

CE



Telair

AIR CONDITIONER



ice s 2800

MANUAL FOR INSTALLATION AND USER
MANUAL

GB

ENGLISH

v.001 - May 2021

The original version of this manual was written in Italian language. The Manufacturer is not responsible for any translation errors present on other languages versions.

This manual has been drawn up by the manufacturer in order to provide all the information / instructions needed for proper, safe use and maintenance of the air conditioner.

The manual is an important part of the air conditioner: it must be stored safely and kept in good condition throughout the working life of the machine and protected from deterioration. It must accompany the air conditioner if re-installed on a new vehicle or sold.

The information contained in this manual is intended for air conditioner installers and all those involved in its use and maintenance.

The manual defines the purpose for which the conditioner has been built and contains all the information required for its safe, correct use.

Constant observance of the information it contains will ensure user safety, low running costs and a longer air conditioner life.

To make consultation easy the manual is divided into sections, each of which deals with a specific topic. To find information quickly refer to the table of contents.

You are strongly advised to read the entire manual and the reference documents: this is the best way to ensure long-lasting performance, reliability and prevention of injury or damage.

The drawings included in this manual are provided for illustrative purposes only. Although the machine in your possession may differ in some details from the illustrations contained in this manual, the safety and information regarding it are nevertheless guaranteed.

"Graphic safety symbols" are used in this document to identify various levels of danger or important information:



Information to avoid a potentially dangerous situation that could cause serious personal injury or possible damage to health.



Information to avoid a situation that could potentially cause damage to objects.



Important information for proper execution of the operations described or for proper use of the equipment.



Before carrying out any work on the air conditioner, carefully consult this manual and make sure you have understood its contents.



Before starting work, wear personal protective equipment (goggles, gloves, dust masks, etc.) appropriate to the type of work to be done.



The air conditioning unit must be installed exclusively by qualified and authorized personnel, in accordance with the instructions provided by the manufacturer. It must be used on vehicles or in a stationary installation connected in all cases to an electrical system installed in compliance with current regulations and sized in relation to the electrical power.



The manufacturer is not liable for any damages resulting from improper use of the air conditioner.



It is mandatory to install a double-pole thermal magnetic circuit breaker on the 230V power supply line upstream of the air conditioner to protect against overcurrents caused by the appliance and to serve as a disconnect switch when the appliance is not in use or undergoing maintenance. The specifications of the switch should be determined in relation to the power rating and inrush current of the air conditioner.



Before installation or any maintenance work involving access to internal parts of the air conditioner, all the vehicle's power supplies must be disconnected (battery or 230V mains supply).

Failure to follow this instruction can cause electrical shock to the operator or damage to the air conditioner or vehicle.



All maintenance work requiring the air conditioner or diffuser to be opened must be carried out by qualified personnel.

When the internal diffuser is removed, the evaporator fan blades are exposed and therefore pose a potential risk.

Do not alter or tamper with any part of the air conditioner.

Do not insert anything into the air vents of the diffuser or the condenser fan.



In the event of fire, do not open the top cover of the AC unit and only use approved fire extinguishers.

Do not attempt to extinguish flames from the air conditioner with water.



This appliance can be used by children over 8 years of age or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, provided they have been instructed in the use of the appliance by a person responsible for their safety. Children must not play with the appliance. Cleaning or maintenance operations must not be carried out by children without the supervision of a person responsible for their safety.



The information contained in this publication was correct at the time of printing but may be modified without advance notice.



Via E. Majorana , 49 48022 Lugo (RA) ITALY

“CE” DECLARATION OF CONFORMITY
in compliance with EC Machine Directive 2006/42/EC



It is hereby declared that the air conditioner specified below has been designed and built in compliance with essential safety and health requisites as per the European Directive on Machine Safety.

This declaration is rendered null and void in the event of incorrect assembly, improper use or modifications made to the machine without our written approval.

Machine: AIR CONDITIONER

Model: ICE S 2800

Serial n°

Reference directive:

Machine Directive 2006/42/CE

Low Voltage Directive 2014/35/UE

Electromagnetic compatibility 2014/30/UE - Regulation 10 UN/ECE Rev. 5

Other applied harmonised standards: EN55014-1 ; EN55014-2 ; EN61000-3-2 ; EN61000-3-3 ; EN62233 ; IEC/EN 60335-1 ; IEC/EN 60335-2-40 ; DIN EN 378-2

Technical documentation manager: Raul Fabbri, engineer

Lugo, 30/04/2021

C.E.O.
Raul Fabbri





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1 GENERAL INFORMATION

The **ICE S 2800** air conditioner is designed for installation on vehicle roofs, although this does not exclude its use in stationary applications. It runs on a 230 Vac 50 Hz **sinusoidal** power supply.

Using the air conditioner at voltages other than those indicated could compromise its efficiency and damage the unit.

The manufacturer may make changes without prior notice, as part of a continuous product development and upgrading policy.

2 FEATURES

2.1 Technical specifications

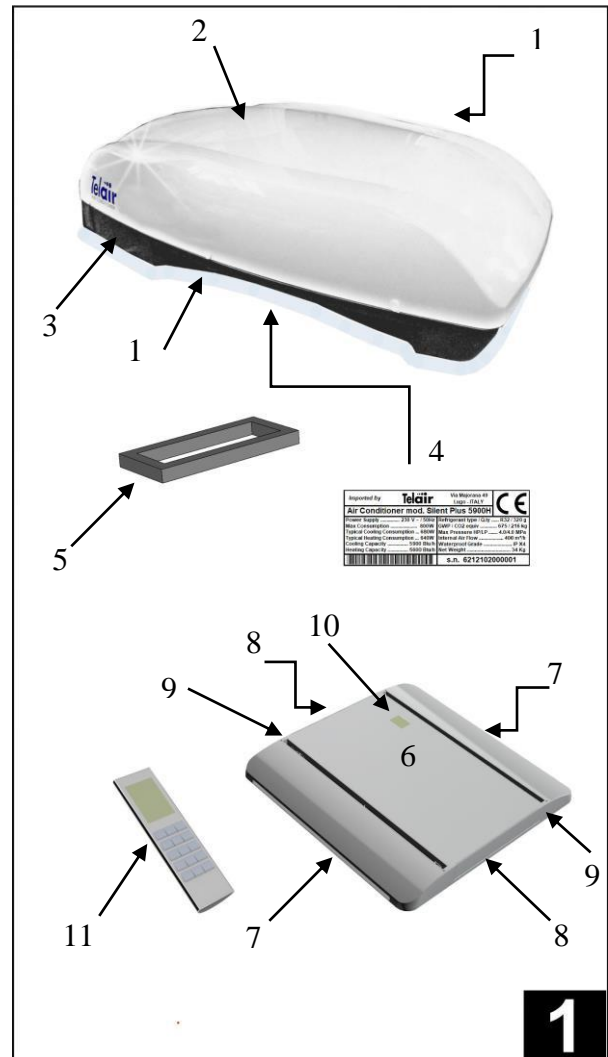
ICE S 2800	
Power supply	230 V 50 Hz sinusoidal
Maximum current consumption	4.8 Ampère
Peak current	18 A (0.15 sec.)
Power consumption for cooling	990 Watt
Power consumption for heating	950 Watt
Cooling capacity	2500 Watt
Heating capacity	2450 Btu/h
Operating temperature	2-48 °C
Internal temperature adjustment range	16-31 °C
Internal fan speed number	3
Maximum internal air flow	450 m³/h
Type and quantity of coolant gas	R32 ... 480 g
Waterproof rating	IP X4
Generator required	2200 W
Diffuser dimensions (H x L x W)	4,2x45x45 cm
Monobloc dimensions (H x L x W)	23.9x98x65 cm
Weight	36 Kg



Some of the technical characteristics in this table may vary. Only the data shown on the actual conditioner identification plate is valid.

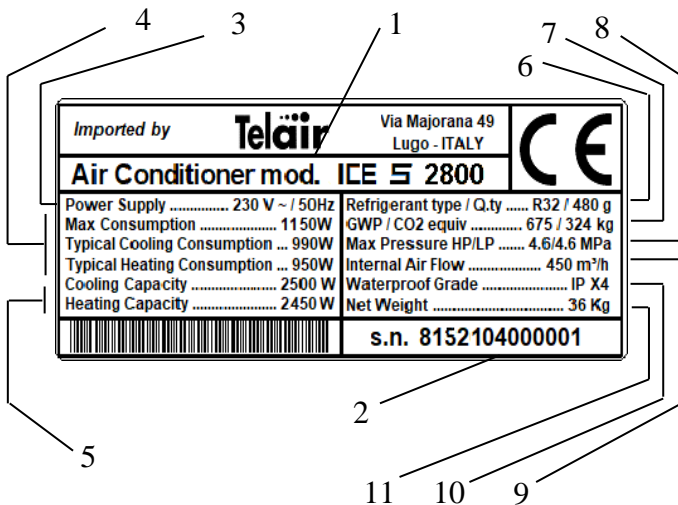
2.2 Components

- 1 Ventilation grille
- 2 Upper cover
- 3 Machine body
- 4 Technical specifications label
- 5 Connector duct
- 6 Diffuser
- 7 Removable air filter
- 8 Adjustable air outflow vents
- 9 Courtesy lights
- 10 Diffuser display
- 11 Remote control



2.3 ID label

- 1 Model
- 2 Serial number
- 3 Type of power supply
- 4 Electrical power consumption
- 5 Cooling and heating capacity
- 6 Type and quantity of refrigerant gas
- 7 GWP of refrigerant gas
- 8 Maximum circuit pressures
- 9 Volume of air conditioned
- 10 Protection rating
- 11 Weight of air conditioning unit



The identification plate illustrated is an example only. Only the data shown on the actual conditioner identification plate is valid.

3 TRANSPORT, HANDLING, STORAGE

3.1 Storage

During transport the air conditioner is protected by its cardboard packaging. The conditioner must be stored indoors in a horizontal position in a dry, ventilated area. The type of packaging allows up to 5 (five) conditioners to be stacked on top of each other.



Do not turn the package upside-down. The right way up is indicated by the symbol on the packaging (↑↑).



Stacking more than five packaged air conditioners can damage the conditioners themselves and put personnel at risk of injury.

3.2 Weight

Weight of **ICE S 2800** including packaging: 45 kg

3.3 Handling



Always observe safety and accident prevention regulations when lifting and transporting. Use only lifting and transport gear of a load bearing capacity greater than the weight to be lifted.

Packaged air conditioners can be moved using standard means of lifting and transport.

4 INSTALLATION

4.1 Preliminary information



Improper installation of the air conditioner can result in irreparable damage to the appliance and endanger the user's safety.

European Machine Directive 2006/42/EC states that the manufacturer cannot be held liable for poor air conditioner performance and/or safety should the air conditioner fail to be installed in observance of the information provided in this manual. Moreover, the manufacturer cannot be held liable for any resulting injury or damage.

4.2 Installation



Before climbing on top of the vehicle check that the roof is designed to be walked on. Check with the vehicle fitter. If it is not, a scaffolding-like framework will be required.

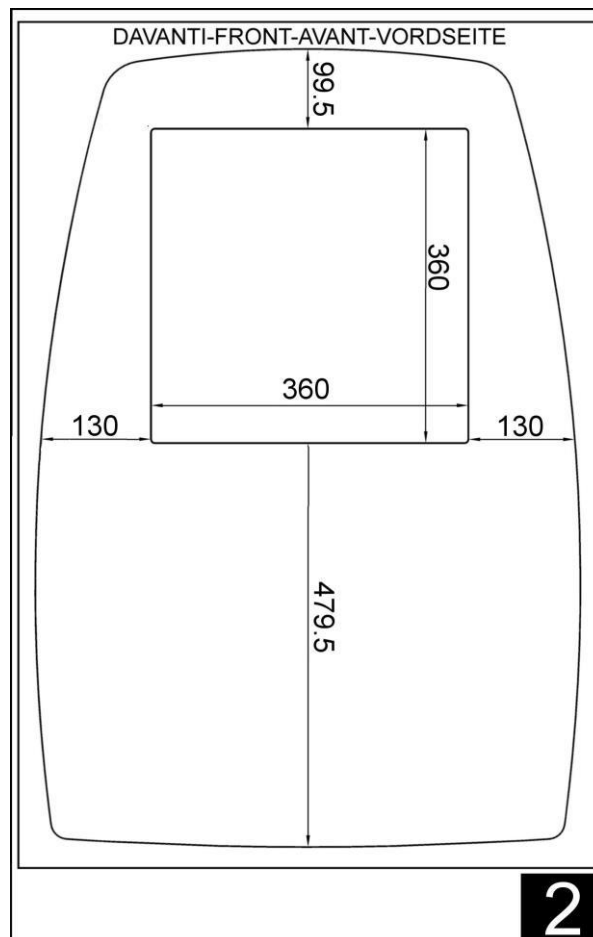
To ensure proper air conditioner installation it is essential that you first check whether the roof is able to support its weight; if it is not the roof must be reinforced. Select a fairly flat, horizontal, central area of the roof and check that there are no obstacles in the interior which might obstruct diffuser attachment (fig. 1 ref. 6) or the outflow of cool air from the adjustable vents (fig. 1 ref. 8).

The air conditioner may be installed in one of two different ways:

- by using a ventilation aperture already on the vehicle (ventilation port)
- by opening a new hole.

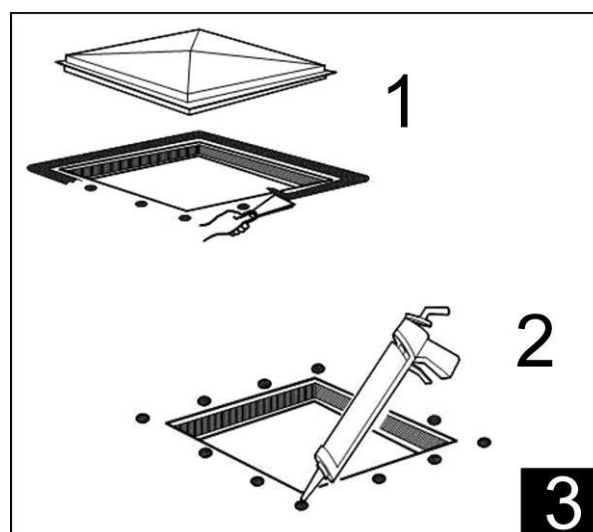
4.2.1 Using the existing ventilation port

This solution is practical as long as the port size is 360 x 360 mm (fig. 2).



Proceed by removing the screws that fix the port to the roof and then removing the port itself.

Scrape off all the sealing material left around the rim of the opening (fig. 3 ref. 1) and putty screw holes and joints with silicon or other products available from specialised shops (fig. 3 ref. 2).





All waste materials (glue, silicon, seals) must be placed in special containers and taken to official waste disposal centres.

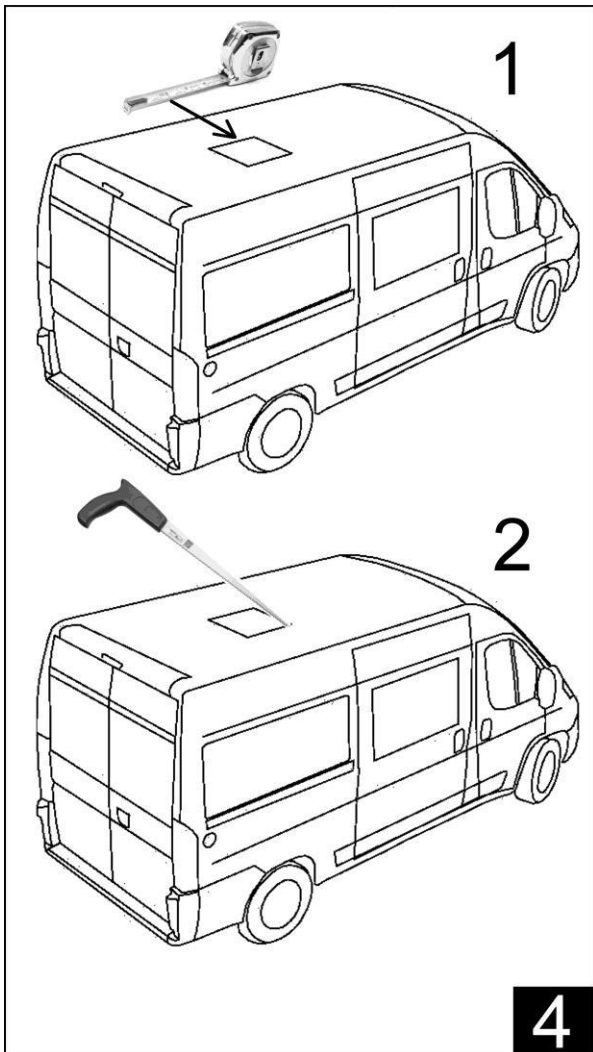
4.2.2 Opening a new hole

Choose a central area of the roof between two side members and trace the outline of a 360 mm square with a felt-tip pen (fig.2) and (fig. 4 ref. 1).

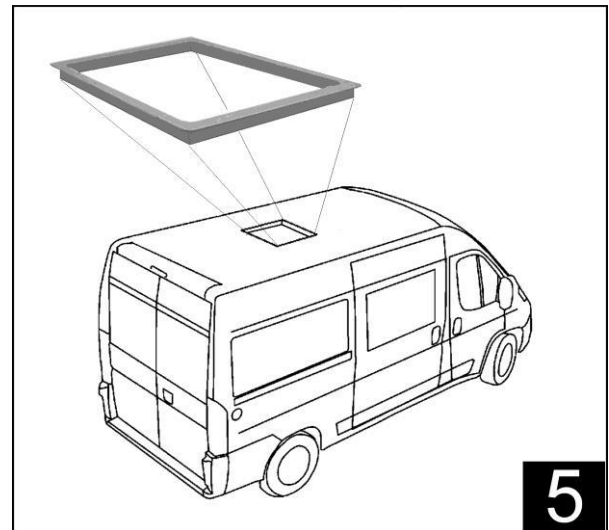


The size of the 360x360 mm opening, shown on the cardboard template (Fig.2), is purely indicative. Before cutting the roof, check the actual size of the hole with a measuring tape.

Cut the new opening in the roof carefully with a saw: be careful not to cut any electrical wires (fig. 4 ref. 2).



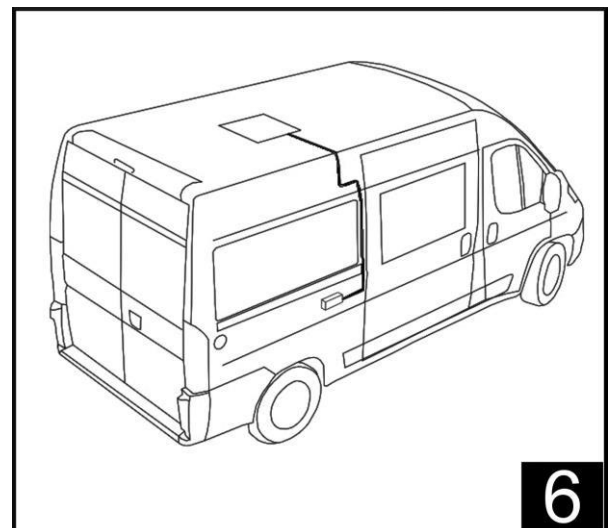
Fix a reinforcement frame around the opening (fig. 5).



4.2.3 Power lead

A 3-core cable with a 2.5 mm² cross-section (live-neutral-earth) must be routed for the power supply of the air conditioner. The wires at one end must be connected to the thermal magnetic circuit breaker (recommended load 10A) previously installed in the vehicle's electrical distribution panel exclusively for the air conditioner. The other end should reach the opening made in the roof of the vehicle and protrude from the hole in the reinforcing frame by approximately 50 cm in order to facilitate connection to the air conditioner (Fig. 6).

The electrical cable must be suitably protected in order to ensure its integrity and insulation in all conditions of use of the vehicle.



4.3 Positioning the air conditioner

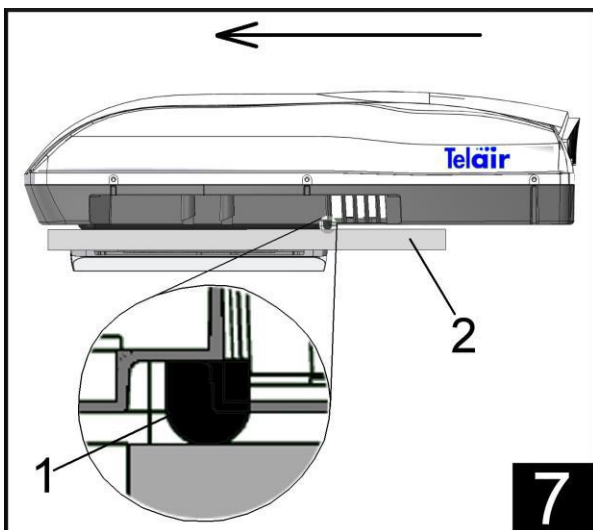


Before installation, check that the cylindrical section seal on the air conditioner base is still correctly positioned inside its special frame seat (Fig. 7 ref. 1).

In case of a rough or uneven roof surface, coat the opening perimeter area on which the seal provided on the bottom of the conditioner must be applied with a thin layer of soft sealant or a bituminous strip. Apply the recommended amount of product. If an excessive amount is applied, the bottom of the air conditioner might be glued to the roof of the vehicle, cancelling the damping effect of the seal, with the resulting propagation of noise and vibrations. This would also make it harder to remove the air conditioner, when needed, with the risk of causing damage to the roof.

Bring the air conditioner onto the roof (fig. 7 ref. 2) and, **without scraping it**, position it over the 360 x 360 mm opening previously lined with sealant. Correct alignment of the air conditioner on the roof will provide a view - from inside the camper - of the 4 threaded fixing seats.

The arrow in fig. 7 indicates direction of forward drive.



Working from inside the vehicle, shift the air conditioner until the four fixing threads are aligned with the square 360 x 360 mm opening of the hole on the roof.

Ensure that the cylindrical seal at the bottom of the air conditioner is again correctly installed in its seat.

4.4 Connecting the power lead

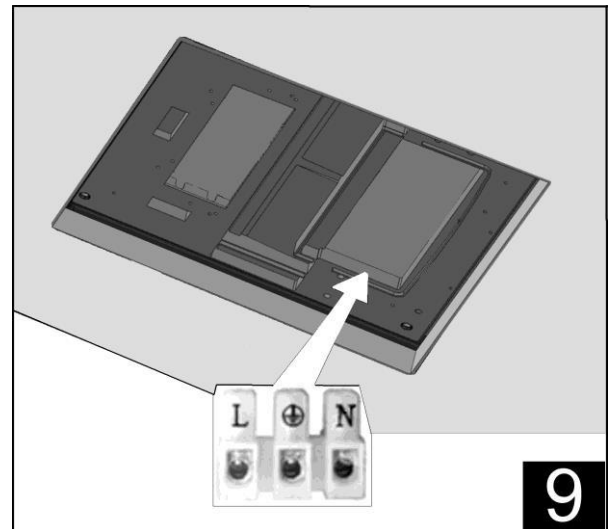
Connect the previously prepared cable of the unit to the 230V AC power supply terminal (Fig. 9).

Please note that the colour of the wires according to their use is:

blue wire: neutral

brown wire: phase

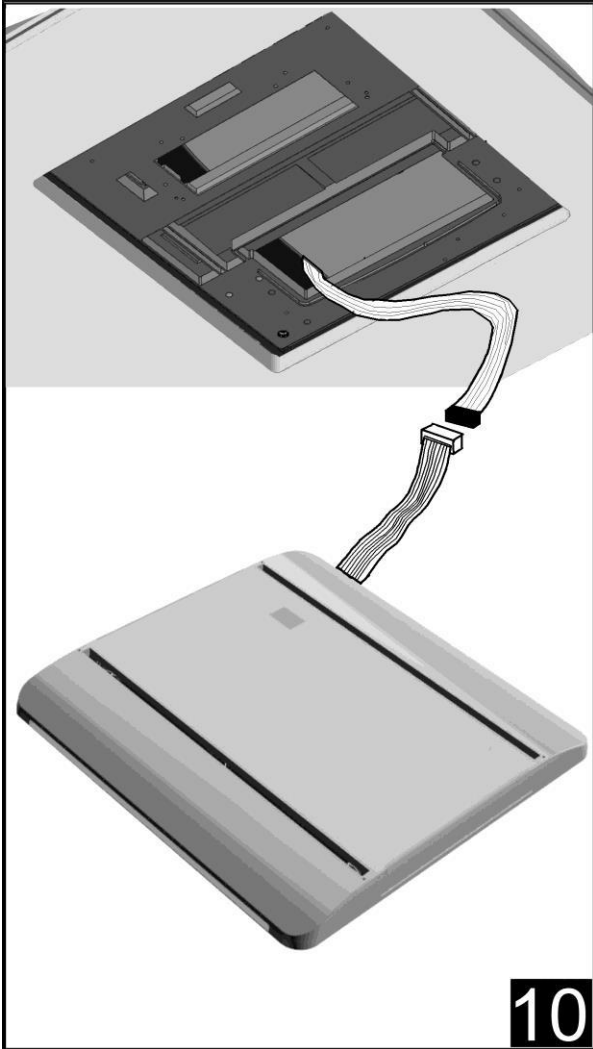
yellow-green wire: earth



Check that the power lead is not excessively long as it could obstruct the intake grilles.

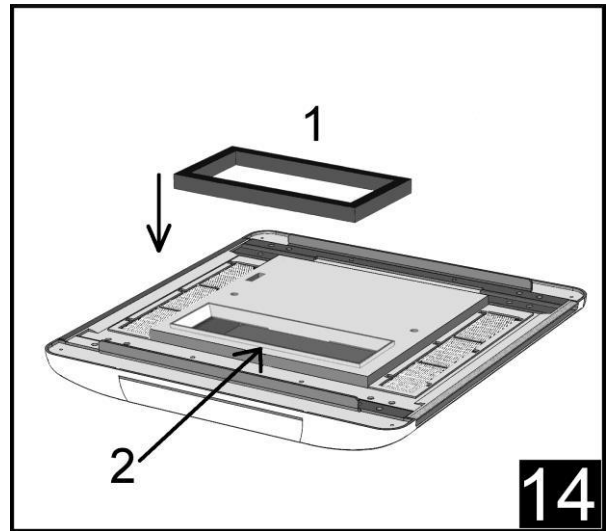
4.5 Diffuser installation and air conditioner fixing

Connect the ribbon cable from the diffuser display to the connector of the ribbon cable from the air conditioner circuit board (Fig. 10).



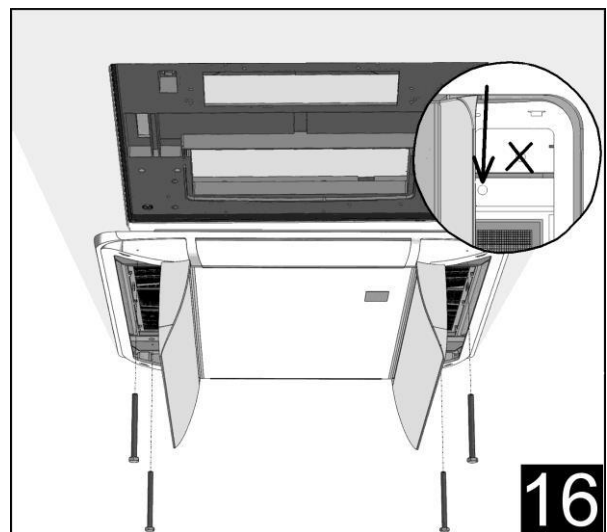
Position the diffuser horizontally and place the rectangular expanded rubber fitting (Fig. 14, ref. 1) over inlet port profile (Fig. 14, ref. 2). If the roof is more than 35 mm thick, a second fitting will need to be overlapped on the first one.

The rectangular fitting has an adhesive side so it can adhere to the diffuser or to the one below in the case of multiple fittings. The purpose of the fitting is to form a sealed channel to connect the diffuser inlet port to the outlet port on the bottom of the air conditioner.



Open the two doors on the diffuser that give access to the fixing screws and air filters. Using the four M6 screws (supplied), attach the diffuser to the bottom of the air conditioner, thus securing it to the roof of the camper (Fig. 16).

It is important to attach the screws according to a **tightening torque of 1.6 Nm**, that is, **0.16 kgm**. You are advised to use a torque wrench.



Incorrect tightening can damage the support base of the air conditioner, compromise the seal and cause loud noise inside the vehicle when the conditioner is in operation.

Once attachment has been completed, re-close the doors.

5 INSTRUCTIONS FOR USE

5.1 Introduction



The power supply voltage must never be less than 205V AC, with a stable frequency of 50Hz.



Outside the specified operating temperature range, the efficiency of the air conditioner is reduced considerably.

The **ICE S 2800** air conditioner consists of nine main parts:

- **compressor**, which circulates the coolant gas through the system.
- **condenser**, which cools the coolant by changing it from a gaseous to a liquid state.
- **evaporator**, which, cooled by the change of state of the coolant, cools the air passing through it.
- **two fans**, which move the air so that it passes through the condenser and evaporator
- **solenoid valve**, which switches gas circulation and so provides a cooling or heating function
- **remote control** to program the desired function
- **receiver**, situated in the diffuser, which receives the remote control signals
- **electronic board**, which receives the signals from the receiver and transforms them into commands for the various electrical components of the air conditioner.

The **ICE S 2800** provides cold air during the summer months and hot air in winter.

If the vehicle has been left in the sun for some time it is good practice to open windows and doors before starting the conditioner so as to release the build up of heat in the interior; once indoor temperature matches outdoor temperature close the windows and doors and start the air conditioner. Subsequently, only open doors and windows when necessary.

5.2 Preliminary checks

Before switching on the air conditioner for the very first time:

- Check that condensate drainage holes are unobstructed.
- Check that the power supply voltage and frequency match the required specifications.
- Check that air flow through relative ducts and vents is unobstructed. To ensure maximum efficiency always keep external ventilation grilles clear.



When the equipment is started for the first time with the remote control, the fan and compressor will also start within a few seconds. After a power-off, upon the next power-on the compressor will only start after at least 3 minutes from the power-off.

5.3 Useful tips

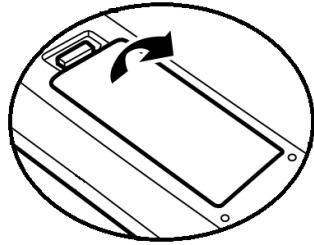
- Enhance the thermal insulation of the camper by eliminating any fissures and covering glass surfaces with heat-reflecting curtains.
- Avoid frequent opening/closing of windows unless necessary.
- Select a suitable temperature and airflow rate.
- Adjust the outflow vents to maximise comfort.
- Never close both adjustable vents when the conditioner is running.
- Clean the diffuser filters periodically.
- Do not obstruct airflow inlets/outlets with fabric, paper or anything else.
- Do not spray water inside the air conditioner.
- Remove the remote control battery if you do not intend to use the conditioner for a long period.
- Periodically check that the condensate drain holes are not obstructed.
- Periodically check that external intakes grilles are clean so as to maintain maximum air conditioner efficiency.
- Clean the air conditioner with detergent solutions only; never use petrol or solvents.

- If the vehicle is garaged for the winter disconnect the air conditioner from the power socket.

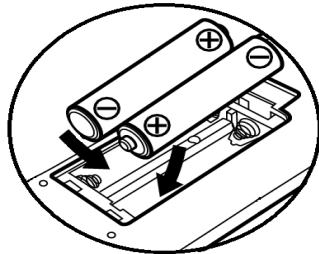
- If the remote control resets when a control button is pressed, the battery power is too low and the batteries should be changed.

5.4 Installing the batteries in the remote control

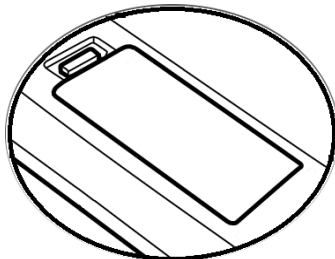
1. Open the battery compartment cover by pressing the tab and lifting.



2. Insert two new LR03 Size AAA 1.5V batteries, according to the polarity indicated.



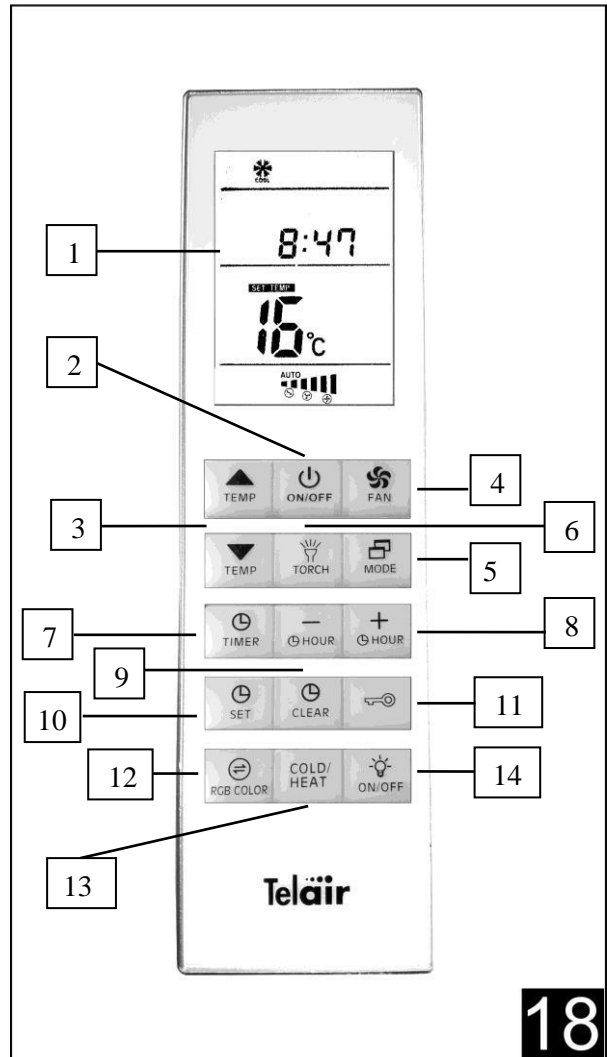
3. Put the battery cover back in place.



5.5 Information on using the Remote Control

- Point the remote control towards the internal unit of the conditioner.
- There must be no obstructions between the remote control and the internal unit.
- Do not drop or throw the remote control.
- Do not expose the remote control to direct sunlight or leave it near heating systems or other sources of heat.
- If you do not intend to use the remote control for some time, remove the batteries.
- If the signal transmission sound is no longer audible in the internal unit or the transmission symbol is no longer clearly visible on the display screen, the batteries need replacing.

5.6 Remote Control description and functions



- 1 - Display** (for details see Fig. 19)
- 2 - On/Off** to start or stop the air conditioner.
- 3 - +TEMP** and **-TEMP** to set the desired temperature between 16 and 31 °C.
- 4 - FAN** to select one of three internal fan speed settings or allow the air conditioner to select the most appropriate setting.
- 5 - MODE** to select Automatic, Cold, Hot or Ventilation operating modes.
- 6 - TORCH**, switches on the torch on the front of the remote control (hold-down operation)
- 7 - TIMER** to activate the timer function and set the air conditioner start and stop times.

8 - +HOUR and **-HOUR** to adjust the time on the remote control and the timer function start/stop times.

9 - CLEAR to delete timer function programming.

10 - SET to enter time adjustment mode on the remote control or confirm the timer function start/stop times.

11 - KEY/RESET to reset the remote control completely.

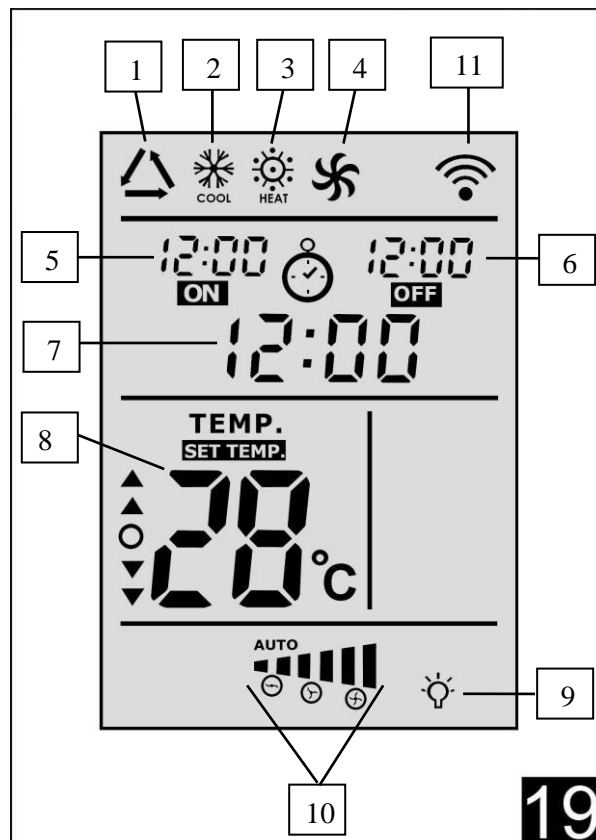
12 - RGB COLOR, function currently unavailable.

13 - COLD/HEAT, immediately switches operating mode from hot to cold and vice versa.

14 - LIGHT ON/OFF, lets the user switch the courtesy light on the diffuser on/off.

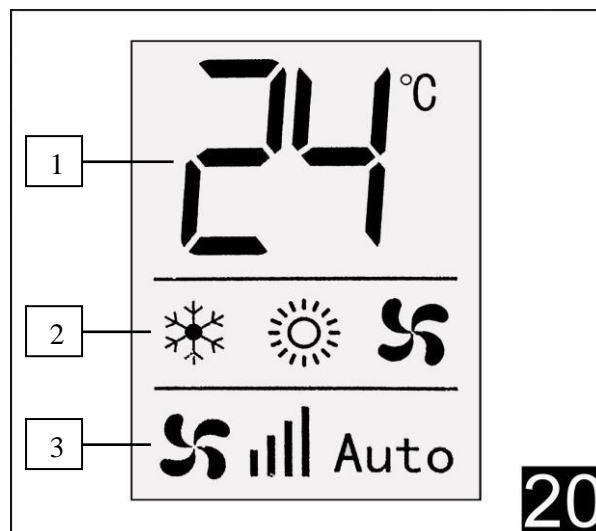
5.7 Remote Control Display

1. Automatic mode
2. Cool operating mode
3. Warm operating mode
4. Ventilation mode
5. Timer: start time (only visible if the timer has been activated)
6. Timer: stop time (only visible if the timer has been activated)
7. System time
8. Temperature setting
9. Courtesy light on indicator
10. Fan speed setting indicator (when AUTO is displayed the speed is automatically controlled by the air conditioner)
11. Data transmission indicator



5.8 Diffuser Display

The diffuser has a display which also contains the IR remote control receiver.



When the air conditioner is powered by the mains but is off, the display shows only room temperature in the first field (Fig. 20 ref. 1)

When the air conditioner is on, the central field (Fig. 20 ref. 2) shows the symbols that describe operating mode:

- Ice crystal = COOL mode
- Sun = WARM mode
- Ice crystal + Sun = AUTOMATIC mode

- Fan = ventilation only mode

The third field (Fig. 20 ref. 3) shows fan mode.

The two figures in the first field (Fig. 20 ref. 1) normally indicate the ambient temperature detected by the air conditioner inside the camper.

When setting the desired temperature with the remote control, the two digits show the set temperature for about 15 seconds; they then show the temperature in the camper interior again.

5.9 Setting system time on remote control

After inserting the batteries, set the system time on your remote control:

- 1) Press and hold down the **SET** key on your remote control until the system time digits start flashing
- 2) By using the **+HOUR** and **-HOUR** keys, set your system time
- 3) Press the **SET** key once again

5.10 Automatic operation mode

- 1) Press the **On/Off** key
- 2) Press the **MODE** key repeatedly until the display shows the **Automatic** mode symbol
- 3) Set your required temperature with the keys **+TEMP** and **-TEMP**
- 4) Press the **FAN** key several times until you reach your required ventilation setting.

5.11 Cold operation mode

- 1) Press the **On/Off** key
- 2) Press the **MODE** key repeatedly until the display shows the **COLD** mode symbol.
- 3) Set your required temperature with the keys **+TEMP** and **-TEMP**.
- 4) Press the **FAN** key several times until you reach your required ventilation setting.

5.12 Heating operation mode

- 1) Press the **On/Off** key
- 2) Press the **MODE** key several times until the display shows the **HOT** mode symbol.
- 3) Set your required temperature with the keys **+TEMP** and **-TEMP**.
- 4) Press the **FAN** key several times until you reach your required ventilation setting.

5.13 Ventilation operation mode

- 1) Press the **On/Off** key
- 2) Press the **MODE** key several times until the display shows the **VENTILATION** mode symbol.
- 3) Press the **FAN** key several times until you reach your required ventilation setting.



If the air conditioner is switched off and immediately re-started or the operating mode is changed, a three-minute interval will elapse before the compressor resumes operating.



If the air conditioner is turned off during the heating mode, the fan will remain in operation for a few minutes in order to dissipate the heat accumulated inside the air conditioner, before stopping automatically.



In cooling mode, the external condensing fan speed changes automatically depending on the required performance and the environmental temperature.

5.14 Timer setting

- 1) Press the **TIMER** key on the remote control: the start time **ON** indicator is activated
- 2) By using the **+HOUR** and **-HOUR** keys, set the start time
- 3) Press the **TIMER** key once again: the stop time **OFF** indicator is activated

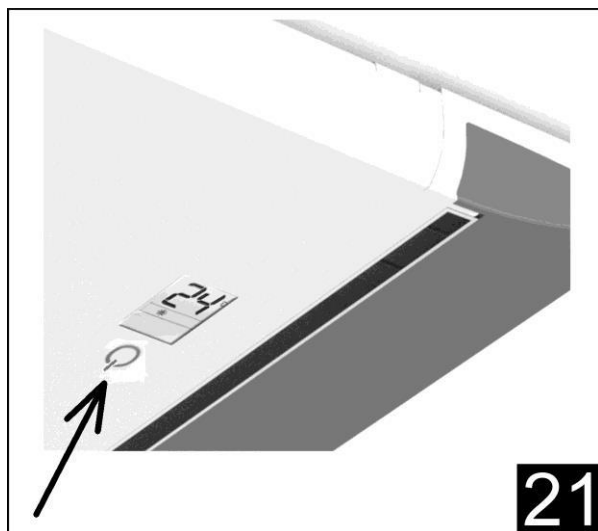
- 4) By using the **+HOUR** and **-HOUR** keys, set the stop time
- 5) Press the **TIMER** key once again
- 6) After completing the setting operations, press the **SET** key

To delete timer programming press the **CLEAR** key



The start and stop times are programmable in 10 minutes' steps. Start and stop will occur with a 10 minutes' tolerance with respect to the programmed time.

5.15 Operation without remote control



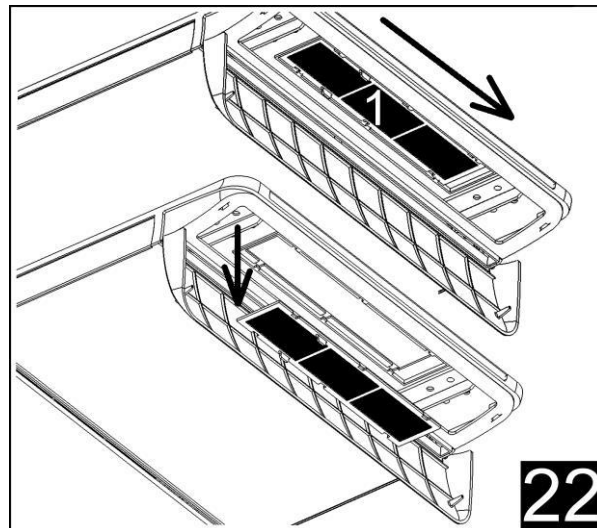
In the event of loss or failure of the remote control, you can still use the air conditioner: switch it on/off by touching the touch-key (ON-OFF symbol in relief) near the display for about 5 seconds.

The air conditioner will start in automatic mode, automatic fan speed, temperature setting 24 °C.

6 MAINTENANCE

6.1 Cleaning the filters

To ensure full efficiency of the air conditioner, clean the diffuser filters by washing them with a neutral detergent solution; allow them to dry well before refitting them in their housing.



To remove the filters (Fig. 22, ref.1) open each diffuser door, and then slide them in the directions indicated by the arrows to release. Once maintenance work has been completed, put the filters back in their seats and re-fasten them by sliding in the opposite direction.

6.2 Unsatisfactory performance

In most cases, poor air conditioner performance is caused by incorrect use rather than actual malfunctions:

- The unit is too small for the volume of air you wish to condition.
- The vehicle is poorly insulated.
- The doors are opened too frequently.
- There are too many people inside the vehicle.
- The power supply voltage is incorrect.

6.3 Troubleshooting



If the air conditioner malfunctions, before attempting any repairs, first check:

- that the power supply voltage is correct
- that the intake vents are unobstructed
- that air outflow vents are open

A list of common problems is given below, together with their causes and solutions.

1) The air conditioner does not start:

- Check that the remote control batteries are charged.
- Make sure the electrical system is powered: connect a household appliance or use a voltmeter.

2) Air outflow is insufficient:

- Check that the directional vents are open;
- Check that the diffuser filters are clean.

3) Not working in Cool mode:

- Check that the temperature setting is lower than the ambient temperature.

4) Not working in Warm mode:

- Check that the temperature setting is higher than the ambient temperature.

5) The air conditioner is working inefficiently:

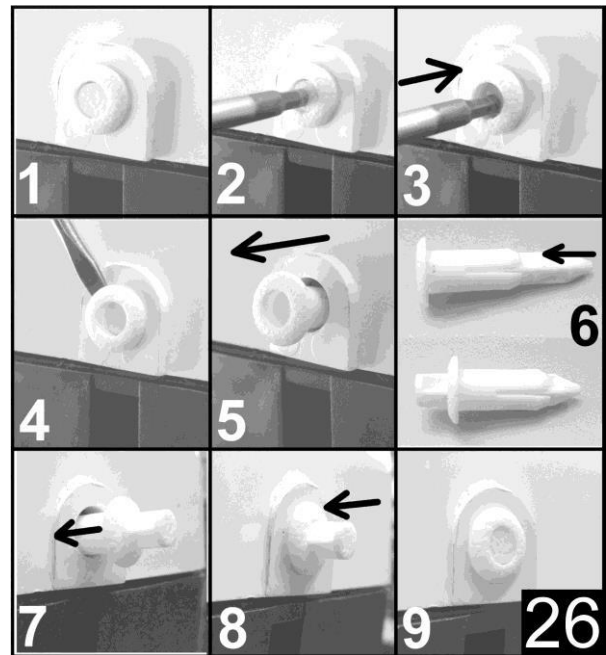
- If the air conditioner is working inefficiently it is necessary to clean the air filter, condenser and evaporator using specific detergents. It is always advisable to clean the air conditioner when it has remained idle for a long period.
- If the air conditioner does not recover its initial yield even after the exchangers have been cleaned, check the refrigerating gas load.

6.4 Opening the external lid

The external lid in ABS is attached to the base by 6 re-usable rivets. To remove them proceed as illustrated in fig. 26.

Use a flat-head tool to push the core of the rivet inwards by about 5 mm (p. 1, 2 and 3). Remove the rivet from its seat (p. 4 and 5). Before re-using it push the core of the rivet outwards by about 5 mm (p. 6), then re-insert

it all the way into its seat (p. 7 e 8). Lastly, press the core of the rivet so it is flush with the outer body (p. 9).



6.5 Periodic maintenance

All tasks requiring removal of air conditioner covers must – as with installation - be carried out by expert personnel.

- Remove the external cover and remove any leaves or other deposited material. Clean the heat exchangers (evaporator and condenser) via the special detergent and rinse with water. Check that the condensate drain holes are unobstructed.
- Check that the seal gaskets are in good condition and there is no water infiltration into the vehicle.
- Remove any traces of oxidation from metallic parts and protect the area with suitable paint.
- Check that wiring insulation is in good condition and eliminate any traces of oxidation or moisture.
- Check that all screws are properly tightened.

6.6 Spare parts

If the event of repair or replacement of parts, use only original spare parts.

7 DISPOSAL

The materials used for the construction of this appliance are recyclable. In the event of disposal, it is advisable to bring the unit to a specialist workshop or designated waste collection centre.



Waste materials must not be dispersed into the environment: always take them to authorised waste collection centres.



8 GENERAL TERMS OF WARRANTY

TELAIR guarantees its products against any construction material and/or manufacturing faults and defects.

The right to warranty cover for new products is valid for a period of 24 months from the time of handing over to the end user, or for a maximum of 1000 operating hours, whichever limit is reached first. In all cases the warranty period shall end no later than 26 months (28 months if delivered outside of Europe) after ex factory delivery.

For electric and hydraulic components, pipes, belts, sealing elements, injection nozzles, clutches, drives, the warranty term is 12 months from the time of handing over to the end user, or a maximum of 1000 operating hours, whichever limit is reached first. In all cases the warranty period shall end no later than 14 months (16 months if delivered outside of Europe) after ex factory delivery.

In any case, the costs of lubricants and consumables shall be charged. Any transport expenses shall have to be covered by the purchaser; the same applies to any expenses connected with inspections requested by the customer and accepted by **TELAIR**.

The manufacturer's warranty shall only be valid if:

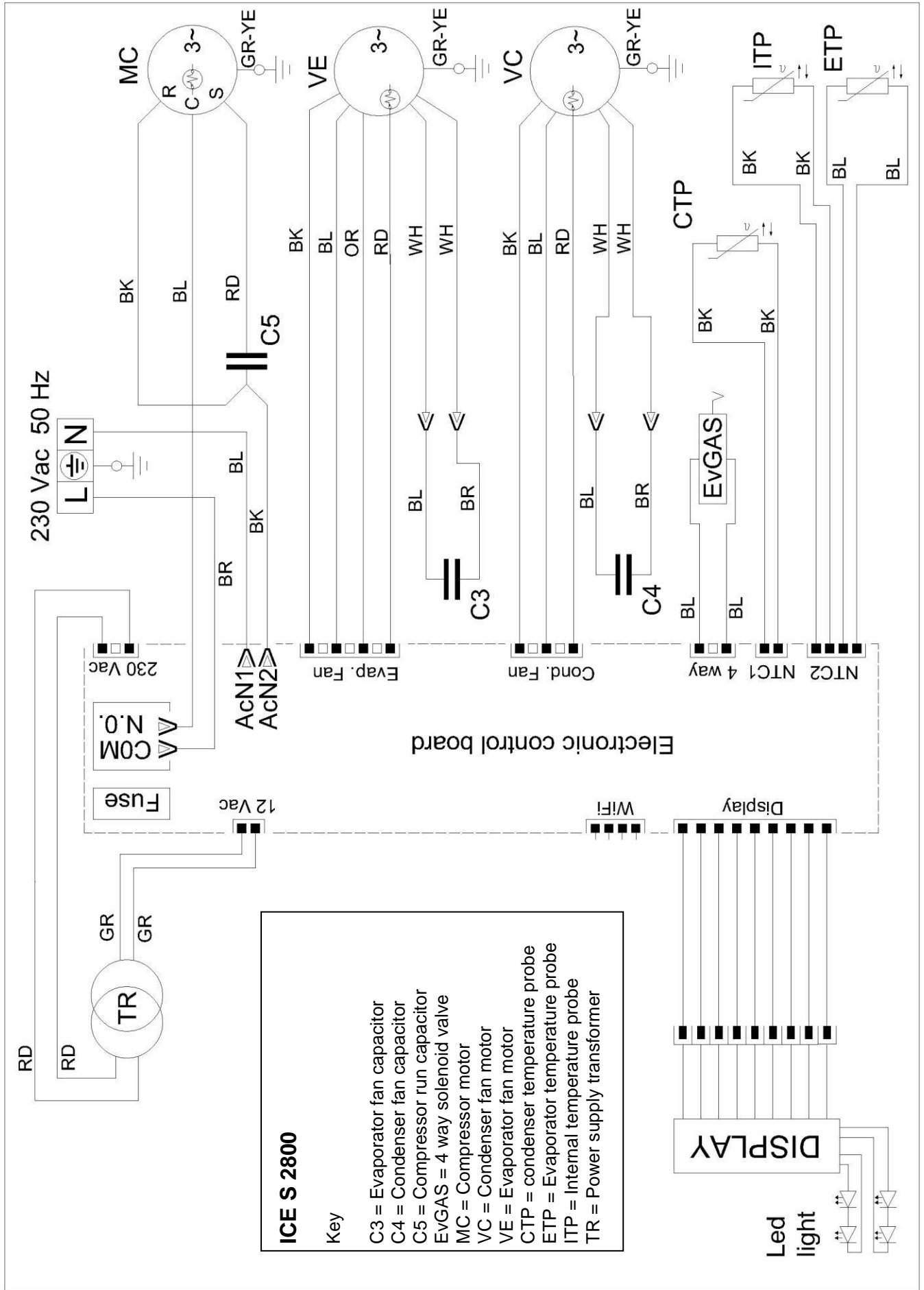
- the customer has carried out all routine maintenance according to the recommended schedule and has promptly visited the nearest after-sale centre if required.
- the customer can produce a document showing the date of sale (invoice or receipt).

Such document will have to be kept with care and be intact when produced to the **TELAIR** After-Sales centre on requesting service.

In any case, the purchaser shall not be entitled to:

- terminate the contract;
- claim damages to persons or property;
- ask that the warranty be extended in the event of product defects or malfunctioning.

9 WIRING DIAGRAM

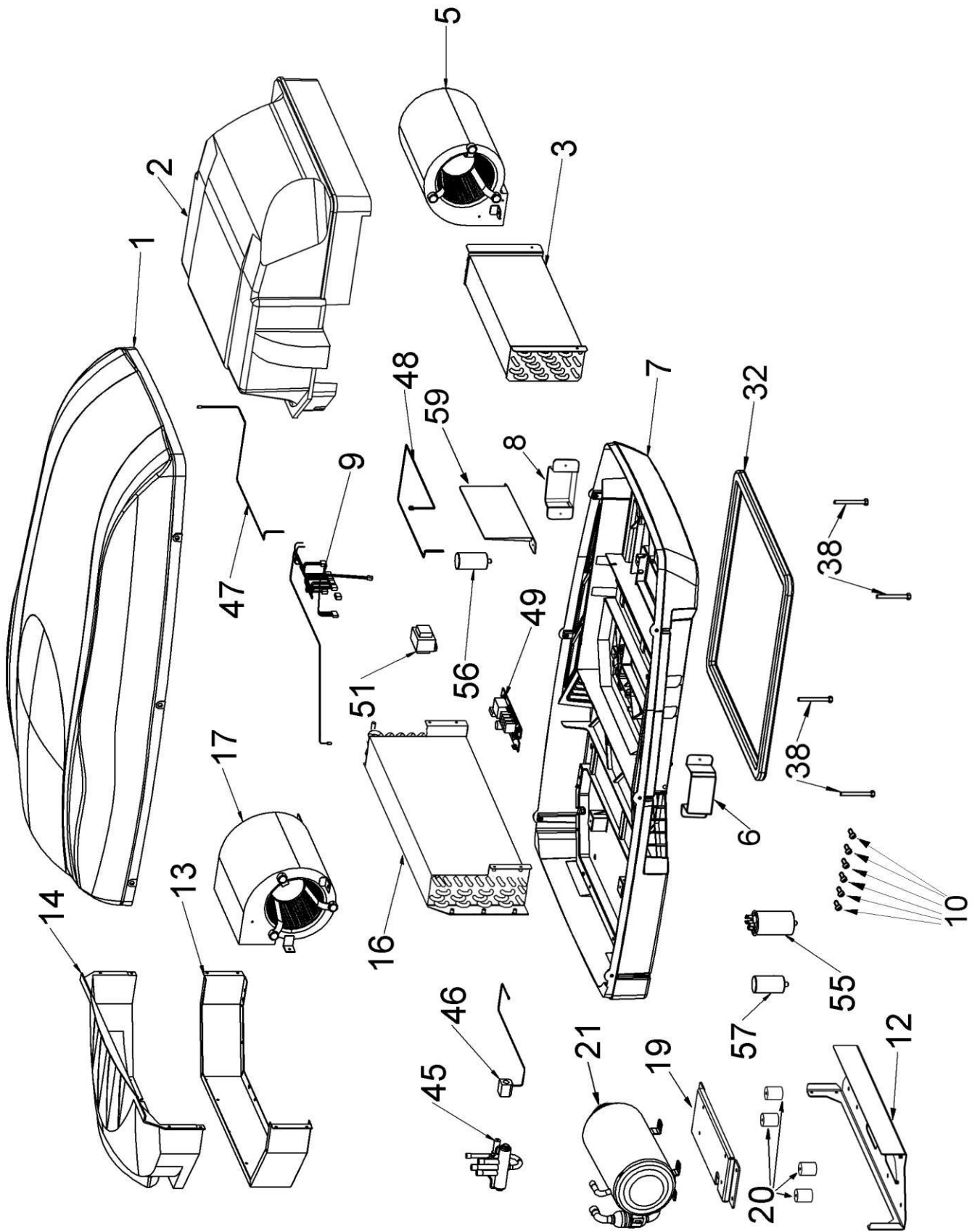


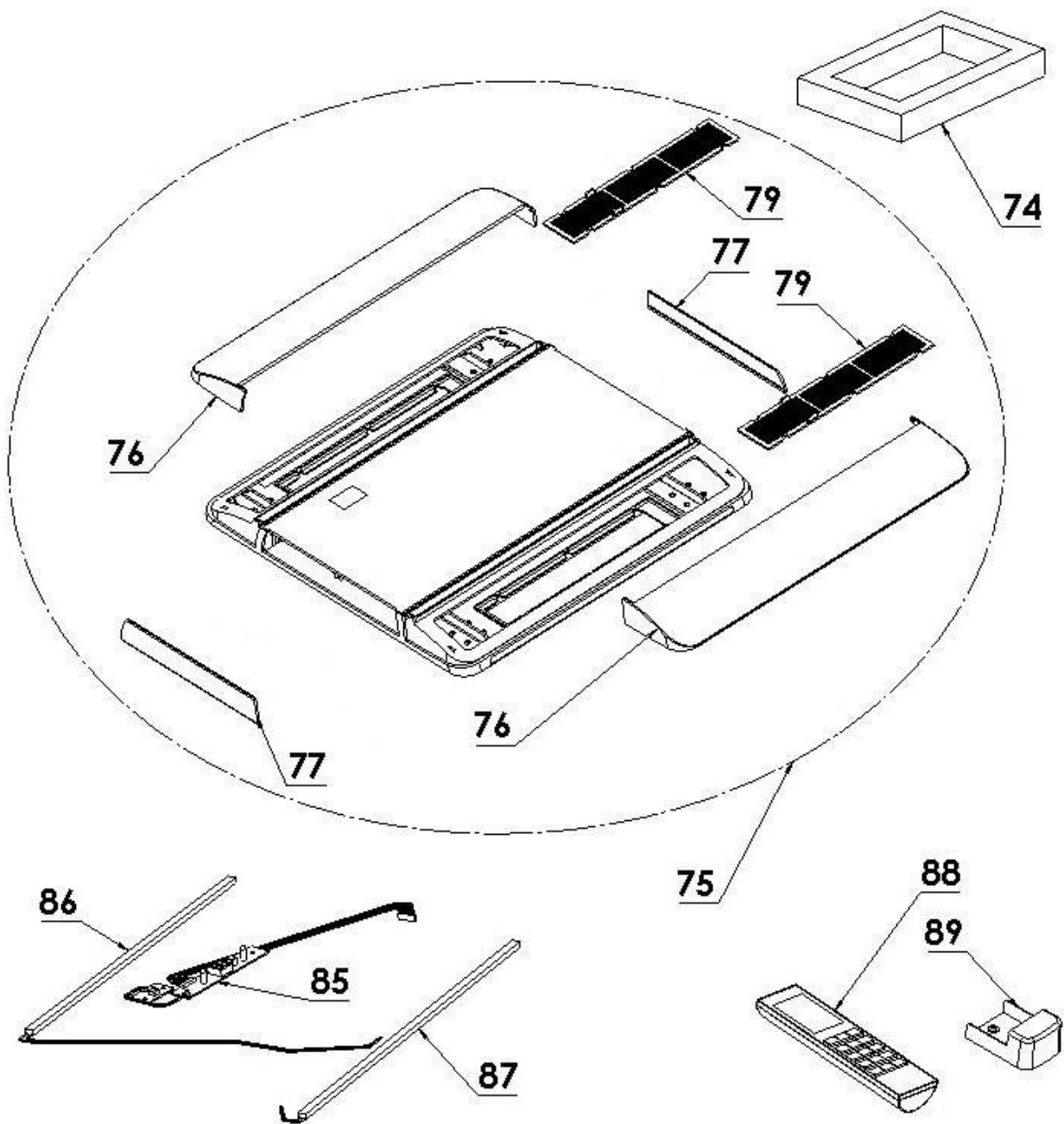
ICE S 2800

Key

C3 = Evaporator fan capacitor
 C4 = Condenser fan capacitor
 C5 = Compressor run capacitor
 EVGAS = 4 way solenoid valve
 MC = Compressor motor
 VC = Condenser fan motor
 VE = Evaporator fan motor
 CTP = condenser temperature probe
 ETP = Evaporator temperature probe
 ITP = Internal temperature probe
 TR = Power supply transformer

10 SPARE PARTS LIST





Pos/Code/Q.tà	Descrizione/Description	Désignation/Bezeichnung	Beschrijving/Descripcion
1 / 06192 / n.1	Coperchio superiore Top lid	Couvercle supérieur Obere Abdeckung	Bovenste afdekking Tapa superior
2 / 07133 / n.1	Coperchio dell'evaporatore Evaporator cover	Couvercle de l'évaporateur Deckel des Verdampfers	Deksel van de verdamper Tapa del evaporador
3 / 06257 / n.1	Gruppo Evaporatore Evaporator unit	Unité d'évaporation Verdampferereinheit	Verdamper Unidad Evaporador
5 / 07009 / n.1	Ventilatore Evaporante Evaporator Fan	Ventilateur l'évaporateur Lüfter des Verdampfers	Ventilator van de verdamper Ventilador de evaporador
6 / 06941 / n.1	Scarico condensa DX Right condensation drain	Décharge droite de condensation Rechter Ablass für Kondensation	Rechts afvoer voor condensatie Drenaje de condensación derecho
7 / 07132 / n.1	Fondo grigio antracite Anthracite grey bottom	Fond gris anthracite Kunststoffbasis, Anthrazitgrau	Onderkant antracietgrijs Fondo gris marengo
8 / 06942 / n.1	Scarico condensa SX Left condensation drain	Décharge gauche de condensation Linke Ablass für Kondensation	Linker afvoer voor condensatie Drenaje de condensación izquierdo
9 / 07012 / n.1	Cablaggio elettrico Electrical wiring	Câblage électrique Verkabelung	Elektrische bedrading Cableado eléctrico
10 / 06113 / n.6	Rivetto di fissaggio coperchio Rivet for Top lid	Rivet pour Couvercle supérieur Niete für Obere Abdeckung	Klinknagel voor Bovenste afdekking Remache para Tapa superior
12 / 06301 / n.1	Staffa base compressore Stirrup compressor support	Étrier de support compresseur Grundplatte Kompressor	Bodemplaat compressor Abrazadera soporte compresor
13 / 06180 / n.1	Scatola condensatore Condenser box	Boîte de condensateur Kondensatorkasten	Doos van de condensator Caja del condensador
14 / 06181 / n.1	Coperchio del condensatore Condenser cover	Couvercle du condenseur Deckel des Kondensators	Deksel van de condensator Tapa del condensador
16 / 07129 / n.1	Gruppo condensante Condenser unit	Groupe de condensation Kondensatoreinheit	Condensatie unit Unidad de condensacion
17 / 06971 / n.1	Ventilatore Condensante Condenser Fan	Ventilateur de condenseur Lüfter des Kondensators	Ventilator van de condensator Ventilador del condensador
19 / 06472 / n.1	Staffa fissaggio compressore Compressor fastening bracket	Étrier de fixation compresseur Befestigungsbügel Kompressor	Bevestigingsbeugel voor de compressor Abrazadera de fijación del compresor
20 / 03486 / n.4	Antivibrante per compressore Vibration damper for compressor	Antivibration pour compresseur Schwingungs dämpfer für Kompressor	Trillingsdempers voor compressor Anti-vibrador por compresor
21 / 07090 / n.1	Compressore rotativo Sliding-vane compressor	Compresseur rotatif Kapselkompressor	Roterende compressor Compresor rotatorio
32 / 03497 / n.1	Guarnizione toroidale Aerstop Toroidal gasket Aerstop	Joint d'étanchéité toroïdal Aerstop Ringkern Dichtung Aerstop	Toroidal afdichting Aerstop Anillo tórico Aerstop
38 / 06428 / n.4	Vite di fissaggio M6x70 Fixing screw M6x70	Vis de fixation M6x70 Befestigungsschraube M6x70	Bevestigingsschroef M6x70 Tornillo de implantaciones M6x70
45 / 05022 / n.1	Elettrovalvola 4 vie 4-way solenoid valve	Électrovanne à 4 voies Magnetventil 4-Wege	4-weg magneetventiel Electroválvula de 4 vías
46 / 07011 / n.1	Bobina per Elettrovalvola 4vie Coil for 4-way solenoid valve	Bobine pour électrovanne 4 voies Spule für 4-Wege-Magnetventil	Spoel voor 4-weg magneetventiel Bobina para electroválvula de 4 vías

Pos/Code/Q.tà	Descrizione/Description	Désignation/Bezeichnung	Beschrijving/Descripcion
47 / 07401 / n.1	Sonda Antighiaccio evaporatore Anti-icing probe for evaporator	Sonde anti-givrage pour l'évaporateur Fühler Anti-Eis für Verdampfer	Anti-ijs probe van de verdampfer Sonda anti-hielo del evaporador
48 / 07402 / n.1	Sonda Antighiaccio condensatore Anti-icing probe for condenser	Sonde anti-givrage pour le condensateur Fühler Anti-Eis für Kondensatoreinheit	Anti-ijs probe van de condensator Sonda anti-hielo del condensador
49 / 07193 / n.1	Scheda Elettronica Comando Electronic Card	Carte électronique Karte elektronisch	Elektronische kaart Tarjeta electrónica
51 / 02487 / n.1	Trasformatore Transformer	Transformateur Transformator	Transformator Transformador
55 / 06349 / n.1	Condensatore 35uF 450V Capacitor 35uF 450V	Condensateur 35uF 450V Kondensator 35uF 450V	Condensator 35uF 450V Condensador 35uF 450V
56 / 03505 / n.1	Condensatore 3uF 450V Capacitor 3uF 450V	Condensateur 3uF 450V Kondensator 3uF 450V	Condensator 3uF 450V Condensador 3uF 450V
57 / 04417 / n.1	Condensatore 5uF 450V Capacitor 5uF 450V	Condensateur 5uF 450V Kondensator 5uF 450V	Condensator 5uF 450V Condensador 5uF 450V
59 / 06691 / n.1	Protezione per scheda elettronica PCB protection	Protection de la carte électronique Schutz für Karte elektronisch	Bescherming Elektronische kaart Protección de la tarjeta electrónica
74 / 06239 / n.1	Condotto aria adesivo rettangolare per diffusore Rectangular adhesive air duct for diffuser	Conduit d'air adhésif rectangulaire pour diffuseur Rechteckiger selbstadhäsiver Luftkanal für Diffusor	Rechthoekige lijm luchtkanaal voor diffuser Conducto adhesivo rectangular de aire para difusor
75 / 07433 / n.1	Diffusore aria Air diffuser	Porte d'inspection du filtre à air Diffusor für Luft	Diffuser voor de lucht Difusor de aire
76 / 07252 / n.2	Sportello ispezione filtro aria Air filter inspection door	Porte d'inspection du filtre à air Luftfilter-Inspektionstür	Inspectiedeur luchtfilter Puerta de inspección del filtro de aire
77 / 07253 / n.2	Aletta per diffusore Fin for air diffuser	Ailette pour le diffuseur de l'air Flossen für Luftverteiler	Vin voor de lucht diffuser Aletas para el difusor de aire
79 / 07254 / n.2	Filtro aria Air filter	Filtre de l'air Luftfilter	Luchtfilter Filtro de l'aire
85 / 07194 / n.1	Ricevitore del Telecomando Receiver for the remote control	Récepteur pour le Télécommande Empfänger für die Fernbedienung	Ontvanger voor de afstandsbediening Receptor para el mando a distancia
86 / 07255 / n.1	Luce led 1 LED light 1	Lumière à led 1 LED-Licht 1	LED-licht 1 Luz LED 1
87 / 07256 / n.1	Luce led 2 LED light 2	Lumière à led 2 LED-Licht 2	LED-licht 2 Luz LED 2
88 / 07184 / n.1	Telecomando Remote control	Télécommande Fernbedienung	Afstandsbediening Mando a distancia
89 / 07173 / n.1	Porta-Telecomando Holder for remote control	Support pour la télécommande Fernbedienungshalter	Behuizing voor afstandsbediening Alojamiento para el mando a distancia



Notes

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Contacts

ITALY - TELECO SPA

Via E. Majorana 49
48022 LUGO (RA)
Tel. + 39 0545 25037
Fax. + 39 0545 32064
mail: info@telecogroup.com
www.telecogroup.com
Assistenza 899 899 856

DEUTSCHLAND - TELECO GmbH

82041 Deisenhofen
Tel. 089 21129976 - Fax 089 21129978
telecogmbh@telecogroup.com
www.teleco-deutschland.de
Vertretung:
Zimmer
Ziegenhainer Str. 7 - 34626 Neukirchen
Tel. 06694-9108000 - Fax 06694-9108008
uwe.zimmer-saalbach@zimmer-automotive.de
TELECO SERVICE 08921129997
TELAIR SERVICE 08921129995

FRANCE - TELECO SAS

3, impasse des Iles - ZA La Maladière
07300 St Jean de Muzols - France
Tél. 04 75 08 49 17 - Fax 09 70 32 83 00
contact@telecogroup.fr
www.telecogroup.fr
SERVICE COMMERCIAL :
Jean-Philippe Bleys
Tél. 03 86 28 25 95 Fax 03 86 26 64 54
teleco.telair@bleysetd.com
Service Technique :
Tél. 06 83 31 44 05 ou 04 75 08 28 25
www.techmobilefrance.com

In Europe

GREAT BRITAIN - SCAN TERIEUR LTD

30, The Metro Centre, Tolpits Lane - Watford,
Herts - England - WD18 9XG
Tel. 01923 800353 - Fax 01923 220358
e-mail: info@scan-terieur.com
www.scan-terieur.com

THE NETHERLANDS/BELGIUM/LUXEMBOURG/ DENMARK/SWEDEN/ NORWAY/FINLAND - KARMAN TRADING

Telgterweg 301-D, 3853NJ ERMELO - Nederland
Tel. +31 (0) 341 722450 - Fax +31 (0) 341 722451
e-mail: info@karmantrading.eu
www.karmantrading.eu
Dealers and Service stations: www.telecobenelux.eu

ESPAÑA - ADD SICMAP S.L.

EVA Caravan - Via Sergia 92 - Pol. Ind. Pla d'en Boet II
08302 MATARÓ (Barcelona)
Tel. 93 790 35 26 - Fax. 93 796 21 17
info@addsicmap.com
Servicio técnico: Fills de Rocha i Lopez, S.L
Avd. Pau Casals, 132 - 08907 L'Hospitalet Llobregat
Barcelona - España
Tel. 933 333 753 - 933 348 071
fillsrocha@fillsrocha.com
www.fillsrocha.com

