical heater defrosting as an option).
- Low-speed and low-noise axial motorfans.
- Refrigeration circuit optimized for R-404A and R-507A refrigerants.
- Inbuilt solenoid valve in liquid line and factory-adjusted thermostatic expansion valve.
- Ready-to-solder cooling connections, with inbuilt suction trap.
- Electronic controller with fan, solenoid valve, electrical heaters relays and temperature probes, with 5 m long electrical connection wires and 3 m long power supply wires.

Series

AJD-NF - High temperature (+5 °C...+15 °C)
Double-flow evaporating units for positive temperature applications, with a low turbulence level, featuring air defrosting (electrical heater defrosting as an option).

As an option

- Electrical heater defrosting (for operation between -5 °C and +5 °C).
- Inbuilt condensed water pump.
- G3 filter for fans.
- Inbuilt humidification kit.
- Deshumidification / heating kit.
- Anti-corrosion coil coating.



Cubic-type industrial evaporating units

- High efficiency coils.
- Inbuilt thermostatic expansion and solenoid valves.
- 100% factory tested and adjusted units for the highest performance.
- Minimum maintenance needs, with simple access through folding panels.
- Operation with R-404A and R-507A.

Description

Cubic-type evaporating units, with inbuilt regulation valves, for positive and negative temperature cold rooms, built in galvanised steel shell with polyester coating.

Features

- 400V-III-50Hz power supply.
- High efficiency coils, in copper pipes and aluminium fins, with 5 mm fin spacing.
- Stainless steel folding drain tray.
- Electrical heater defrosting with drain tray heater for negative temperature models, and air defrosting for positive temperature models (electrical heater defrosting as an option).
- Flexible draining pipe heater (for negative temperature models).
- High-flow axial motor-fans operating at 1300 rpm.
- Refrigeration circuit optimized for R-404A and R-507A refrigerants.
- Solenoid valve in liquid line and factory-adjusted thermostatic expansion valve, both inbuilt in the unit.
- Ready-to-solder cooling connections, with inbuilt suction trap.
- Control and power board with electronic microcontroller and digital display, with MCB protection for heaters and motor-fans, 6 relays for control, cold room temperature probe and defrosting, and operation leds.

As an option

- Electrical heater defrosting (for MJC-NF and MJH-NF series operating between -5 °C and +5 °C).
- Inbuilt humidification kit.
- Deshumidification / heating kit.
- Anti-corrosion coil coating.
- Long-range fan streamer (for Ø350 and Ø450 fans).

Series

MJC-NF - Medium and high temperature (-5 °C... + 10 °C)
Evaporating units designed for positive temperature applications at medium and large size cold rooms, featuring air defrosting (electrical heater defrosting as an option).

BJC-NF - NEGATIVE TEMPERATURE (-30 °C... -15 °C)
Evaporating units designed for negative temperature applications at medium and large size cold rooms, featuring air defrosting.

Humidification kit (as an option)

An humidification kit is integrated in the evaporating unit as an option. It works by water steam with 3 kg/h capacity, it is composed by: water steam diffuser, submerged electrodes generator cylinder with water supply and purge valves, and an electronic controller to control relative humidity inside the cold room.

This system is only to be used with water whose conductivity is between 125 y 1250 µS/cm, and a total hardness between 50 y 400 mg/l $CaCO_3$, and greater than twice the content of Cl.

Long range air streamer (as an option)

ptionally, a streamer is installed on the fan outlet to get a longer range.

Only available in Ø350 and Ø450 mm fans.