# **MOKU**

# INSTRUCTION MANUAL

Original Instructions







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#### 1. Introduction

## 1.1 Introduction and purpose of the Manual

Thank you for choosing Mondel S.r.l., hereinafter referred to as the Manufacturer. We are glad to have you as our Customer and hope you will be fully satisfied with this product.

This Use and Maintenance Manual is an integral part of the product and is aimed at anyone who works on the product or interacts with its users.

The purpose of this Manual is to supply the necessary information to enable:

- quick identification of the product parts;
- all the commissioning, functioning and maintenance operations to be carried out on the product;
- the health and safety of all users and exposed persons to be guaranteed at all stages.

All information, drawings, diagrams, tables and any other contents of this Use and Maintenance Manual are confidential and therefore the full or partial reproduction or disclosure thereof to third parties is subject to the authorisation of the Manufacturer in its capacity as sole owner.

#### 1.1.1 Use of this Manual

Read this manual before handling, installing and using the product, and likewise before carrying out any maintenance work on it.

The term Manufacturer will always be used to indicate Mondel S.r.l., while the generic term Supplier will be used to indicate other manufacturers of specific components fitted in the product.

The term Dealer will be used to indicate the company that, according to a distribution agreement signed with the Manufacturer, is authorised to sell the product and constitutes the Customer's commercial counterpart.

Keep this manual away from sources of heat, dampness and corrosive agents throughout the product working life, pass it on to any other user or subsequent owner and keep it handy for easy reference by its users.

Handle this manual with care; do not damage it, tear out pages or modify its content for any reason.

The Manufacturer reserves the right to communicate at any moment any information which is considered necessary for a better and safer use of the product. Such information, provided as modifications, updating or additions, will have to be considered in all respects as an integral part of this manual.

#### 1.2 Warranty conditions

Warranty conditions are stated in the sales agreement which is accepted by the Customer by means of order confirmation.

#### 1.3 Graphical conventions

**Bold type** is used to highlight information considered important.

References to illustrations are made by means of a number in **bold type** that identifies the illustration (i.e. **Fig. 1**) and, if necessary, by means of a letter or number that identifies the component in question



within the illustration. Illustration references and component references may be used at the same time (i.e. **A - Fig. 1** or **1 - Fig. 1**).

The following graphical symbols are used in this Manual to draw users' attention to information concerning proper and safe use of the product:



#### NOTE!

This symbol is used to highlight a piece of information or advice, or a rule which is considered particularly important.



# **CAUTION!**

This symbol is used to point out a dangerous operation or situation.



# PROHIBITED OPERATION!

This symbol is used to indicate a prohibited operation.

Additionally, the graphical symbols listed below are employed in this manual to show the Personal Protective Equipment which must be worn when installing, using and maintaining the product.

The symbol for each safety device will be found whenever a specific operation requires use of said device.



#### PERSONAL PROTECTIVE EQUIPMENT

This symbol indicates that it is compulsory to wear protective gloves during operations marked by this symbol.

#### 1.4 Personnel qualifications

Here follows a description of the type of personnel to whom this Manual is addressed.



# **Qualified**

The Qualified Technician is a specialised technician who is supplied by the Customer or by the Dealer and is authorised, under different circumstances, to carry out operations such as assembly, disassembly, installation, set-up, start-up, maintenance and repair.



# Warning!

Before displaying the goods, run the cabinet for 24 hours at the desired temperature. Goods are to be displayed on the cabinet when the cabinet has already reached the storage temperature.

## 1.5 General warnings

All the indicated safety regulations must be strictly observed by the users of the product.



The instructions written on this Manual will be the object of a training activity given by the Dealer's technical personnel during installation. The Customer will be responsible for selecting, inside their organisation, the people to whom such training activity is addressed and for checking that the trained personnel have reached a learning level which is apt for the tasks assigned to them.

#### WARNINGS:

If the information in this user manual are not followed exactly, a fire or explosion may occur, resulting in material damage, personal injury or death.

# <u>Donotuseopenflames, cigarettes or other possibles our ces of ignition in side or anywhere near the units.</u>

Installation and commissioning of the cabinet must be performed by qualified installer. READ

THE USER MANUAL THOROUGHLY BEFORE INSTALLING OR USING THIS EQUIPMENT. The

#### unitusesR-290(propane)gasasrefrigerant,whichishighlyflammable.

This refrigerant being heavier than air tends to accumulate in enclosed spaces, particularly at or below ground level. The propane gas used in the unit does not smell.

Any leakage, therefore, can only be detected by qualified personnel with appropriate tools.

If a leakage is detected, immediately evacuate all people from the store and contact your local firefighters to inform them that a propane leakege has occurred.

FAILURE TO COMPLY WITH THIS WARNING MAY CAUSE AN ESPLOSION, INJURY, DAMAGE TO PEOPLE AND THINGS.

Print this page out and keep it in your store!

The diagrams enclosed in this Manual are to be used only for extraordinary maintenance and controls.

#### Note!



It is strictly forbidden to use them to carry out modifications on the product. Possible modifications are to be required directly to the Dealer, specifying all the product technical features and the reasons for such modifications; if approved, modifications must be carried out only by the Manufacturer's personnel or by authorised personnel.

#### Note!



Any non-authorised tampering/replacement of one or more parts or units of the product may cause accidents and exempt the Manufacturer from civil and criminal liability.

## 1.5.1 To be arranged by the Customer

Provided for otherwise by special contractual conditions, the Customer is responsible for arranging the following:

- selecting the people to whom the training on the product use is addressed;
- arranging a suitable place for product installation;
- checking that the received product corresponds to the order specifications;
- carrying out all the activities described in the present manual, except where expressly indicated otherwise.



# 1.5.2 Technical assistance

The Customer may require technical assistance by contacting directly the Dealer's Customer Service according to the ways specified in the Sales Agreement.

## 1.5.3 Spare parts

#### Note!



The Customer must always use original spare parts supplied by the Manufacturer.

The Manufacturer cannot be held responsible for any damage or injury or any other inconvenience arising from the use of non-original spare parts.

With regard to the electrical and electronic equipment, please refer to the electrical diagrams.

# Note!



When ordering new spare parts, always quote the model and serial number of the product for which the spare parts are required.



## 2. Information on safety

## 2.1 General regulations - Training

- It is recommended that any person who interacts with the product reads this Manual completely before starting to operate.
- Negligence or failure to comply with these safety regulations while using and maintaining the product may cause accidents for which the Dealer and the Manufacturer are not responsible.
- Finally, it is hereby reminded that according to the provisions of the law in force:



#### Note!

Workers must follow the orders and instructions given by the employer.

## 2.2 General regulations - Skills and checks

- Only qualified and authorised technical personnel can install, set and carry out extraordinary maintenance on the product.
- The product has been designed only for holding food and shall not be used for any other purpose.
- Always use the Personal Protective Equipment when recommended.
- Arrange fire-fighting equipment adequate to the product technical features.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved
- Children shall not play with the appliance
- Cleaning and user maintenance shall not be made by children without supervision
- Do not store explosive substances such as aerosol cans with fiammable propellant inside the aplliance.

## 2.3 Fire regulations



# Warning!

Suitable extinguishing media: Water spray, Dry powder.

Unsuitable extinguishing media: Do not use water jets to extinguish the fire. Carbon dioxide.

Specific hazards: Exposure to fire could cause the container to rupture/explode.

Hazardous combustion products: Incomplete combustion may produce carbon monoxide.

For more details refer to the product safety data sheet.

## 2.4 First aid regulations

The following first aid regulations concern the treatment of injuries that could be caused by the refrigerant fluid.





# Warning!

Refer to the product safety data sheet.



#### Note!

For further details, refer to the "Safety data sheet" of the refrigerant fluid.

# ATTENTION: CABINETS CHARGED WITH R290 REFRIGERANT



R290 refrigerant is a gas that is compatible with the environment but highly flammable. Be careful when transporting, installing and scrapping the equipment so as not to damage the refrigeration circuit pipes.

Keepnakedflamesorsourcesofignitionawayfromequipment.



#### **IN CASE OF DAMAGE:**

#### Keepnakedflamesorsourcesofignitionawayfromequipment.

Ventilate the area well for a few minutes. Switch of the equipment, remove the power plug. Inform customer service. The more refrigerant a device contains, the larger the room in wich the equipment is located must be. In rooms that are too small, a flammable mixture of air and gas may form in the event of a leakege. The volume of the room where the equipment is located must be at least 19 m³ for each cooling system.



The refrigerant circuit contains R290 gas under pressure. It can explode if heated.



#### **CAUTION**

Maintenance must be carried out by trained technical personnel authorized to work on flammable refrigerants.



# 3. Product specification

# 3.1 General description

The product described in this manual is a display cabinet, hereinafter called "cabinet", multiplexable, in standard sizes, whose intended use is to display food sold:

## 3.1.1 Structural components.

**MOKU C3: WITH REFRIGERATED UNDERSTORAGE** 

**MOKU V3: WITHOUT REFRIGERATOR COMPARTMENTS** 

**CORNERS** 

## 3.1.2 Control system

It is performed through control units.

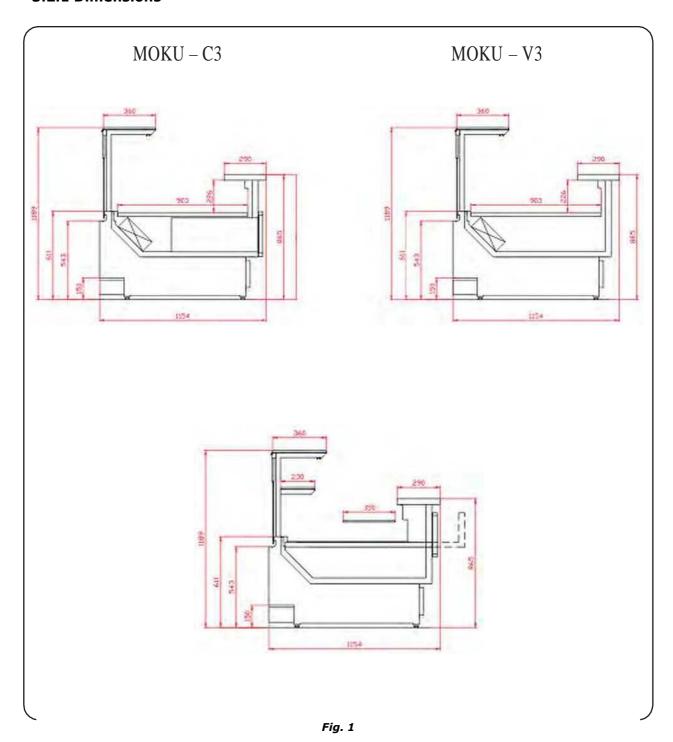
For specific instructions on its use, refer to the enclosed "Control unit instructions for use" .

## 3.2 Technical characteristics

In this manual all dimensions in the technical drawings are given in millimeters (mm).



# 3.2.1 Dimensions





# 3.2.2 Lay-out

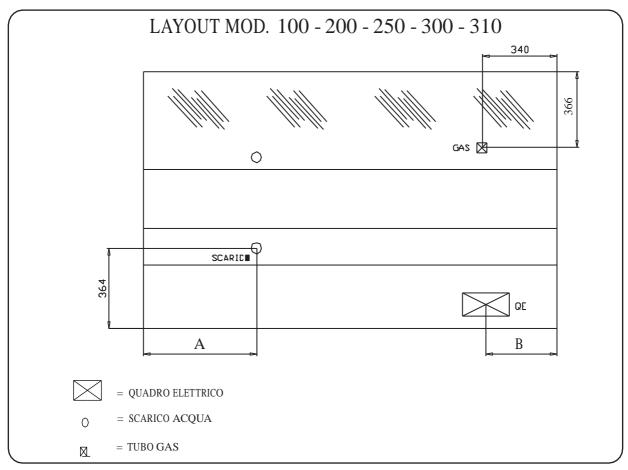
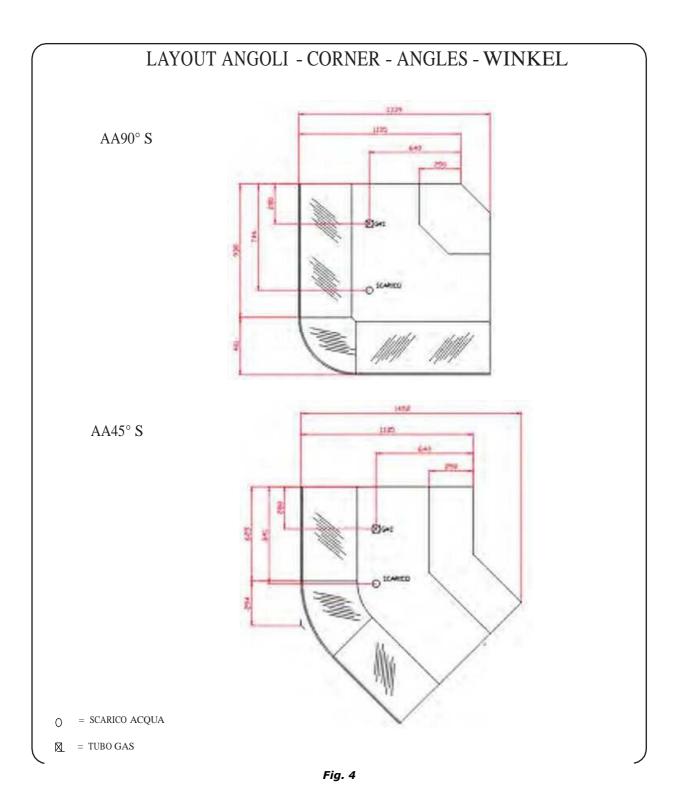


Fig. 3 Layout 100 - 200 - 300 - 310

LENGHT BANK	A	В
937	153	170
1250	196	290
1875	512	322
	620	785
3125	1042	934
3750	1352	897







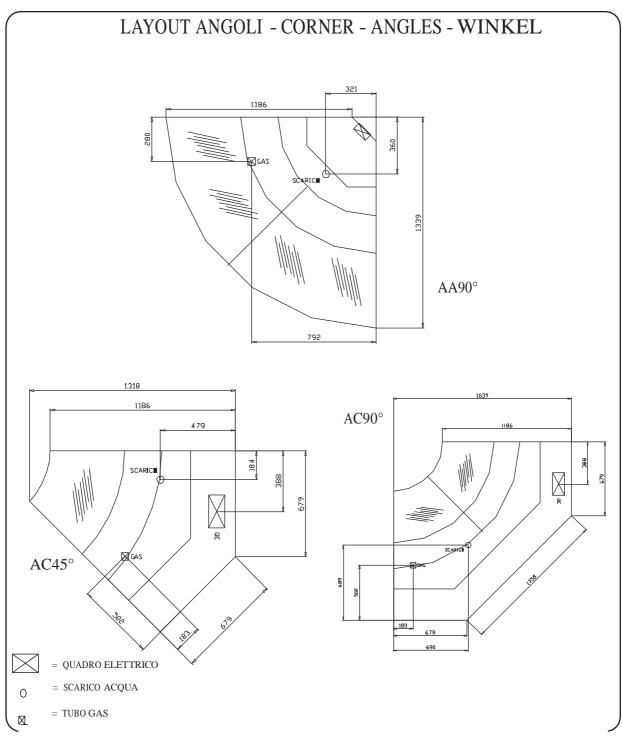


Fig. 5



## 3.2.3 Weight table

Cabinet length (mm)	937	1250	1875	2500	3125	3750
Weight (kg) (refrigeration unit not included)	100	125	185	250	310	370
Weight (kg) (refrigeration unit included)	130	160	220	280	340	410

#### 3.2.4 Admissible loads

As for the cabinet admissible loads, refer to the following table:

COMPONENTS	LOAD
Top canopies, alluminium	max kg 66/m²
Top canopies, glass	max kg 26/m <sup>2</sup>
Intermediate shelves	max kg 34/m <sup>2</sup>
Display surfaces	max kg 105/m <sup>2</sup>

## 3.2.5 Refrigeration system:

As for the refrigerant fluid characteristics, refer to the "Refrigerant fluid safety data sheet".

#### 3.3 Noise level

Tests performed by the Manufacturer have shown that the noise level ranges from 55 to 57 dBA in compliance with the EU Directive no. 89/392/EEC.

Noise level depends also on room temperature and, as for cabinets "with refrigeration unit", on the condensing unit cleaning level.



# Warning

Refrigerant R290 leaks are possible.

## 3.4 Environmental requirements for operation

To maintain the refrigerating cabinet in good working conditions check that the cabinet temperature class corresponds to that of the room where the cabinet has been installed (see below).

To maintain in good conditions cabinets provided with a refrigerating unit, act as follows:

- guarantee air exchange in the room, even at floor level, also when the sales outlet is closed;
- do not obstruct the condensing unit air outlets by placing products or materials around the cabinet.

In case of cabinets "without refrigeration unit", act as follows:

locate the remote condensing unit in a place sheltered from the atmospheric agents.

In any case, act as follows:



- install the cabinet avoiding exposure to direct sunlight and to any other source of heat such as high-intensity incandescent lighting, ovens or heat-emitting bodies such as radiators;
- position the cabinet away from doors, windows, air-conditioning outlets to avoid air flows exceeding 0.2 m/s.

#### Note



A room temperature rising and/or a lack of air to the condensing unit not only increases energy consumption but also reduces the cabinet technical performances and may lead to the deterioration of displayed products.

#### RECOMMENDED ROOM OPERATING TEMPERATURES:

Min 15°C

Max 26°C

Relative humidity 60%

#### 3.5 Description of residual risks

# **Warning DANGER OF CUTTING**



When cleaning the cabinet tray, after having removed the display shelves, be careful not to injure yourself on the evaporator fins as they may be sharp due to their reduced thickness.

When cleaning the condensing unit of cabinets provided "with a refrigerating unit", be careful not to injure yourself on the condensing unit fins, as they may be sharp due to their reduced thickness.



#### PERSONAL PROTECTIVE EQUIPMENT

It is compulsory to wear protective gloves when performing the above mentioned cleaning operations.



# Warning DANGER OF BURNS

In case of cabinets provided with electric defrosting, be careful not to get burnt by the heater, as this may still be hot.

In case of infrared lamp heated cabinets, be careful no to get burnt by hot parts.



# Warning DANGER OF CRUSHING

Cabinet front glasses open by means of piston system. Pistons act as a lifting back-up and prevent the glass from accidental and unexpected falling.

To avoid danger of crushing, check periodically the system efficiency and check if the effort required to lift the glass is increasing, as this will indicate a reduced efficiency of the lifting system.



# Warning DANGER OF GLASS BREAKING



All movable glasses are hardened and, if broken, fragment in pieces not longer than 3cm, thus reducing the risk of damaging people.

During the normal use of the cabinet glasses are lowered, thus avoiding any danger of breaking due to glass falling.

To store goods and for cleaning purpose glasses are lifted and kept open thanks to the lifting system.

# 3.6 Specific protections

Normally, the refrigeration system components and the control panel are not accessible. They are sheltered by means of panels placed on the cabinet rear side.



## **Prohibited operation**

Except when special maintenance is performed, it is forbidden to remove the panels or use the cabinets when the panels have been removed or are open.

# 4. Instructions for commissioning

## 4.1 Transport, handling and positioning

#### 4.1.1 Precautions to be taken upon receipt of the product

The Manufacturer supplies the cabinet ex-works. Before delivery to the carrier, the material, subject matter of the supply contract, shall be carefully inspected by the Manufacturer.

The Manufacturer cannot be held responsible for missing parts or damage to parts that might occur after delivery to the carrier.



#### **Note**

The cabinet components are usually packed; non-packed components have to be covered during transport.

All loose components that might move during transport must be firmly secured.

#### **Note**

Upon receipt of the cabinet, the Customer shall act as follows:



Check that the supplied material corresponds to the order specifications.

Check that the cabinet has not been damaged during transport, that the packaging, if any, has not been tampered with and that no part is missing.

In case of damage or missing parts, immediately inform the carrier and the Manufacturer producing photographic proof.

## 4.1.2 Handling and positioning

Unless otherwise specified, the Customer is responsible for the above mentioned operations.



To handle the cabinet use a forklift truck of suitable capacity. Refer to the gripping-lifting areas shown in the picture below.

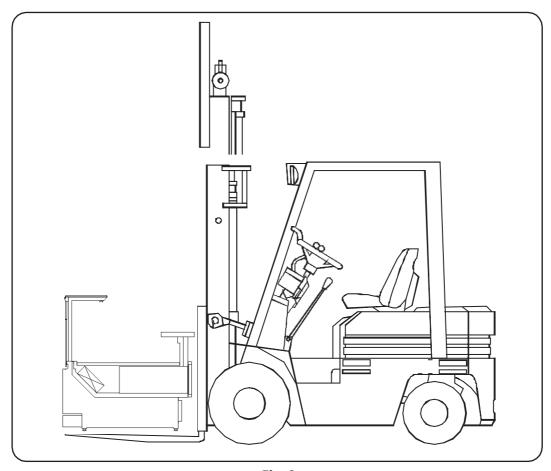


Fig. 6

## Note



It is recommended to move the cabinet only by means of a pallet.

# Check the correct balancing of the cabinet before lifting it completely.

#### Lifting has to be smooth (avoid jerks and jolts).

Make sure that the cabinet has been positioned completely flat. If necessary, adjust the feet screws and check the position of the cabinet with a spirit level. The cabinet must be placed on a completely flat surface to ensure correct operation, to drain any condensing water and to avoid noisy vibrations from the motor.

In case of cabinets provided with a condensate collection tank, make sure that the collection tank has been positioned so that to allow the connection of the relative drainage pipe to the hydraulic system.



# 4.2 Unpacking and disposal of packaging materials

Unless otherwise specified, the Customer is responsible for the operations mentioned below.

Remove the packaging only after having positioned the unit.

Packaging must be disposed of in compliance with the laws in force.

# 4.3 Assembly

Unless otherwise specified, the Customer is responsible for the operations mentioned below.



CANALIZZAZIONE TRA BANCO E BANCO - MULTIPLEXATION BETWEEN CABINET AND CABINET -CANALISATION VITRINE ET VITRINE - ZUSAMMENBAUSATZ ZWISCHEN THEKE UND THEKE

ART.1 C60001080



**SPUGNA ADESIVA** 2 PZ

ART. 2 C50001970 SPINA D. 4 X 40 ZN



4 PZ

ART.3 C50006050



ART. 4 C50001880 DADO M6 ZN



7 PZ

ART. 7 C50002170 ROSETTA ZN X M6



10 PZ

ART.10 C50008660 VITE CANNOCCHIALE FEM. M4X20 TCI



1 PZ

ART. 5 C50003550 VITE AF 4,2X13 TC-IC IX



8 PZ

ART. 8 C70028290 COPERTURA CAN 1 PZ

> ART.11 C50008400 VITE M6X70 TCEI ZN



VITE M6X 30 TCEI ZN 🍇



ART.6 C50001040 VITE M6 X 100 TE ZN



ART. 9 C50008650 VITE CANNOCCHIALE



MAS. M4X30 TCI 1 PZ

ART. 12 C50010930 ROSETTA 6X18 IX



2 PZ



CANALIZZAZIONE BANCO CON CASSA - MULTIPLEXATION BETWEEN CABINET AND ENDWALL FOR CASH BLOCK - CANALISATION ENTRE VITRINE ET JOUE CAISSE - ZUSAMMENBAUSATZ ZWISCHEN THEKE UND SEITENTEIL FÜR KASSENTISCH

ART.13 C50001730 VITE AF 4,8X60 TC-IC

1 PZ

ART. 14 C50004110 VITE AF 4.8X32 TC -IC

4 PZ

ART. 7 C50002170 ROSETTA ZN X M6

1 PZ



CANALIZZAZIONE BANCO CON SPALLA PIATTA - MULTIPLEXATION BETWEEN CABINET WITH FLAT ENDWALL-CANALISATION ENTRE VITRINE ET JOUE PLATE - ZUSAMMENBAUSATZ ZWISCHEN THEKE MIT FLACHEN SEITENTEIL



ART.1 C60001080 **SPUGNA ADESIVA** 1 PZ

ART.5 C50003550 VITE AF 4,2X13 TC-IC IX

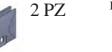


2 PZ

ART.13 C50001730 VITE AF 4,8X60 TC-IC

4 PZ

ART.15 CP0004867 ART.16 CP0005760 SUPP.FIANCO V. SP.5 BORCHIA 25X25



1 PZ



ART. 14 C50004110 ART. 7 C50002170 VITE AF 4,8X32 TC –IC ROSETTA ZN X M6





5 PZ

FOR VERSION 310 - 400 - 410

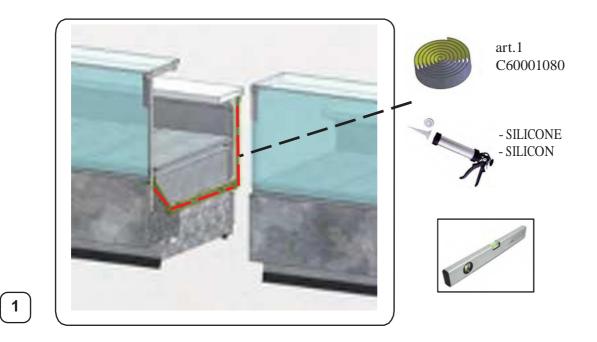


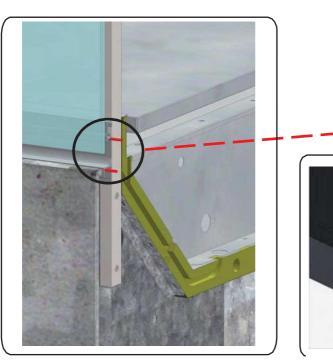
Fig. 7 Multiplexing Plexi

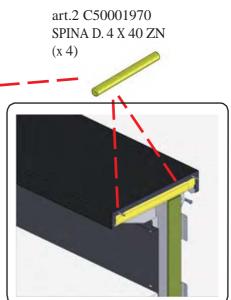




CANALIZZAZIONE TRA BANCO E BANCO - MULTIPLEXATION BETWEEN CABINET AND CABINET - CANALISATION VITRINE ET VITRINE - ZUSAMMENBAUSATZ ZWISCHEN THEKE UND THEKE







2

Fig. 8 Multiplexation



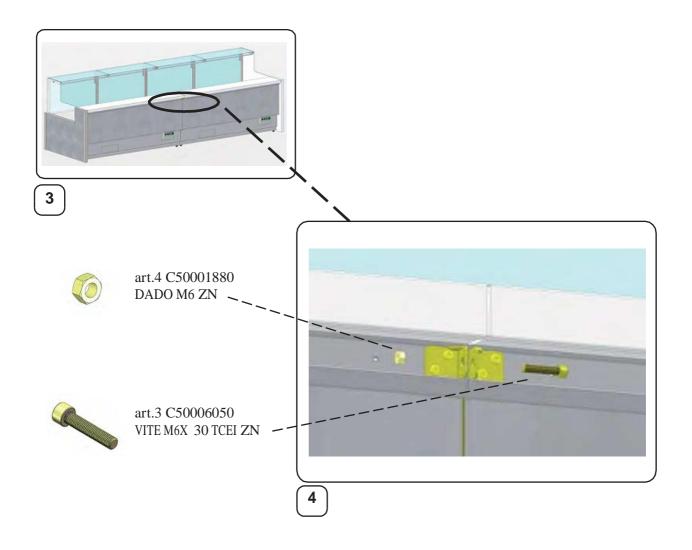
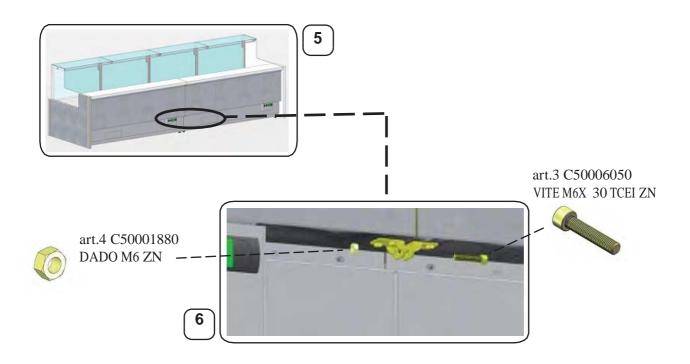
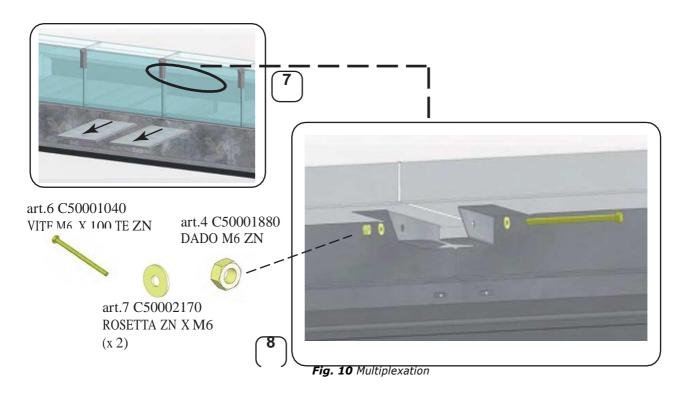


Fig. 9 Multiplexation









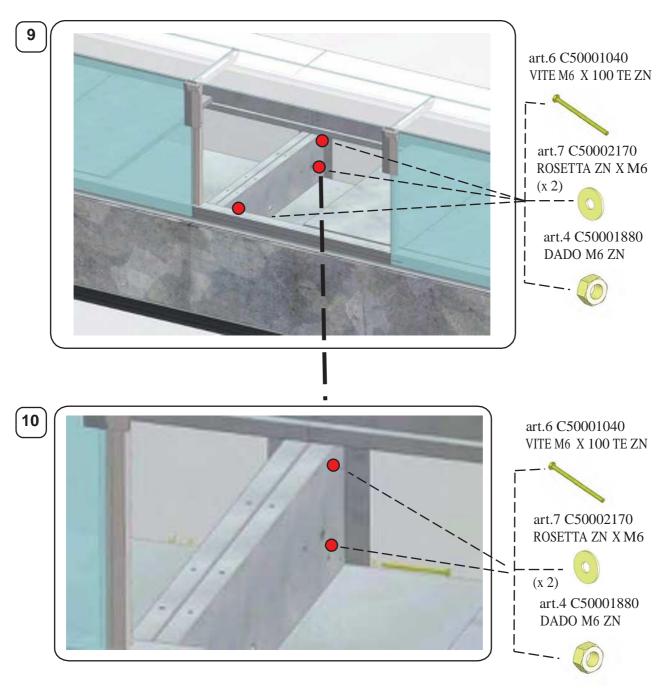
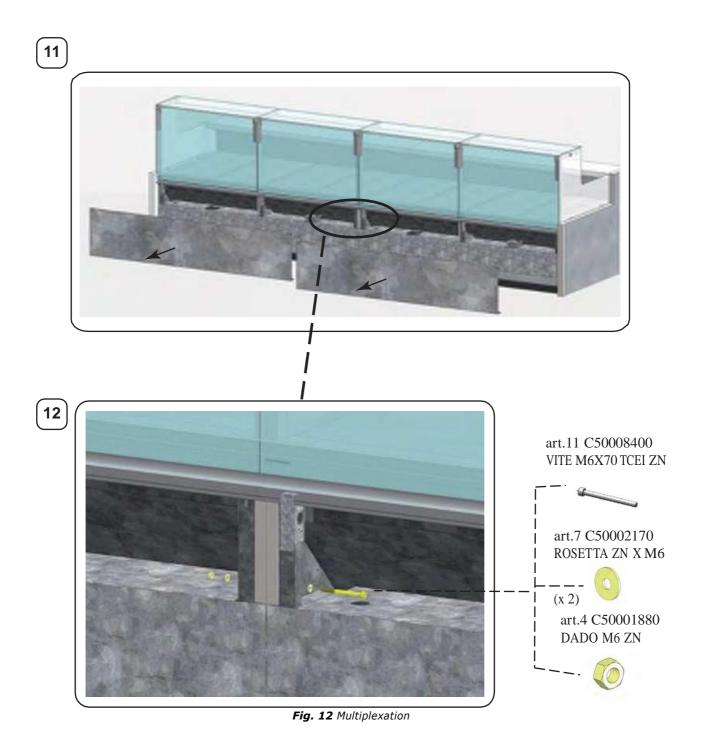
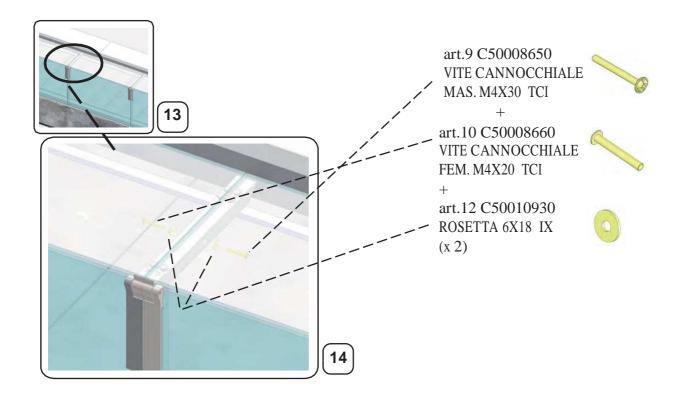


Fig. 11 Multiplexation









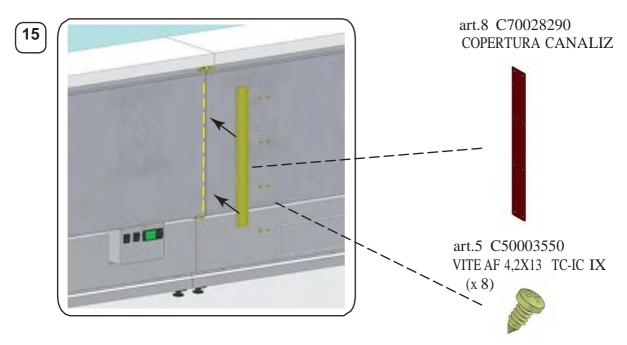


Fig. 13 Multiplexation



CANALIZZAZIONE BANCO CON CASSA - MULTIPLEXATION BETWEEN CABINET AND ENDWALL FOR CASH BLOCK - CANALISATION ENTRE VITRINE ET JOUE CAISSE - ZUSAMMENBAUSATZ ZWISCHEN THEKE UND SEITENTEIL FÜR KASSENTISCH

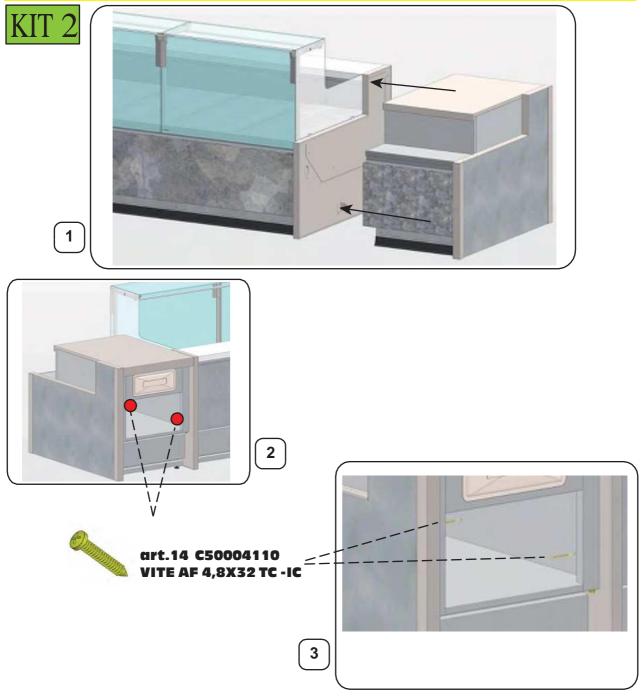


Fig. 14 Multiplexation



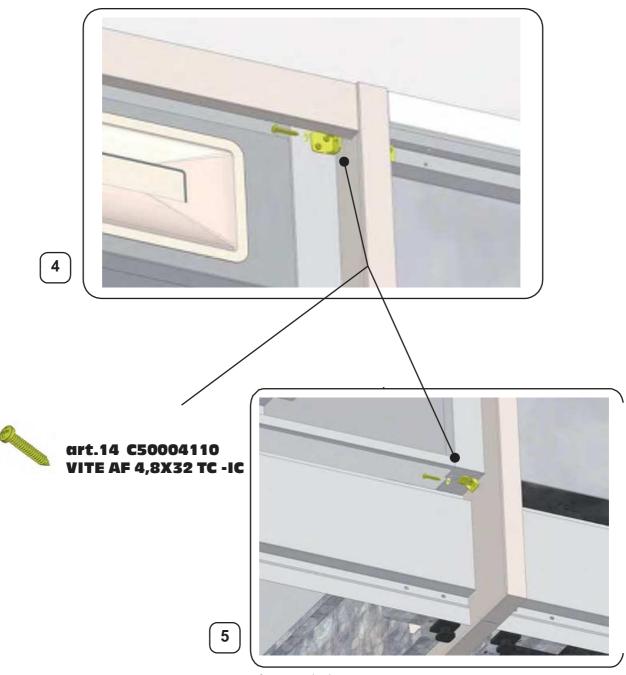
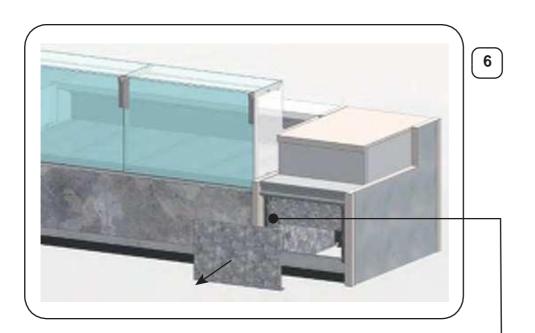
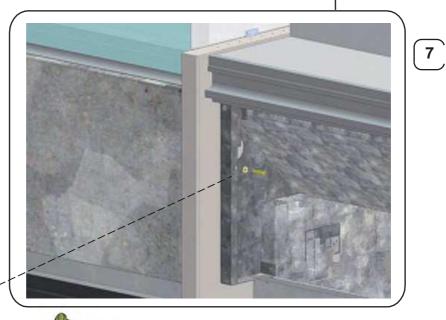


Fig. 15 Multiplexation







art.13 C50001730 VITE AF 4,8X60 TC-IC

art.7 C50002170 ROSETTA ZN X M6 UNI 6592



Fig. 16 Multiplexation





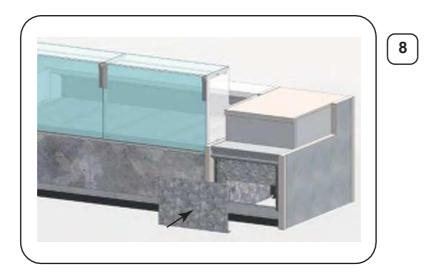


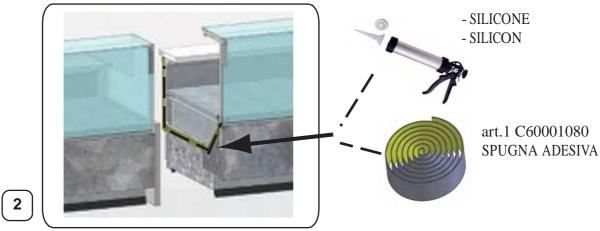
Fig. 17 Multiplexation



CANALIZZAZIONE BANCO CON SPALLA PIATTA - MULTIPLEXATION BETWEEN CABINET WITH FLAT ENDWALL-CANALISATION ENTRE VITRINE ET JOUE PLATE - ZUSAMMENBAUSATZ ZWISCHEN THEKE MIT FLACHEN SEITENTEIL







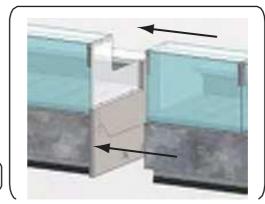


Fig. 18 Multiplexation

3



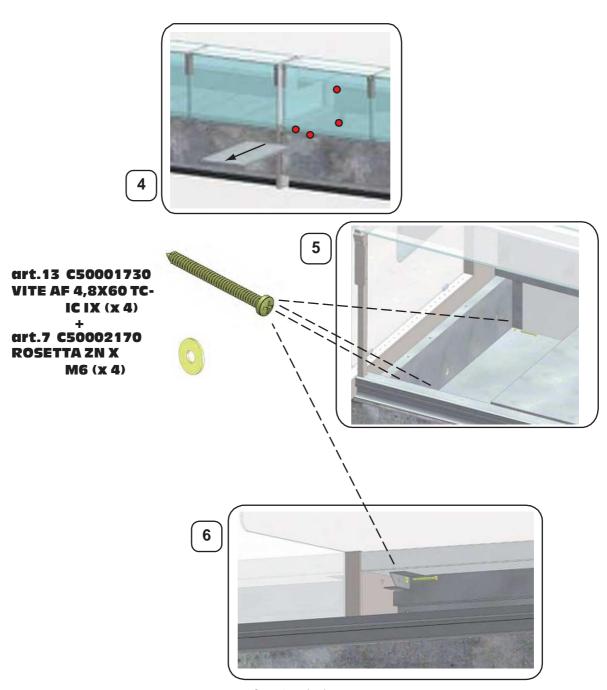
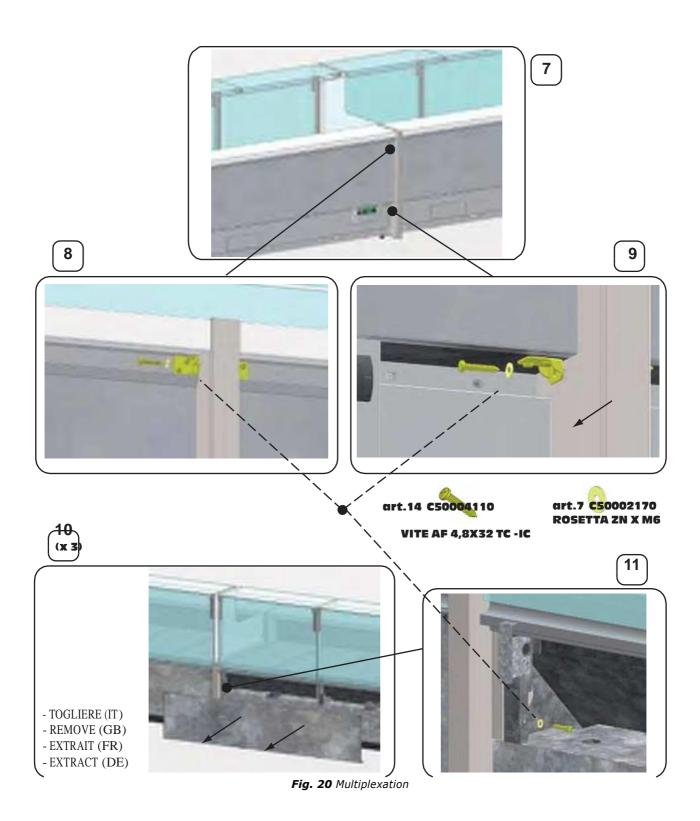


Fig. 19 Multiplexation







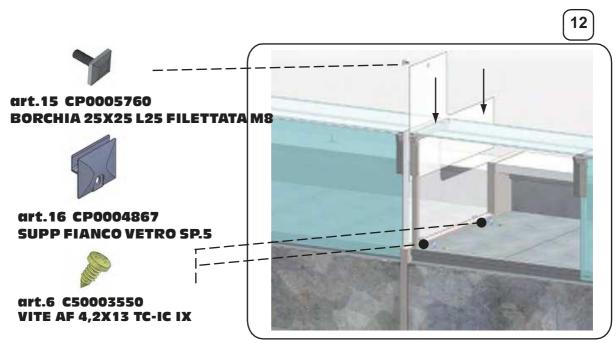
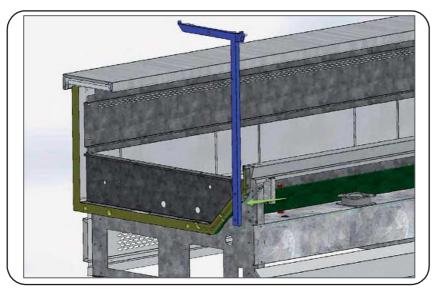


Fig. 21 Multiplexation



## MONTAGGIO VETRINA (IT) - SHOWCASE ASSEMBLY (GB) ASSEMBLAGE VITRINE (FR) - MONTAGE VITRINENAUFBAU (DE)

- \* TUTTA LA VITERIA PER IL MONTAGGIO VETRINA VIENE FORNITA, UNITAMENTE AL BANCO SOLO SE RICHIESTO CON VETRINA SMONTATA (IT)
- \* ALL THE SCREWS FOR THE ASSEMBLY OF THE TOP CANOPY ARE SUPPLIED TOGETHER WITH THE CABINET ONLY IF IT IS REQUIRED WITH DISMANTLED TOP CANOPY (GB)
- \* TOUT LA VISSERIE POUR L'ASSEMBLAGE DU SYSTÈME VITRÉ VIENT FOURNI AVEC LA VITRINE, SEULEMENT SUR REQUÊTE AVEC VITRINE DÉMONTÉE (FR)
- \* ALLE SCHRAUBEN FÜR DIE MONTAGE DER VITRINE WIRD NUR BEI BEDARF DER DEMONTIERTEN VITRINE MIT DER THEKE GELIEFERT (DE)



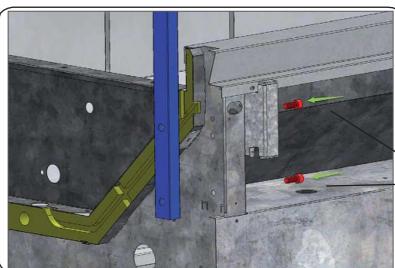


Fig. 22 Top Canopy Assembly

C50006190 ROSETTA D.8 INOX (X 2)



2

1





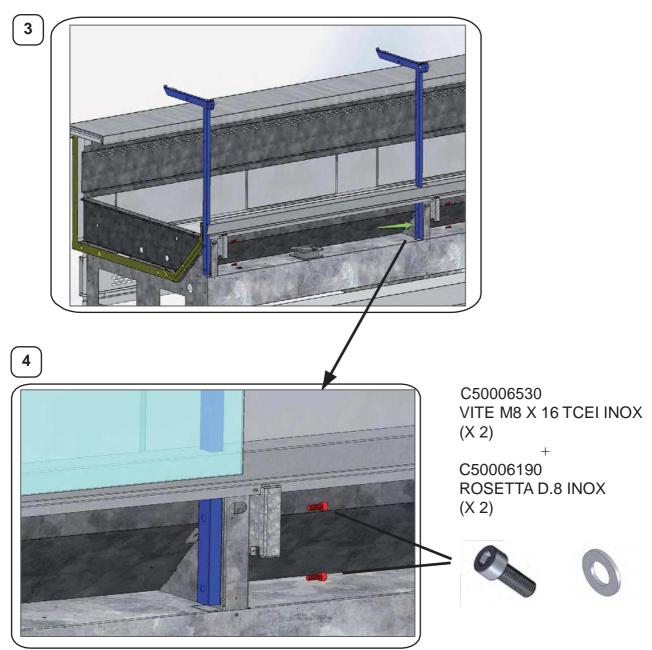


Fig. 23 Top Canopy Assembly



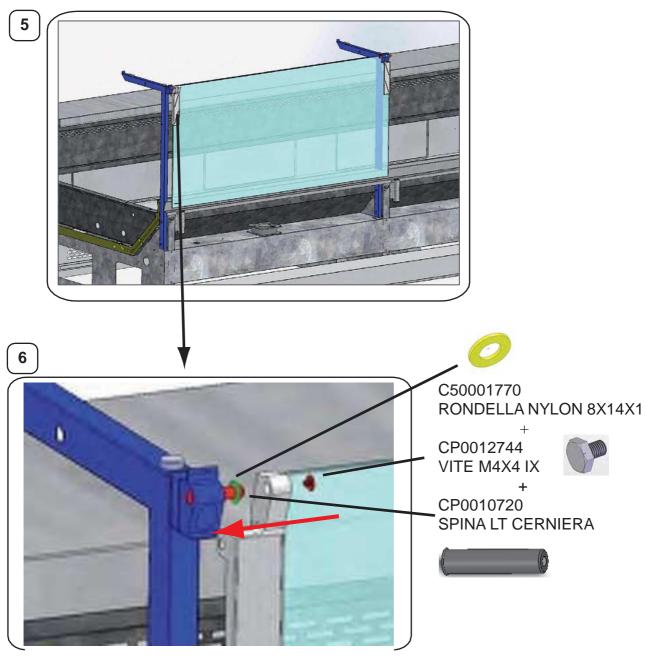
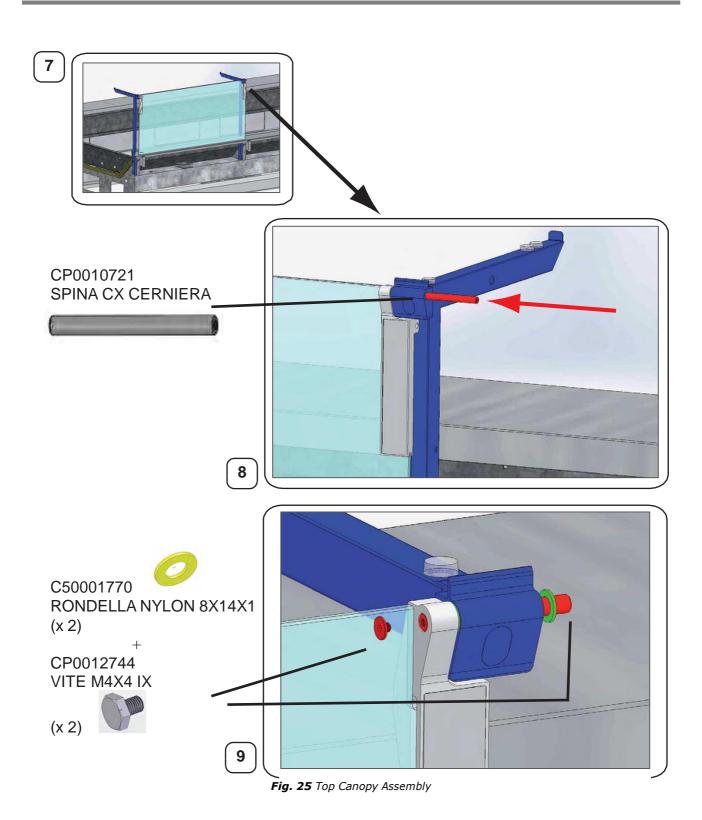


Fig. 24 Top Canopy Assembly







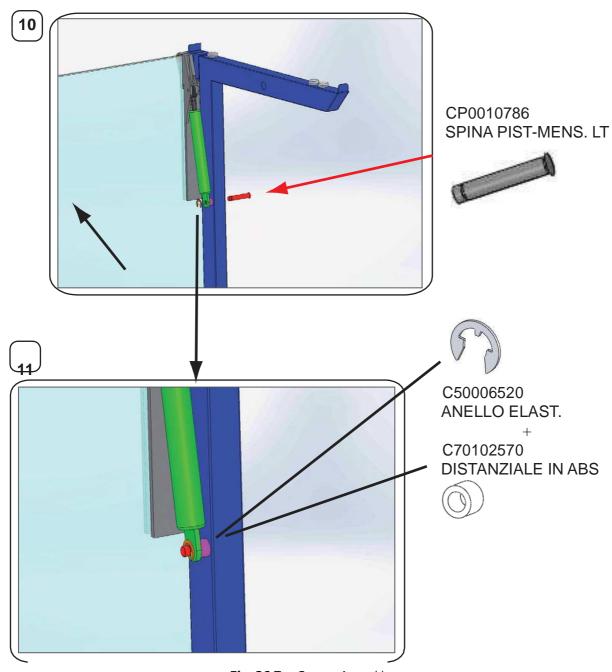


Fig. 26 Top Canopy Assembly



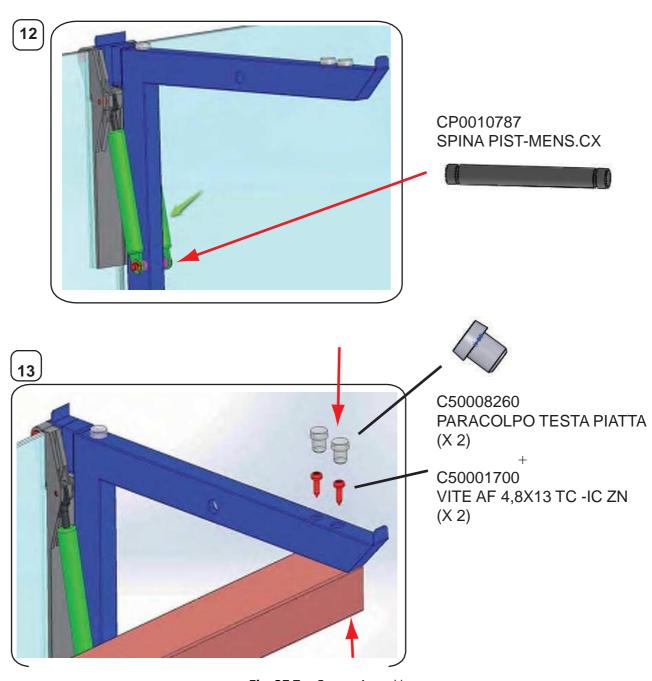


Fig. 27 Top Canopy Assembly



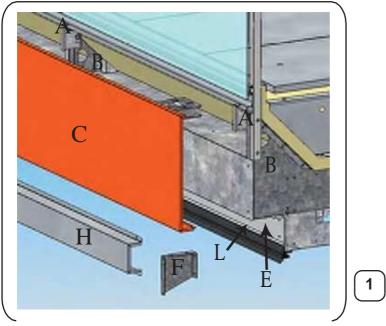
# MONTAGGIO VETRO CAPPELLO FISSO ANGOLO APERTO AA90° (IT) SHOWCASE ASSEMBLY OPEN CORNER AA90° (GB) ASSEMBLAGE VITRINE ANGLE OUVERTE AA90°(FR) MONTAGE VITRINENAUFBAU AUSSEN WINKEL AA90° (DE)



Fig. 28 Top Canopy Assembly

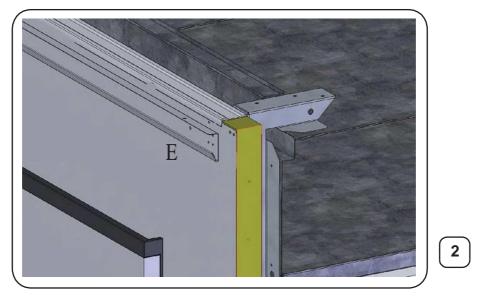


# MONTAGGIO PER IMBALLO CONTAINER (IT) - CONTAINER ASSEMBLY (GB) ASSEMBLEE CONTAINER (FR) - MONTAGE CONTAINER (DE)



**Fig. 29** Fix (A) supports to the legs (B). Clasp the upper front panel (C) to the supports (A) and fix it with self-drilling screws on the lower part (E). FOR LOUNGE FRONT PANEL: Fix the ribs (F) to the plinth (L) using the prearranged holes. Lean the panel (H) on the ribs (F) and fix it using the prearranged holes with self-drilling screws.





**Fig. 30** Fix the angle bracket for the support of the work surface (E) to the external part of the back panel (please use the prearranged holes) with 48x13 screws.

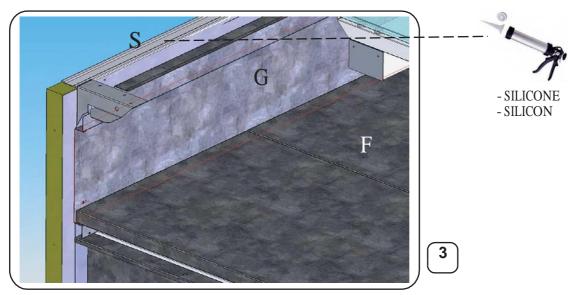
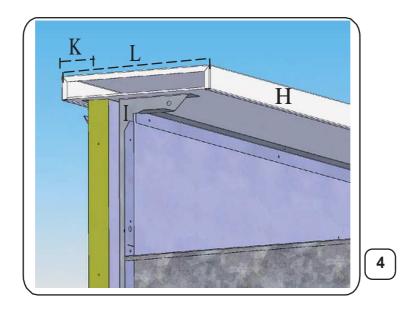
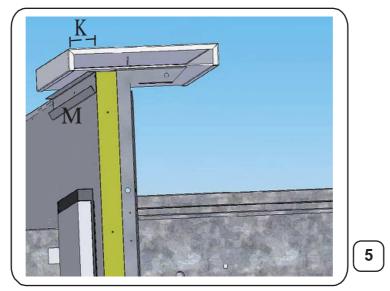


Fig. 31 Remove the display surfaces (F) and airflow grid (G). Apply silicone along the tank border(S).







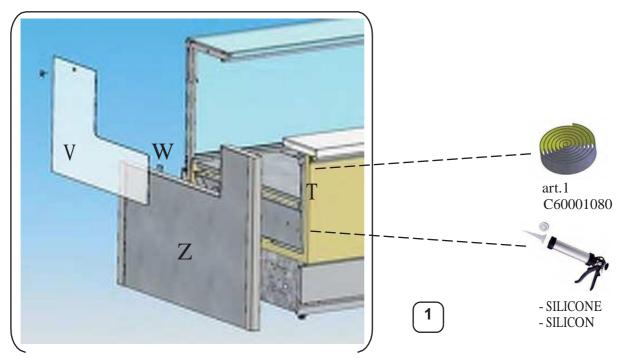
**Fig. 32** Apply the work surface (H), make sure it comes out of (L) mm from the back panel. Fix the work surface to the angle brackets (M) and to the struts (I) with 4.8x13 screws. Fix the airflow grid (G).

L (mm)	K (mm)
290	56
360	126

Fig. 33

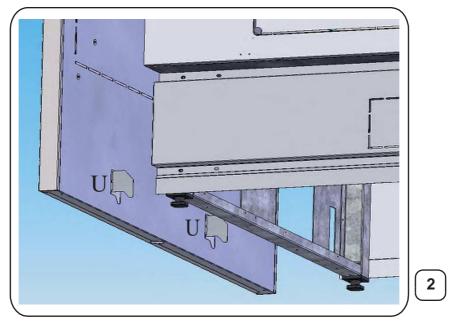


# MONTAGGIO FIANCATA (IT) - ENDWALL ASSEMBLY (GB) ASSEMBLEE JOUE (FR) - MONTAGE SEITENTEIL (DE)

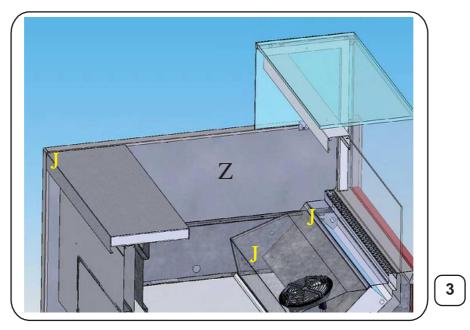


**Fig. 34** (Z): Endwall (V): Side Glass (W): Glass Holder Apply adehesive sponge along the tank border (T) leaving a small stripe towards the inside part of the tank empty. On this stripe, apply a high quantity of silicone.



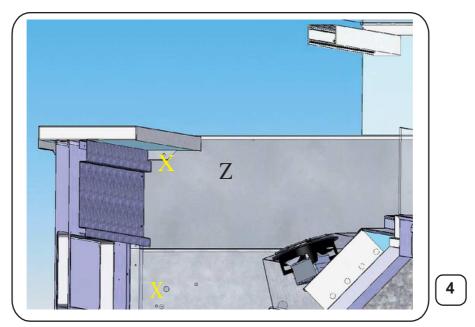


**Fig. 35** Open the little (U) pieces. Clasp the endwall (Z) to the leg using the (U) pieces.

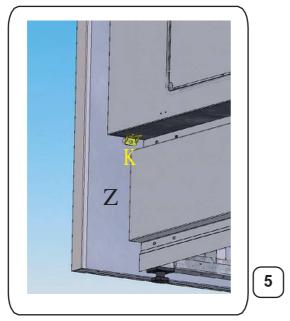


**Fig. 36** Fix the endwall (Z) to the showed points (J) with 4.8x60 stainless steel screws.





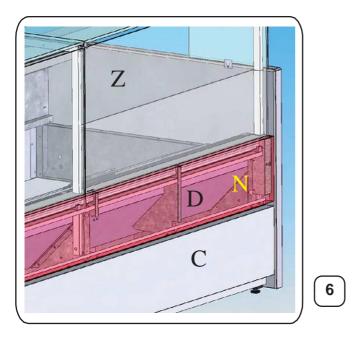
**Fig. 37** Fix the endwall (Z) to the showed points (X) with 4.8x60 stainless steelscrews.



**Fig. 38** Fix the endwall (Z) to the showed points (K) with 4.8x32 stainless steel screws.







**Fig. 39** Unlock the upper front panel (D). Fix the endwall to the showed point (N) with 4.8x60 stainless steel screws. Lock the front panel (D) back and fix it to the lower panel (C) with 4.8x13 screws.



# MONTAGGIO SPORTELLO SERIE R (IT) - ASSEMBLING R MODEL DOOR (GB)

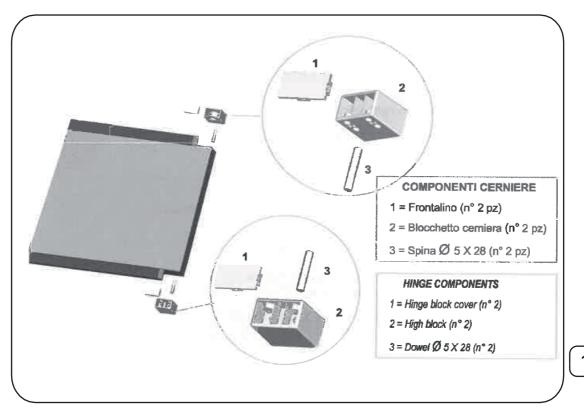
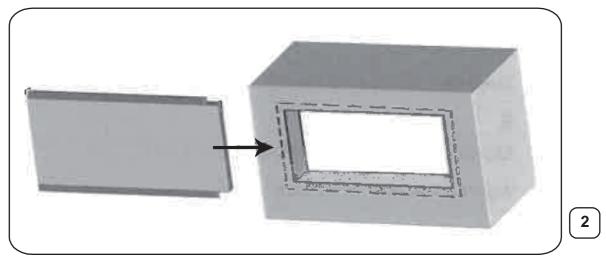


Fig. 40





**Fig. 41** Place the door on the counter hole. The door will remain fixed to the bar counter by means of the magnetic seal. Make sure that the door is perfectly aligned.

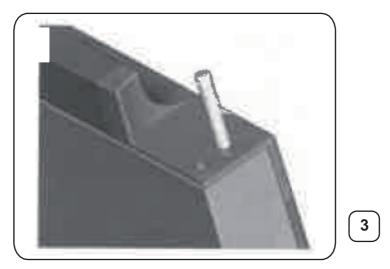


Fig. 42 Insert the dowel into the hole of the upper hinge. You must use the inner hole.



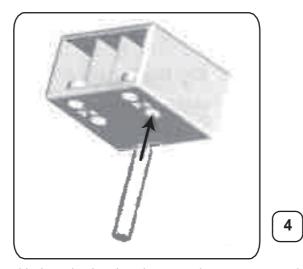
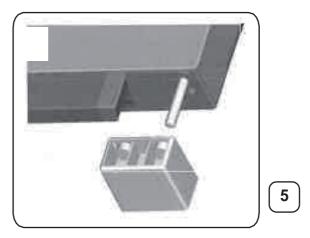


Fig. 43 Place the upper hinge block on the dowel. making sure that it goes correctly into its seat.



**Fig. 44** Insert the second dowel in the lower hole of the door using the external hole for self-closing door or internal hole for non self-closing door. Then place the hinge block in the dowel and hold it in this position.



Marke the position of the four fixing screws of the hinge blocks.

Remove the door and fix the hinge block using self-tapping wood screws (e.g.  $\emptyset$  3.9 x45, ...) placing them on the marks previously made (see above).

Insert the lower dowel in the hole of the lower hinge block.

Assemble the door on the lower dowel.

Insert the upper dowel in the upper inner hole of the door.

Insert the upper hinge block in the dowel.

Fix the upper hinge block using self-tapping screws (e.g.  $\emptyset$  3.9 x45, ...) placing them on the marks previously made.

Click the hinge block covers into place.

### 4.4 Disassembly and subsequent reassembly

The Customer is responsible for the cabinet disassembly in order to move it and for its subsequent reassembly.

For technical service, the Customer can apply to the Reseller.

### 4.5 Fixing

The cabinet described in this manual is provided with screw feet and therefore does not need to be fixed to the floor.

### 4.6 Installation

Unless otherwise specified, the Customer is responsible for the operations mentioned below.

### 4.6.1 Connection to a remote condensing unit

The connection to a remote condensing unit concerns only cabinets "without a refrigeration unit".



### Qualified

Both the connection and the start-up shall be carried out by a Refrigerant Specialist. Refer to the cabinet layout for the position of the refrigerant fluid intake and outlet pipes.

### 4.6.2 Connection to the mains

Connect the cabinet to a mains power supply having an impedance lower than 0.228 ohm.

Line supply, frequency and voltage must correspond to those stated on the cabinet rating plate. When the compressor is started, the nominal voltage must be within  $\pm$  10%.

We recommend the use of a omnipolar isolation switch of adequate rating (C or D) upstream of the outlet.



Moreover, according to the law, both the system and the socket must be connected by a differential switch with 0.03 A release current.



# Warning

The cabinet must be earthed.

Before plugging in cabinets "with a refrigeration unit", check that the isolator is open, in 0, OFF or green position. Then plug the cabinet in and turn on the switch.

### 4.6.3 Connection to the drain line

The cabinet must be connected to a drain line if it is not provided with tanks collecting the condensate coming from inside the cabinet tank. In this case, connect the condensate drainage pipe to the drain line of the place where the cabinet has been installed.

### 4.7 Commissioning

### 4.7.1 Setting

Start-up settings are performed in the factory during the testing procedure by the Manufacturer.

As for set-up operation parameters, refer to the **List of parameters**.

To modify the above mentioned parameters, refer to the enclosed **"Control unit instructions for use"**.

For the configuration and description of the keys please use the manual electronic control attached.

### 4.8 Idle time and restarting

No special measures must be taken in case of prolonged idle times and subsequent restarting of the cabinet.



### 5. Instructions for use

the Customer is responsible for the operations mentioned below.

### 5.1 Correct use of the cabinet

### Note

When using the cabinet we recommend to observe with the utmost scrupulousness the principles of the Hazard Analysis and Critical Control Point (Haccp) concerning:



personal hygiene of all the operators of food service;

plant hygiene; food transport; interrupted cold chain; food preservation.

### Note

In particular:



products must be brought from the warehouses at a temperature close to their ideal storage temperature and immediately placed in the cabinet.

Filling the cabinet with products whose temperature is higher than that of the cabinet itself may make the cabinet operating conditions worse and even deteriorate the conservation of the already displayed goods.

To ensure the cabinet good operating conditions, displayed good must not obstruct the refrigerated air circulation.

### Note



Front glasses must be lifted to their maximum opening point and kept open only as long as it takes to store or remove food, or for cleaning purposes. Pistons act as a lifting back-up and prevent the glass from accidental falling.

If cabinets are provided with hatches, these must be opened only as long as it takes to store or remove food in order to avoid an anomalous rising of the cabinet working tem-perature.

### 5.2 Uses to be avoided

# **Prohibited operation**



Do not set temperatures lower than those recommended for the cabinet category. This would not bring any advantage and may block the evaporator.

Do not store goods over the maximum load line. This may cause ice formation on the evaporator, which may damage the thermal conditions of the correctly stored products.

Do not obstruct the air inlet grille located in the display surface front side.



### 5.3 Working limits

RECOMMENDED ROOM OPERATING TEMPERATURES:

Min 15°C

Max 26°C

Relative humidity 60%

### 5.4 Cabinet control functions

Here are the cabinet control functions reckoned among the Customer's common skills:

- cabinet switching on;
- manual defrosting of the evaporator;
- setting temperature;
- periodical cleaning and maintenance;
- cabinet switching off.

To carry out the listed control functions, refer to the enclosed "Control unit instructions for use".

### 5.4.1 Manual defrosting

In order to avoid ice formation on the evaporator and consequent reduction of cold air flow, the unit has an automatic system that will defrost the cabinet periodically, whose daily frequency has been preset by the Manufacturer during the testing procedure.

In case of an anomalous reduction of the refrigerated air flow, the manual defrosting of the cabinet must be carried out.

### 6. Maintenance instructions

### 6.1 General warnings

Maintenance operations described in this manual concern planned routine maintenance. **The Customer is responsible** for the routine maintenance of the equipment.

**Special maintenance** shall be carried out only by qualified personnel.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

The appliance shall be disconnected from its power source during cleaning or maintenance and when replacing parts. The removal of the plug has to be such that an operator can check from any of the points to which he has access that the plug remains removed.

### 6.2 Periodical cleaning



### **Warning**

Before starting to clean the cabinet, unplug it from the mains.

### Cabinet cleaning:

- **Clean every day** the areas around the display surface with water and a neutral detergent, then dry the parts with a soft cloth.
- Clean weekly both the product display surface and the tray bottom.



# Prohibited operation It is strictly forbidden to clean the cabinet with acid or ammonia-based

It is strictly forbidden to clean the cabinet with acid or ammonia-based compounds.



# Warning

When cleaning the cabinet tray, after having removed the display shelves, be careful not to injure yourself on the evaporator fins as they may be sharp due to their reduced thickness.

### Condensing unit cleaning:

- Drain **every day** the water collected in the special tray.
- Clean the unit at least **once a month** by using a vacuum cleaner and a hard bristle brush. A dirty condensing unit reduces motor performance and increases electricity consumption.



It is advisable to wear protective gloves when cleaning both the cabinet and the condensing unit.

### 6.3 Periodical maintenance

### 6.3.1 Check of the glass lifting system



### **Qualified**

Check at least once a year that the glass lifting system works perfectly.

### 6.4 Special maintenance

The maintenance of the refrigeration system components (Compressor, Condenser, Fans, Evaporator, thermostatic or capillary valve) pertains to special maintenance operations.

### 6.5 Troubleshooting



### Qualified

Cabinet restoring shall be performed by a refrigerant specialist.

Refer to the enclosed "Control unit instructions for use".

The unit allows to control operation signals concerning the good working order of the cabinet, alarm signals with relative description and restoring modality.

### 7. Instructions for demolition and disposal

Make sure that all parts of the cabinet are disposed of in compliance with the laws in force in the User's country.

Pay particular attention to the following list of materials used to produce the cabinet and entrust their recovery and/or disposal to specialized and authorized companies:

- thermal insulation;
- refrigerant fluid;
- electric and electronic components.



# Prohibited operation

The refrigerant fluid is not easily biodegradable.

It must not be discharged in ground waters, rivers, sewages or on the ground.



# Warning

In particular, the refrigerant fluid disposal is very dangerous.

Only qualified personal is allowed to make the intervention.

Don't drill or cut parts of the refrigerant circuit, before the gas has been removed from it.

### 8. Attachments

### 8.1 Reference to manuals of other suppliers

Instructions of control unit: as attached.

Wiring diagram: attahed.

### 8.2 Declaration of conformity: as attached

# MOKU

