

05/2014

# **Mod: N65/R316G/PM**

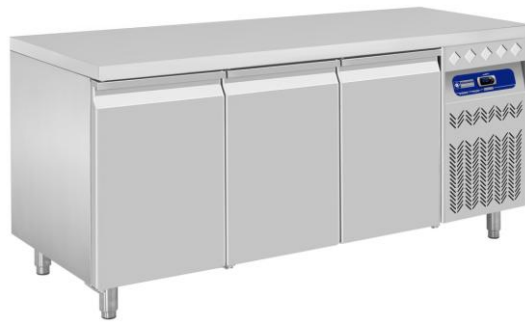
**Production code: 10121702-Q-0-0 (U3)**



**Diamond**  
catering equipment

**Manual de Instruções  
Instruction Manual  
Mode d'Emploi  
Gebrauchsanleitung  
Manuale d'Istruzioni  
Manual de Instrucciones  
Gebruiksaanwijzing**

**N.º MNS00027.02**



**BANCADAS REFRIGERADAS  
REFRIGERATED COUNTERS  
TABLES RÉFRIGÉRÉES  
KÜHLTRESSEN  
BANCHI REFRIGERATI  
MESAS FRÍAS REFRIGERADAS  
GEKOELDE WERKTAFELS**

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### Notes

First we want to thank your preference for our refrigerated equipment, which fulfils all the Directives and Standards applied and will meet for sure, your expectations and satisfy your needs.  
Our thanks

## 1. Reception



Upon receiving the equipment, please verify carefully if the package is intact and was not subject to any damage during transportation. After it has been unpacked please confirm that there is no component missing and if the characteristics and the condition correspond to the specifications in the purchase order.

This equipment has been created to work at a 5 climatic class (40°C room temperature, 40% Hr).

The installation, maintenance and any other interventions, should be carried out by specialised and authorised technicians. The manufacturer declines any responsibility and is not obliged to cover the guarantee, should these conditions not be respected.

It should be remembered that our continuing research in technological improvements, could mean that alterations have been made in the characteristics as indicated without prior warning.

## 2. Identification Plate

Our models contain, on the top of the panel control, a plate showing the data considered to be of most importance. This refers to the name of the MODEL, the SERIAL NUMBER and YEAR, which is fundamental information in any consultation with the manufacturer.

|  |                      |
|--|----------------------|
| Model  | <input type="text"/> |
| Model   Model   Modèle   Modello   Modelo   Modelo   |                      |
| Product code   | <input type="text"/> |
| Artikelnummer   Artikelnummer   Code article   Codice articolo   Código producto   Código artigo   |                      |
| Serial number & Year   | <input type="text"/> |
| Seriennummer & Jahr   Seriennummer & Jahr   Numéro de série & Année   Numero di serie & Anno   Número de serie & Año   Número de série & Ano                           |                      |
| Climate class  | <input type="text"/> |
| Klimaklasse   Klimaat klasse   Classe climatique   Classe climatica   Clase climática   Classe climática   |                      |
| Defrost power (W)  | <input type="text"/> |
| Abtauung Leistung   Ontdooi vermogen   Puissance dégivrage   Potenza sbrinamento   Potencia desescarche   Potência descongelação                                       |                      |
| Door heater wire (W)   | <input type="text"/> |
| Heizleitungen der Tür   Verwarmingslint voor deur   Cordon chauffant porte   Resistenza elettrica porta   Resistencia calefactora puerta   Resistência eléctrica porta |                      |
| Light bulb (Max.W)   | <input type="text"/> |
| Glühbirne   Verlichtingsunit   Ampoule   Lampadina   Bombilla   Lâmpada  |                      |
| EN   de   nl   f   it   es   pt  | <input type="text"/> |
| PT-503403474   | <input type="text"/> |

| Legend                        |                     |
|-------------------------------|---------------------|
| a) Voltage (V)                | b) Frequency (Hz)   |
| c) Current (A)                | d) Power (W)        |
| e) Refrigeration gas (ASHRAE) | f) Gas capacity (g) |



The European directive on Waste from Electrical and Electronic Equipment (WEEE) specifies that, at the end of its life cycle, the equipment and all of its components, subassemblies and consumable materials should be sent separately for treatment for it to be destroyed, recycled or reused.

Do not put equipment with this symbol together with unseparated urban waste.

### 3. Recommendations for Installation

#### 3.1 - General Notes

Although the construction and operation of every counter is controlled on the factory floor, this does not invalidate the possibility that damage may be caused during transportation. Thus upon reception we advise that the general condition of the counters should be verified.

#### 3.2 - Placement



- Remove the packaging or pallet with care so as not to damage the surfaces of the equipment.
- With a pallet-lifter, lift the refrigerating cupboard and take it to the place for installation.
- Remove the protective plastic from the outside. This operation could cause small electric shocks, but which are of no consequence, as they involve merely static electricity. This inconvenience can be reduced or eliminated by always having a hand on the machine or connecting the earth wire to the outer packaging.
- Once the cupboard has been placed in position, remove the packaging or pallet with a chisel and hammer, paying attention so as not to damage the feet or the cupboard itself.
- It is advisable to place the cupboard away from any possible heat sources (like heaters) and of the sunlight.
- Do not cover or obstruct the cupboard top - must be guarantee free space to this area, assuring a good air circulation.
- In order to ensure a proper operation of the cupboard, it should always be on the level. Small differences in level can be compensated by regulating the feet.
- For models which do not contain automatic condensation water evaporation systems, a tray must be put in the lower part of the cupboards, and should be emptied out on a regular basis.

#### 3.3 - Installation

Installation should be carried out with the following standards always being borne in mind:



- Regulations referring to the construction of the buildings and fire-precautions.
- Regulations in force concerning accident prevention.
- European Union Standards which may be in force.
- The cupboard is supplied with a plug in accordance with current standards of practice and with an electricity supply power cable according to the regulations with a length which is sufficient to allow connection to the electricity current.
- The electrical socket should be easily accessible and organised so that maximum consumption is available (see data from the Table of Technical Terms). The socket should be EARTHEN.
- Never use plugs or sockets without earth, nor use adapters or extension wires.
- For direct connections to the network, a fuse switch should always be installed in accordance with international regulations.

#### 3.4 - Substitution of the Electricity Supply Cable



- Pull the power cord from the plug.
- The terminal board is in the compressor compartment (back side). Remove the cover of the terminal board.
- Loosen the fastening device from the cord at the bottom of the compartment.
- To remove the conductors, loosen the terminals and replace the cable. The new one must have at least the characteristics on the Technical Data Table. The earth wire must be longer than the phase and neutral wires.

|                             |                         |
|-----------------------------|-------------------------|
| Power cord:                 |                         |
| - type                      | HO5VVF                  |
| - Nominal section           | 3 x 1.5 mm <sup>2</sup> |
| - Manufacture code (normal) | 43001004                |
| (England)                   | 43001001                |

- The Ensure that the supply cable is not subject to traction and that it does not contain coils or knots which could create heat.

The manufacturer declines any responsibility both for the operation, and for damage or losses caused, which result from lack of observing recommendations in this instruction manual.

### 4. Recommendations for the User

Refrigerated counters were conceived in order to conserve food during short periods of time and for food products in general.

In order to ensure that the machine is operating properly it is necessary to follow the following instructions:



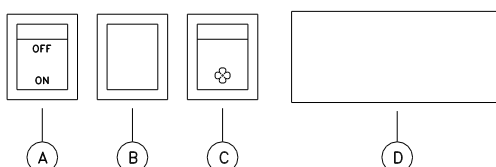
- Children should be supervised to ensure that they do not play with the device.
- Avoid opening the doors and drawers as much as possible.

- When putting in food, make sure that there is good natural circulation of air inside.
- Do not put in hot drinks or hot food.
- Do not block the air circulation vents as this will seriously affect the efficiency of the compressor.
- Do not use pointed objects to remove ice - that could damage the evaporator and be dangerous to health and environment.
- Cover the foods with a protection to avoid damaging the evaporator.
- Do not load the shelves / drawers with more than its maximum load capacity (shelves - 20 Kg / drawers - 40Kg) .
- If you do not follow the advises above, there will be an increase of electrical energy.

#### 4.1 - Starting- up

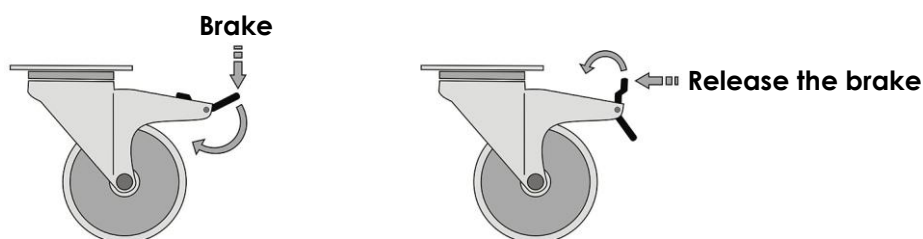
Ensure that the plug has been introduced correctly into the socket or that the switch for the cupboard has been connected.

Then connect the cupboard, which involves – see also the enclosed electronic controller data sheet:

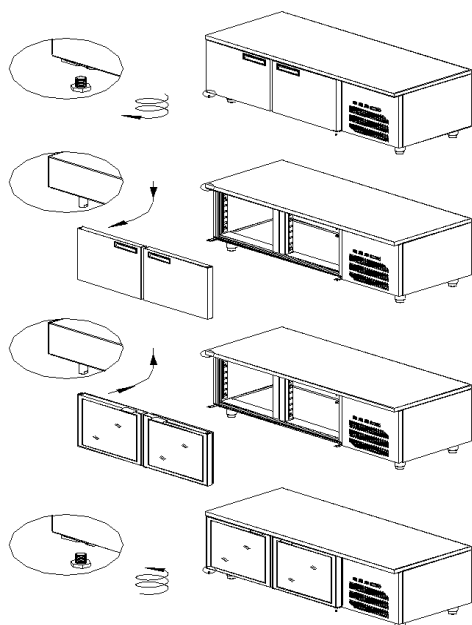


- ⇒ Press button "A", placing it in the "ON" position. The green light will come on and indicate connection. At the same time, the display will flash for some seconds until it indicates the inner temperature.
- ⇒ After it has started, red light "B" (option) comes on, and goes off when the compressor stops.
- ⇒ Temperature is controlled automatically through the electronic thermostat "D".
- ⇒ "C" turns ON/OFF the fans.

#### 4.2 – Brake working instructions (option)

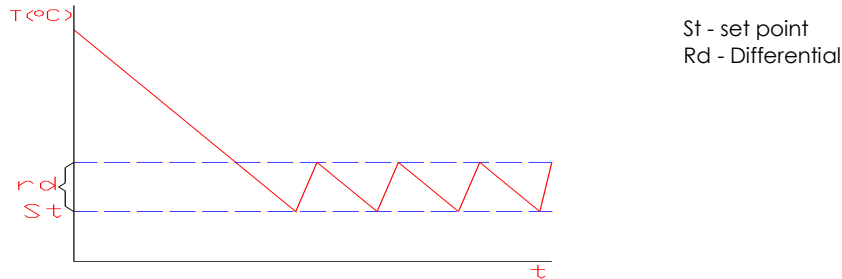


#### 4.3 – Instructions to change the door against a glass door (for L4)



4.4 – PJ microprocessor instructions

4.4.1 Definitions



St - set point  
Rd - Differential

Set Point – The lowest temperature in °C inside the counter.

Differential – Interval of temperature in °C for the working of the counter.

4.4.2 Change of the SET POINT (inside minimum temperature of the cabinet)

- 1- Press the key for 1 second to display the value of the SET POINT ;
- 2 – After some time the preset value blinks;
- 3 – Use the key or to increase or decrease the value;
- 4 – Press for 5 seconds to confirm the new value.

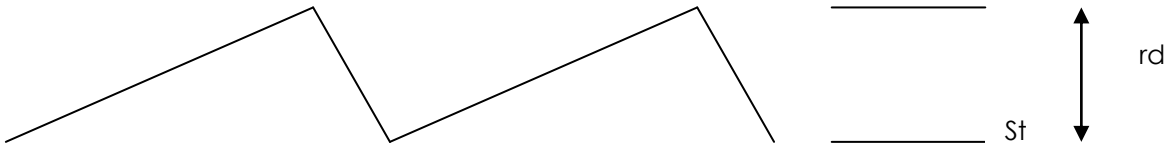
4.4.3 Change of the DIFFERENTIAL

- 1- Press for 5 seconds, it shows PS;
- 2 – Press the key or or till the parameter rd;
- 3 – Press the key to display the value of the parameter;
- 4 – Press the key or to change the value;
- 5 – Press the key to confirm temporarily the new value and display the parameters code;
- 6 – To memorise the new value press the key for 5 seconds.

4.4.4 Configuration for HACCP control on the refrigerated equipment with PJ controller + module

|   |   |
|---|---|
| <p><b>St</b> - set point – Working temperature<br/> <b>rd</b> – Temperature differential<br/> <b>AH</b> – Highest temperature level allowed without alarm<br/> <b>AL</b> – Lowest temperature level without alarm<br/> <b>Ad</b> – Delay of temperature alarm</p> | <p><b>tu</b> – day of the week<br/> <b>th</b> – hour<br/> <b>t'</b> – minutes<br/> <b>tr</b> – period of delay of HACCP alarm<br/> <b>to</b> – global reset of the HA and HF alarms</p> |
|---|---|

$$HI = St + AH$$



**Possible configuration for HACCP control on the refrigerated equipment with PJ controller (each user must program the controller according to the specifications defined by him for each unit):**

- St = 0
- rd = 3
- AL = 3 (the LO alarm trips at -3°C)
- AH = 8 (the HI alarm trips at 0+8=8°C)
- Ad = 30 (30 min delay on the alarms)
  - tu = 4 (Thursday, Monday would be 1)
  - th = 16 (16 hours)
  - t' = 23 (minutes)
- tr = 45 (45 min after the alarm being tripped the HACCP begins to record)


**The records are made on the following parameters:**

- Tu – day of the last HÁ or HF event
- Th – hour of the last HÁ or HF event
- t' - minute of the last HÁ or HF event
- tA - number of events since the reset
- tt – maximum of temperature during the HÁ or HF alarm
- td – Maximum time duration of the HA or HF event
- On the HA alarm the highest vertical led on the left switches on
- On the HF alarm the lowest vertical led on the left switches on

} Day hour and minutes when programming

#### 4.5 - Defrost

The counter defrosts automatically. When this process starts the  sign lights up. Following the deferring process the same sign switches itself off automatically.

Should it be necessary (excessive ice in the evaporator), it is possible to carry out a further defrosting process (besides those already programmed). In order to do this press button with  for a period of 5 seconds; at the end of this further cycle the timetable programmed is re-established.

It is advisable that following defrosting the doors are not opened so as to allow the temperature level to be reached more rapidly. Defrosting and condensation water go into trays placed under the evaporator and is directed to a collecting tray underneath the cooling unit, where they are automatically evaporated (in models that do not evaporate automatically, this tray should be emptied regularly).

#### 4.6 - Cleanliness

In order to ensure perfect hygiene and conservation, it is recommended that the following regular and daily cleaning procedures are adhered to:



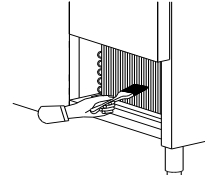
- Careful and regular cleaning of the surfaces using a damp cloth.
- A neutral detergent and water should be used, totally avoiding those which are chlorine-based or are abrasive.
- Wash down with pure water and dry with care.
- The use of water-pressure jets is not recommended, in particular in the direction of the compressor.
- Cleaning of the drainage tables is recommended and verification of the existence or not of items or residue which may obstruct the flow of the condensation water.

#### 4.7 - Maintenance

In order to ensure long life and correct operation of the refrigeration system, regular maintenance of the condensation should be carried out, as follows:



- Disconnect the cupboard from the electric current, by taking out the plug.
- Vacuum or lightly brush the condensation, according to the track direction.



#### 4.8 - Prolonged lack of Use

When prolonged periods with lack of use are predicted, the following measures are recommended:

- Disconnect the cupboard from the electric current;
- Remove completely the food produce;
- Carry out any maintenance operations;
- Leave the doors slightly open so to avoid odours.

#### 4.9 - Irregularities

Should any irregularities in the operation be detected, before calling the technical services, ensure that:

- The main switch is lit;
- The doors/drawers close correctly;
- The equipment is not placed near to any heat source;
- The condenser is clean and the ventilator motor is operational;
- There is not too much ice in the evaporator.

Should these inspections be negative, it is advisable to remove what is placed within the cupboard, disconnect it from the electricity network and request assistance from the nearest technical services available.

Note: Maintenance should be carried out by specialised technicians and the use of non-original parts allow that the manufacturer withdraws any responsibility and cancels the guarantee.