ISTRUZIONI DI MONTAGGIO DEL CONDIZIONATORE AIR CONDITIONER MOUNTING INSTRUCTIONS INSTRUCTIONS POUR LE MONTAGE DU CLIMATISEUR MONTAGE DER KLIMAANLAGE INSTRUCCIONES DE MONTAJE DEL ACONDICIONADOR

CONDIZIONATORE AIR CONDITIONING FOR PORTHOLE CLIMATISEUR POUR HUBLOT KLIMA-ANLAGE FÜR BULLAUGE CLIMATIZADOR DE PORTILLA

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SCHEMA IMPIANTO ELETTRICO ELECTRIC DIAGRAM SCHÉMA ÉLECTRIQUE SCHALTSCHEMA ESQUEMA ALAMBRICO



8

NOTES

The indications which refer to the RIGHT and to the LEFT concern the driver of the vehicle on the drive way.

GENERAL DESCRIPTION

The **air conditioning for porthole** allows to keep optimum thermal conditions inside the industrial vehicles' driving cabins during day or night stops.

IT WORKS WHEN ENGINE IS SWITCHED OFF and is extremely quiet. It can be easily installed on any type of vehicle without alterations (with existing roof hatch).

It uses R134a refrigerant (ecological refrigerant fluid).

TECHNICAL DATA

Cooling capacity	950 Watt / 3250 BTU
Evaporator air flow	450 m3/h
N° ventilation speed	6
Working voltage	24Vc.c
Power consumption	14,5A (max) 7,5A (standard)
Refrigerant	R134a
Compressor	Danfoss BD350 GH
Functioning with engine off	YES
Temperature's electronic control with digital control panel	YES
Remote control	YES
Weight	32 Kg

THIS INSTALLATION IS EQUIPPED WITH A PATENTED SYSTEM WHICH MAKES IT POSSIBLE TO KEEP THE REST SURFACE OF THE COMPRESSOR IN A HORIZONTAL POSITION, WITH UP TO 26° INCLINATION OF THE VEHICLE ROOF.

GENERAL WARNINGS

When installing, be sure to follow carefully the instructions given in this manual. The manufacturer declines all responsibilities for damage to equipment or people caused by non-standard system installations or modifications.

Use the conditioner exclusively for the use envisaged by the manufacturer and make no arbitrary changes or alterations to the appliance.

Never poke your hands inside the grid of the vents and avoid introducing any object into the system.

BEFORE INSTALLING THE SYSTEM, DISCONNECT ALL CONNECTIONS TO THE VEHICLE BATTERY.

Install the roof unit securely to prevent it tipping or falling.

During the assembly phases and the creation of holes in the vehicle, make sure that you do not damage wirings or piping of systems already installed.

When working near the heat exchangers of the condenser and the evaporator, be careful not to cut yourself on the sharp edges of the fins.

If the electrical wires have to pass through walls with sharp edges, use protective pipes or specific channels.

Securely fasten the electrical wires, paying special attention to their route along metal walls that conduct electricity; also avoid contact with sharp elements.

Before beginning installation and after positioning the unit on the roof, check that the openings for the air inlet and outlets on the condenser are not blocked or covered.

Check whether, following the assembly of the conditioner, it is necessary to change the registration of the height of the vehicle indicated in the log (contact the vehicle manufacturer).

Switch off the conditioner before using automatic washing devices to clean the vehicle.

MOUNTING STEPS

Disconnect the battery.

Installation operations must be carried out exclusively by a specialised technician who is aware of the dangers connected with installation and the relative prescriptions.

Before positioning the unit on the roof of the vehicle, check that it is possible to access it and that it can support the weight of the conditioner you intend to install.

Rest air conditioning for porthole on an adequate surface, making sure that it is stable and that the inner diffuser is not damaged.

Remove the hatch from the roof of the vehicle.

Remove the cover of the air conditioning for porthole, unscrewing the 10 fastening screws.

Remove the gasket round the hatch opening (if present) and thoroughly clean the edge of the latter, removing all traces of adhesive and grease.

Fix temporary the air conditioning for porthole inside of the hatch; working from the inside of the cabin, fix the supplied frame over the air diffuser checking that, once the installation is finished, it will cover the hatch space correctly. Ensure that the front and side slots on the air diffuser remain free after it has been fastened in place. If this is not the case, trim the upper profile of the frame as much as necessary (**see fig.7**).

ENGLISH

Remove the air conditioning for porthole, fit the gasket supplied to the clean edge and apply sealant to the upper surface (see fig.3).

Fit the conditioner in position inside the hatch, paying attention to the newly inserted gasket (see fig.4).

Insert the electrical wires that protrude from the air diffuser between the roof and the inner lining, directing them towards the front of the vehicle (see fig.4).

Insert the M8x100 screws with washers and nuts onto the brackets, positioning the latter by inserting the end between the lining and the roof (see fig.4). Tighten the screws into the threaded cylindrical holes in the roof unit, then tighten the nuts beneath against the brackets (see fig.4a).

Working from the outside, carefully apply sealant above the end of the 2 rear screws which you have just tightened into the threaded holes, as shown in **fig.5**.

Working from the outside, adjust the 4 lateral screws on the compressor (2 M8 and 2 M6) and, irrespective of the inclination of the roof, keep the compressor resting base in the horizontal position (see fig.6). When the operation has been completed, tighten the 4 screws.

Then fasten the frame in place using T.C.E.I. screws, inserting the 4 spacers supplied (shorten if necessary) (see fig.8-9).

Direct the 2 electrical wires towards the dashboard for connection to the fittings on the vehicle's main distribution frame (red wire +24V, - black wire earth).

In the case of direct connection to the battery, use at least a 30 Amp fuse.

After completing the assembly, refit the outer cover (see fig.10).