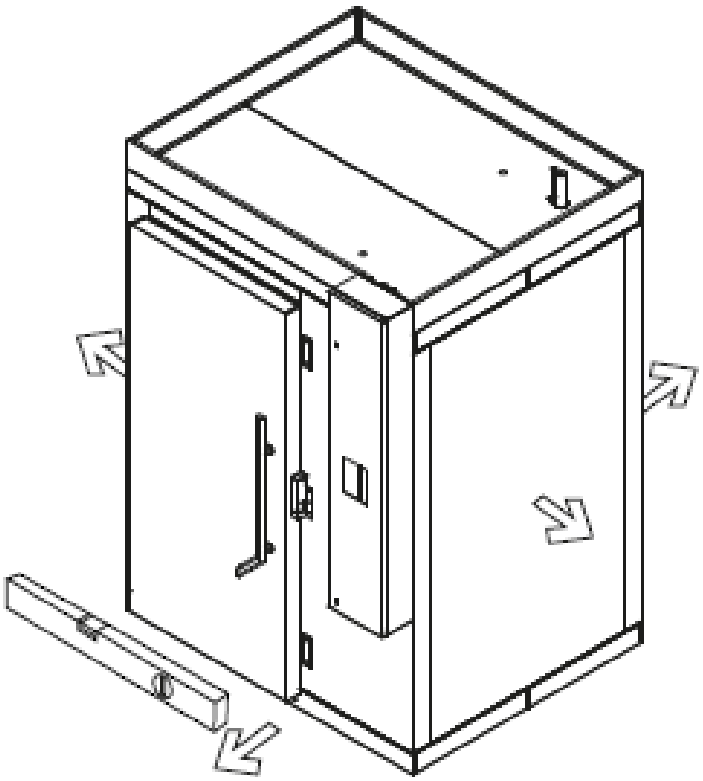
NUOVAIR
INNOVATORS OF REFRIGERATION

# INSTALLATION CHECK LIST
# “INDUSTRY LINE”

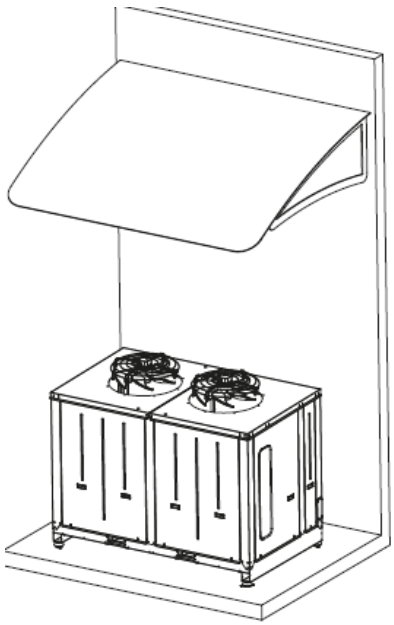
## 1) Positioning of the cabinet

The machine must be installed on a flat, horizontal surface both to avoid problems related to the stability of the machine and for the appropriate slope for draining the condensate. If the surface is not flat it is necessary.
Check the correct positioning of the condensate drain and the condensate drain tray in the case of unibody blast chillers.



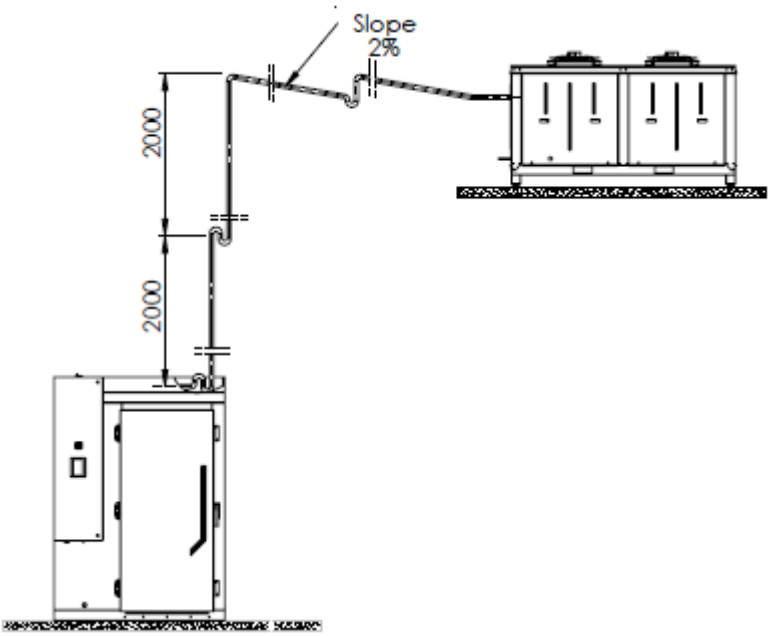
## 2) Positioning of the condensing unit

The condensing unit must be installed on a flat, horizontal surface. It is also necessary to fix the condensing unit to the ground or to secure it.

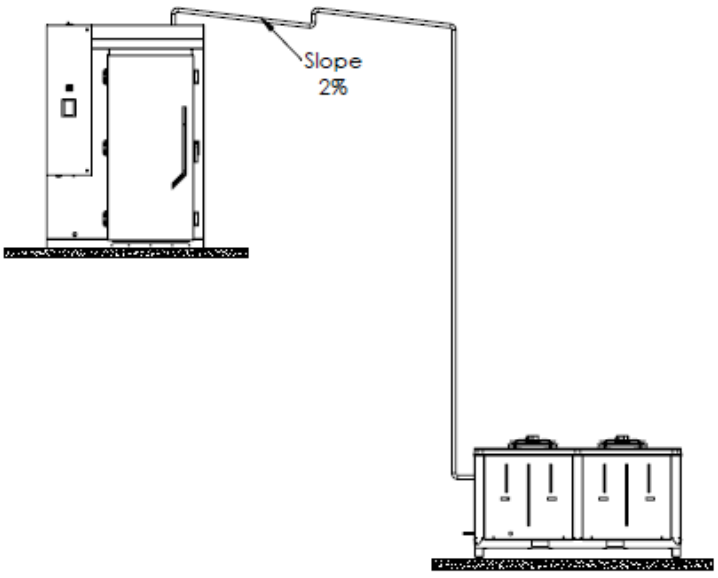


## 3) Oil return

All refrigerant lines must be designed to allow correct oil return to the compressor. If the condensing unit is positioned above the evaporator it is necessary to insert siphons at a height of every 2 metres on the vertical line section and a counter-siphon having reaching the end of the ascent section.




When there are horizontal line sections it is important that the suction pipes have a slope of at least 3% towards the condensing unit in order to facilitate the return of the oil to the compressor. If the condensing unit is positioned below or at the same height as the cabinet, no siphon must be used, but it is su_icient to guarantee the slope of the pipes for the condensing unit.

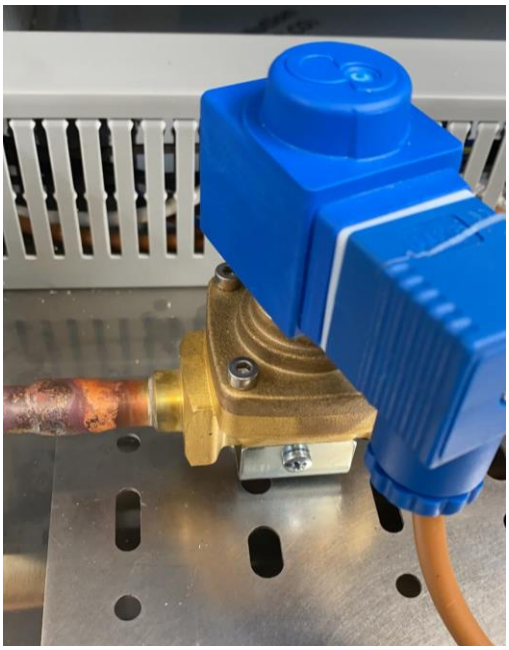



Minimum thikness of the suction line isulation: 19 mm

## 4) CABINET AND CONDENSING UNIT ARE CHARGED WITH NITROGEN

## 5) Vacuum of the system

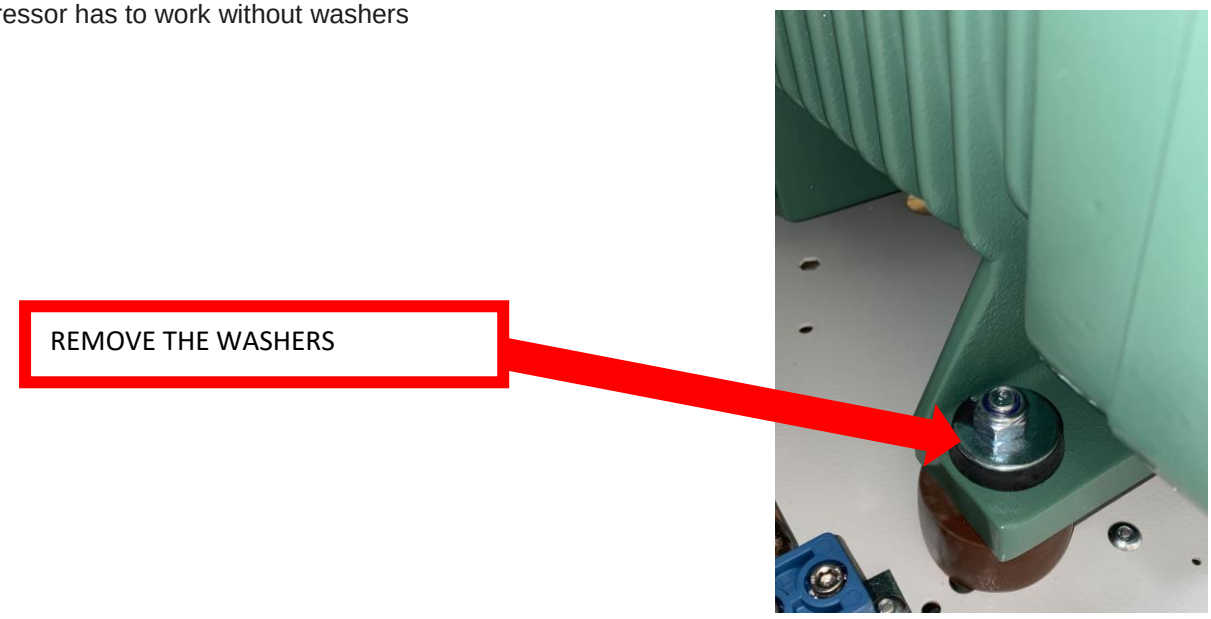
Open the valves on the cabinet and on the condensing unit
Use a magnet to open the solenoid valve on the top of the cabinet



Start the vacuum of the pipe line, cabinet and condensing unit

## 6) Compressor unblocking

Turn counter – unclockwise block nuts to remove 4 washers.
Compressor has to work without washers



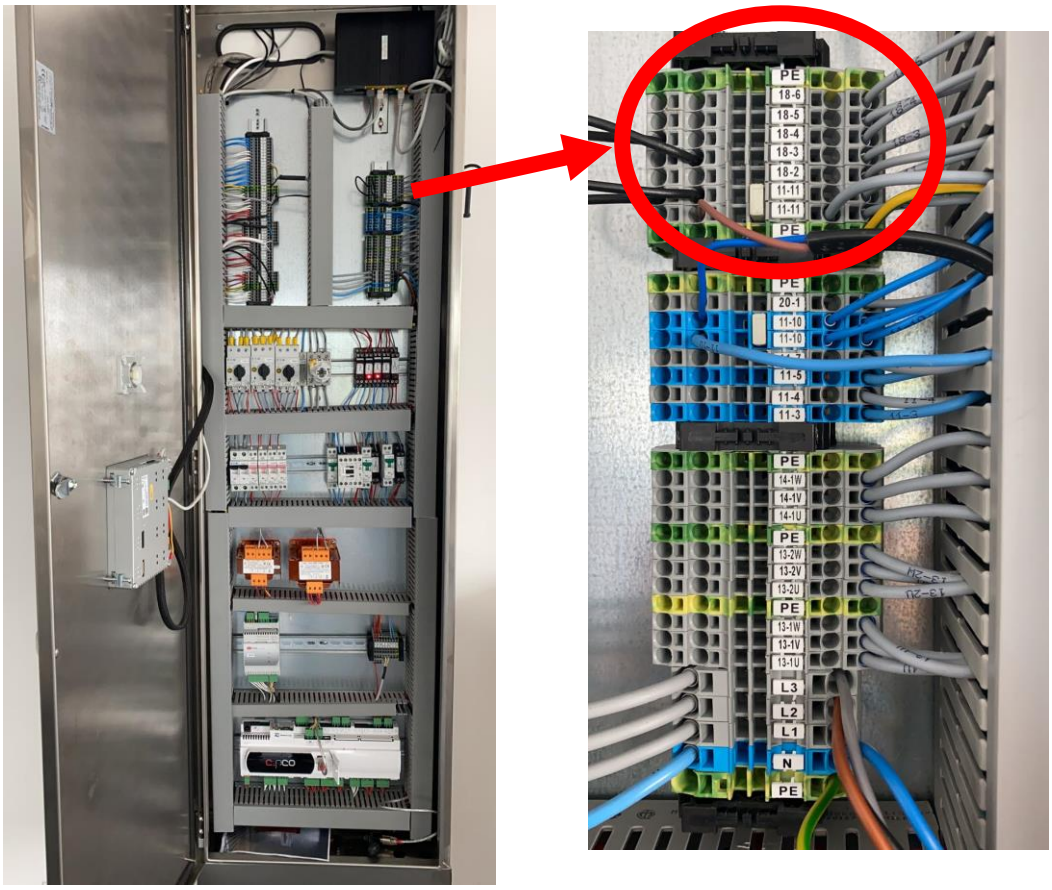
## 7) Electrical connection

Power supply cabinet position


Power supply condensing unit position

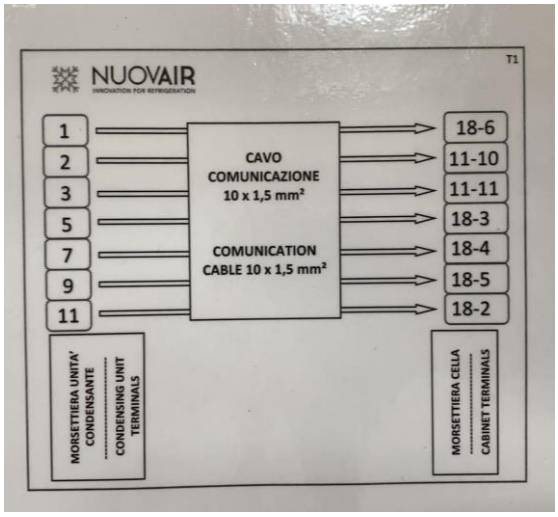
## 8) Comunication cable cabinet / condensing unit

Cabinet comunication therminals position



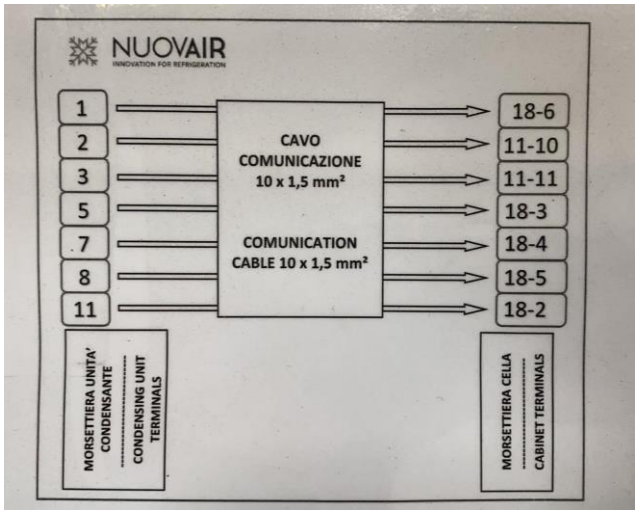

Condensing unit comunications therminals positon

Connect the n°7 wires between the cabinet and the condensing unit following the chart below




NA 2.140T1 – NA 2.200T1 –

NA 2.260T1 – NA 2.260T1 XL




NA 2.260T2 – NA 2.520T2 –

NA 2.520T2 XL – NA 2.450T3 –

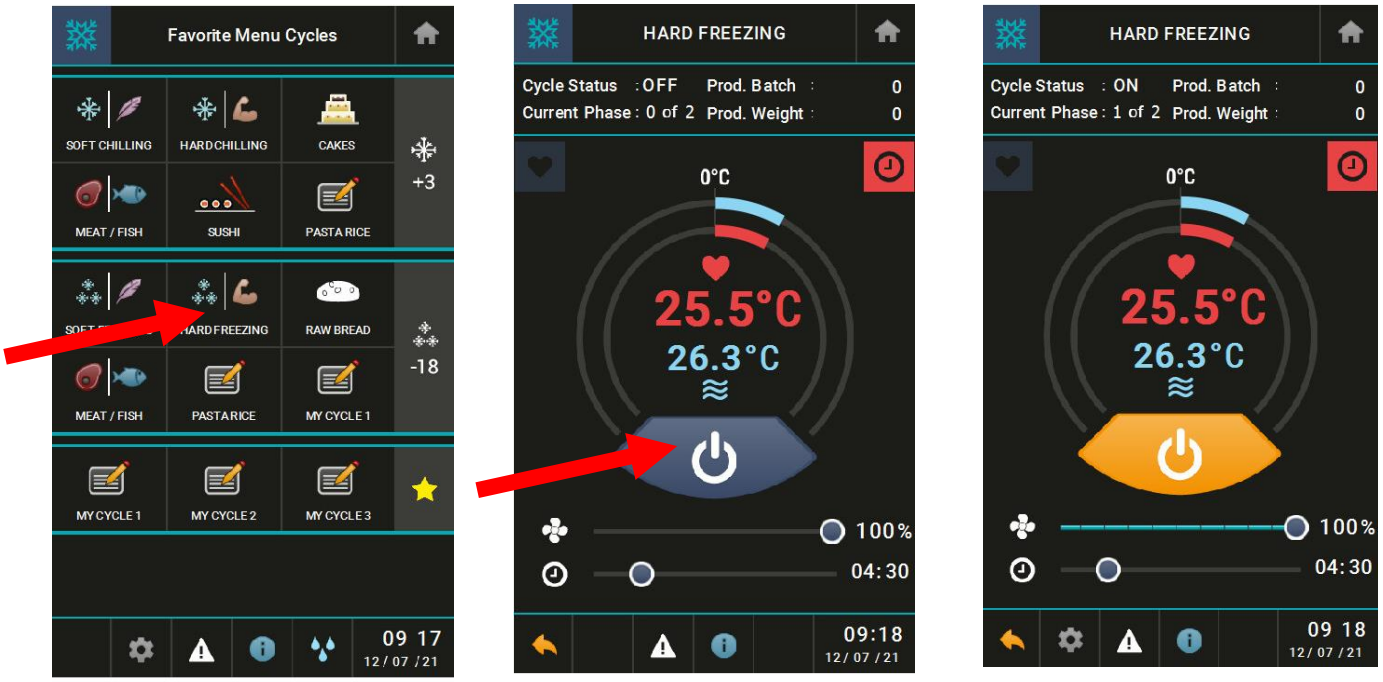
NA 2.780T3 – NA 2.780T3 XL

**9) Check the voltage before switch on the main switches**

**10) Give power supply to the condensing unit in order to warm up the compressor oil**

**11) At te end of the vacuum start to fill with refrigerant**

## 12)Start the HARD FREEZING CYCLE in manual mode




## 13)Charge the refrigerant untill the check glass is full

## 14)Check the direction of rotation of the condenser fan

## 15)Check the absortion of the compressor, condenser fan, evaporator fan

## 16)Check performance: from ambient temperature to -38 / -40°C with empty cabinet the blast freezer takes between 35 to 45 minute