



GB

D

F

I

**USE & MAINTENANCE INSTRUCTIONS
BEDIENUNGSANLEITUNG
INSTRUCTIONS D'USAGE ET ENTRETIEN
MANUALE USO E MANUTENZIONE**

CU-O



SERVICE SHEET - SERVICEBLATT - FICHE DE SERVICE - FOGLIO SERVIZIO

1.	Description of the unit	page	4
1.1	<i>How the unit works</i>	<i>page</i>	4
1.2	<i>Safety devices and safety measures</i>	<i>page</i>	4
1.3	<i>Synopsis of signs</i>	<i>page</i>	5
1.4	<i>Residual risks</i>	<i>page</i>	6
2.	Technical features of the unit	page	7
3.	Intended uses	page	7
3.1	<i>Dangers deriving from using the unit for purposes other than those it is designed for</i>	<i>page</i>	7
4.	Moving the unit	page	8
5.	Installation.....	page	8
5.1	<i>Signs.....</i>	<i>page</i>	8
5.2	<i>Dimensions of unit and packing</i>	<i>page</i>	8
5.3	<i>Commissioning.....</i>	<i>page</i>	9
5.4	<i>Area surrounding the unit to be kept clear</i>	<i>page</i>	9
6.	Assembly and preparation for commissioning	page	9
6.1	<i>Cleaning the unit.....</i>	<i>page</i>	11
6.2	<i>Connecting the unit to external power sources</i>	<i>page</i>	11
6.2.1	<i>Power mains connection</i>	<i>page</i>	11
6.2.2	<i>Water mains connection</i>	<i>page</i>	12
6.3	<i>Checks, adjustments and settings</i>	<i>page</i>	12
6.4	<i>Setting of the control and power devices.....</i>	<i>page</i>	12
7.	Start-up	page	13
7.1	<i>Electrical controls</i>	<i>page</i>	13
7.1.1	<i>Control panel</i>	<i>page</i>	13
8.	How to use the unit	page	13
8.1	<i>Description of the unit's work cycle</i>	<i>page</i>	13
8.2	<i>Diagram of the unit's electrical system.....</i>	<i>page</i>	13
9.	Maintenance and repairs	page	14
9.1	<i>General maintenance operations</i>	<i>page</i>	14
9.2	<i>Special maintenance operations</i>	<i>page</i>	14
9.3	<i>Operations to be carried out by qualified personnel or by the manufacturer</i>	<i>page</i>	14
9.4	<i>Troubleshooting guide</i>	<i>page</i>	14
9.5	<i>Parts subject to wear and spares</i>	<i>page</i>	15
10.	Disposal of packaging	page	15
11.	Disassembling the unit	page	15

Thank you for choosing a ***uniblock*** product.
Please read this booklet carefully - it has been specially designed to provide advice and information on how to install, use and maintain the unit correctly, so as to use it to the best of its capacities.

The term ***CAUTION*** is used to indicate situations that may cause damage to the unit. These appear in italics.

The term ***WARNING*** is used to indicate situations that might endanger the safety of operators. These appear in italics and, in some case, also in bold.

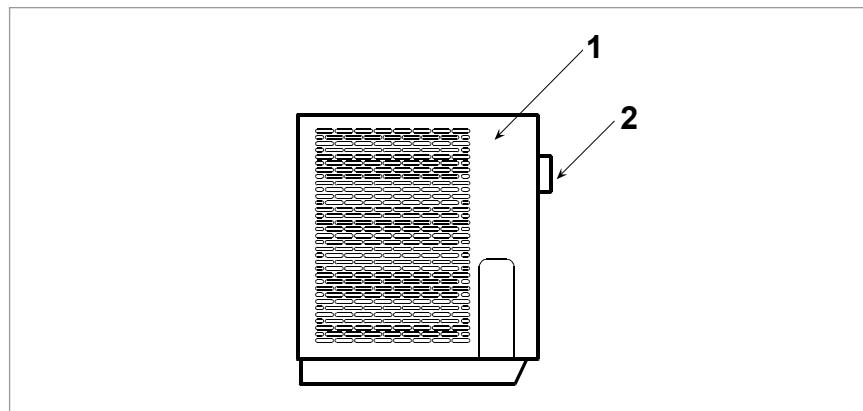
All measures indicated in this catalogue are stated in millimetres

1. DESCRIPTION OF UNIT

The CU-O range consists in:

1. a condenser unit, with air or water condensation installed external to the cell
2. an electrical control panel, located on the condenser unit

fig.1



1.1 How the unit works

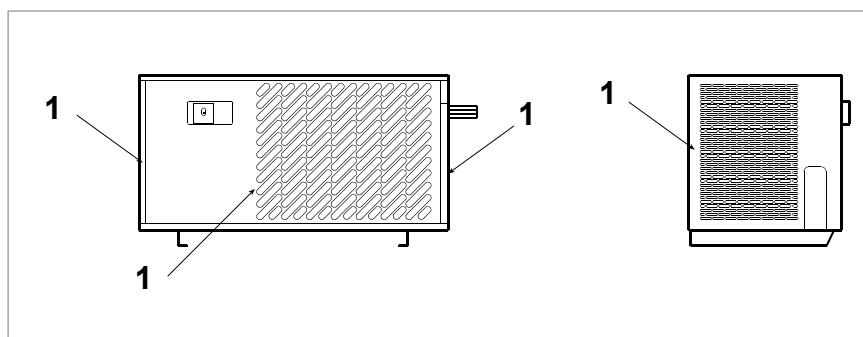
The units CU-O are condensing parts operating by means of a sealed or semi-sealed a/c mains powered refrigerating compressor (three-phase), using HFC refrigerating liquids.

1.2 Safety devices and safety measures

The following mechanical safety devices are supplied by the manufacturer (fig. 2):

1. fixed side guards of the evaporator and condenser units: these are fixed to the metal casing with locking screws.

fig.2



The following electrical safety devices are supplied by the manufacturer:

1. Fan thermal protection (incorporated into the motors) with manual resetting: protects electric fans against excessive current absorption.
2. High pressure switch with manual resetting: protects against excessively high pressure.
3. Thermistors or thermostats with manual resetting: protects the motor against overheating.
4. Minimum/maximum tension electronic relay (monitor) with automatic resetting (optional).

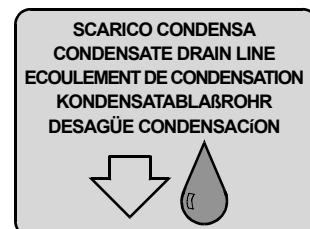
WARNING

Safety devices have been designed by the manufacturer to ensure the safety of operators while carrying out their work

1.3 Synopsis of labels

The following caution and warning signs have been placed on the unit by the manufacturer:

INDICATION:



TYPE OF REFRIGERATING LIQUID

WARNING:



CAUTION!
hot and/or cold parts

ATTENZIONE!
PRIMA DI OPERARE SULLA MACHINA TOGLIERE LA CORRENTE

ATTENTION!
COUPEZ LE COURANT AVANT DE TRAVAILLER A LA MACHINE

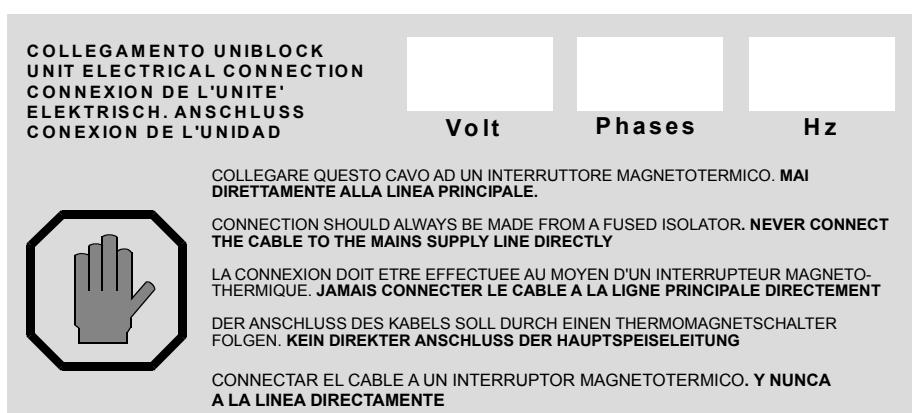
CAUTION!
SWITCH OFF BEFORE WORKING AT THE MACHINE

VORSICHT!
SCHALTEN AUF BEVOR MAN AUF DERN MASCHINE HANDET

CUIDADO!
ANTES DE MANIPULAR EN EL EQUIPO, QUITAR LA CORRIENTE



CAUTION:



GB

D

F

I

*Direction of rotation***ATTENZIONE - IMPORTANTE**

PULIRE PERIODICAMENTE IL CONDENSATORE CON GETTO D'ARIA DALL'INTERNO VERSO L'ESTERNO. ESEGUIRE CON MACCHINA FERMA

ATTENTION - IMPORTANT

NETTOYER PERIODIQUEMENT LE CONDENSATEUR AVEC UN JET D'AIR DE L'INTERIEUR VERS L'EXTERIEUR. FAIRE CETTE OPERATION AVEC MACHINE FERME.

ATTENTION - IMPORTANT

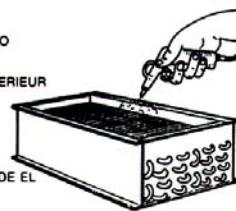
PERIODICALLY CLEAN THE CONDENSER FINS WITH THE UNIT SWITCHED OFF.

ACHTUNG - WICHTIG

PERIODISCH PUTZEN DIE KONDENSATORSRIPPEN MIT DER MACHINE ZU.

ATENCION - IMPORTANTE

LIMPIAR PERIODICAMENTE EL CONDENSADOR POR UN CHORRO DE AIRE DESDE EL INTERIOR HACIA EL EXTERIOR. EJECUTAR CON EL APARATO PARADO.

**ATTENZIONE - IMPORTANTE**

PRIMA DI AVVIARE L'IMPIANTO PORTARE L'INTERRUTTORE A POSIZIONE PRE-RISCALDO PER CIRCA 3 ORE.

ATTENTION - IMPORTANT

BEFORE STARTING THE UNIT, SWITCH IS TO BE KEPT ON PRE-HEATING FOR 3 HOURS APPROX.

ACHTUNG - WICHTIG

BEVOR MAN DIE MASCHINE ANLAUFT, MUSS MAN DEN SCHALTER AUF VORWARMEN FÜR ETWA 3 STUNDEN HALTEN.

ATTENTION - IMPORTANT

AVANT DE LA MISE EN MARCHE DE L'APPAREIL EST NECESSAIRE QUE L'INTERRUPTEUR SOIT EN POSITION DE PRECHAUFFAGE POUR 3 HEURES ENVIRON.

I CUIDADO - IMPORTANTE!

ANTES DE PONER EN MARCHA EL EQUIPO LLEVAR EL INTERRUPTOR A LA POSICION PRE-CALENTAMIENTO PARA CERCA DE 3 HORAS.

1.4 RESIDUAL RISKS

Below we list all the situations - from the delivery of the unit to its demolition - in which the user will need to exercise caution in order to avoid damage to persons.

CHAPTER 4 - Positioning the unit

Maximum caution should be used in ensuring that no one passes through the area while the suspended load is being handled, in order to avoid any chance of damage to persons.

CHAPTER 9 - Maintenance

Condenser and evaporator groups' fins: any maintenance operations must be carried out using personal protection devices (e.g. gloves) in order to avoid any chance of damage to hands.

2. TECHNICAL FEATURES OF THE UNIT

GB

fig.3

D

F

I

The specific technical features of each CU model are indicated on the data plate attached to the unit (fig. 3).

Carrier Refrigeration AB

Modello
Model



ZANOTTI S.p.A.

Via Martin L. King, nr. 30
46020 PEGOGNÀGA
(Mantova) - Italy



Mod.
Mod.

Matricola
Serial Number

Tensione
Voltage

Assorb. Marcia
Run Absorption

Assorb. Max
Max Absor.

Potenza compressore
Compressor power

Refrigerante
Refrigerant

Massa
Mass

Schemi
Diagr.

- 1) Year of manufacture
- 2) Carrier unit code
- 3) Serial number
- 4) Voltage
- 5) Operating current
- 6) Maximum current
- 7) Starting current
- 8) Compressor's nominal power
- 9) Refrigerating liquid Type; Quantity
- 10) Mass of the unit
- 11) Electric diagram (Project) number

3. INTENDED USES

The CU-O ranges are air condensing units manufactured to operate automatically. Using the machine for any purposes other than those envisaged represents an anomaly and may seriously endanger people's safety.

3.1 Dangers deriving from using the unit for purposes other than those it is designed for

The unit is not designed to operate in premises where explosives are stored. Therefore, it is categorically forbidden to use it in locations where any risk of explosion exists.

Should the user wish to use the unit for any purposes or in any fields other than those intended (see ch. 8, section 8.2 of this manual), or wish to modify the unit in any way, he should consult the manufacturer/distributor about any contraindications or dangers that may derive from the incorrect use of the unit.

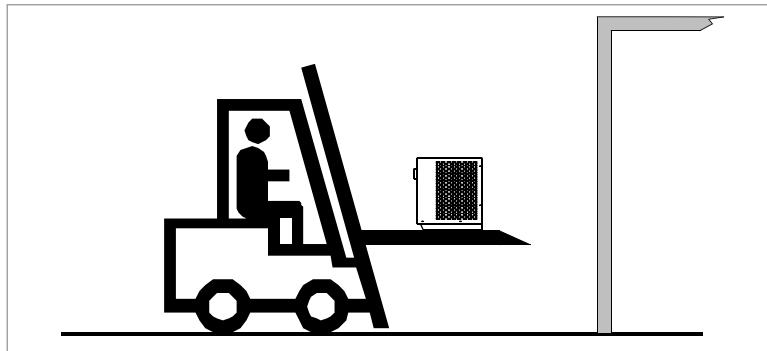
D

F

I

The unit can be moved with lifting and transport devices. (Fig.4)

fig.4

**WARNING**

Take the utmost care in ensuring no one passes through the platform truck's manoeuvring area, so as to avoid any risk to personnel while the load is being handled.

The unit is shipped packed in a wooden case or in a wooden crate: the movement has to be done securing the packaging with a sling in an appropriate way.

Take special care in ensuring that the packing crate containing the unit is not lifted too quickly to avoid oscillations which may damage or break the unit.

5. INSTALLATION

5.1 Signs

The Manufacturer has envisaged the posting of the following caution and warning signs:

Caution: Low /high temperature
Switch off before handling the unit
Caution: danger

5.2 Dimensions of unit and packing

CU range units come in different sizes, as indicated in the following diagrams (fig. 5-6).

CU 401 - 451 - 501 - 631 /O

Cod.	H	G
GCU401	10	22
HCU401	10	28
GCU451	12	28
HCU451	12	35
GCU501	12	28
HCU501	12	35
GCU631	12	28
HCU631	12	42

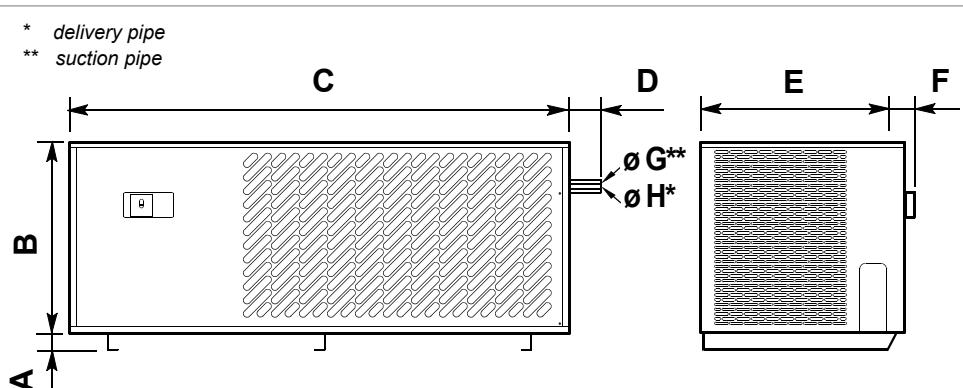
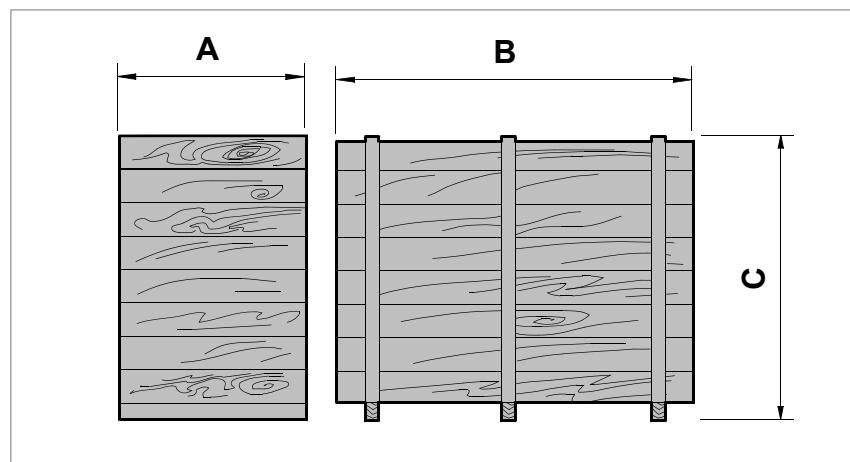


fig.5

Mod.	A	B	C	D	E	F
CU401	52	542	1075	105	532	28
CU451	52	602	1575	105	642	28
CU501	52	602	1575	105	642	28
CU631	83	802	1725	105	742	28

Mod.	A	B	C	Kg
CU401-O	670	1350	810	56
CU451/501-O	780	1850	865	89
CU631-O	880	2000	1100	114



5.3 Commissioning

In order to achieve optimum performance, the unit must be:

- a) Place the cell in a well ventilated room, away from heat sources .
- b) Check that the unit has adequate aspirating and extracting power.

5.4 Area surrounding the unit

In order to allow it to work properly and to facilitate its maintenance in safety conditions, the unit should be installed providing the minimum spatial requirements for opening the unit, indicated in figs 5.

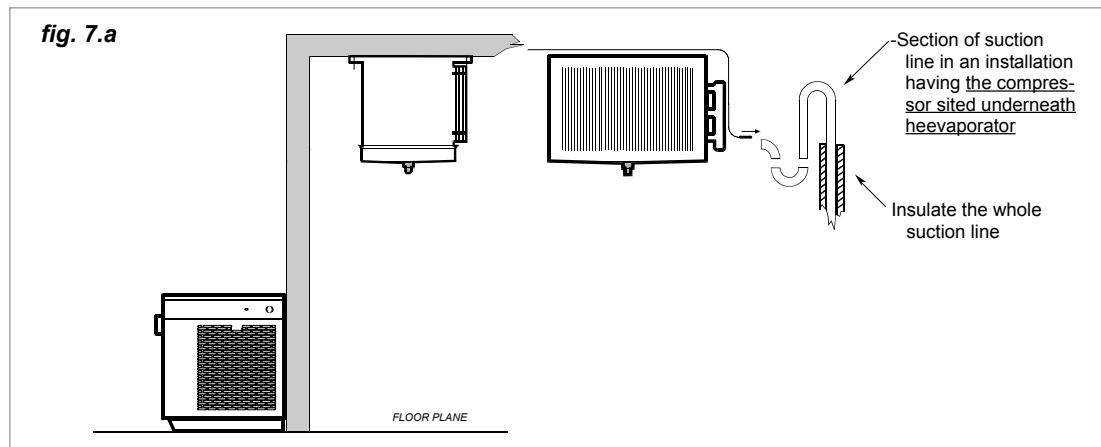
6. ASSEMBLY AND PREPARATION PRIOR TO COMMISSIONING

Ensure that no damage has occurred to the unit or the equipment it contains during transportation, particularly to the components fixed to the electric control panel door and to the refrigerating system pipes. To install the unit, proceed as indicated in the diagrams, taking special care to level the unit (fig.7).

Connect the condensing unit to its evaporator following the diagrams of the fig.7 and using pipes with the correct diameter as indicated in the enclosed tables.

fig. 7

fig. 7.a



GB

D

F

I

fig.7

fig.7.b

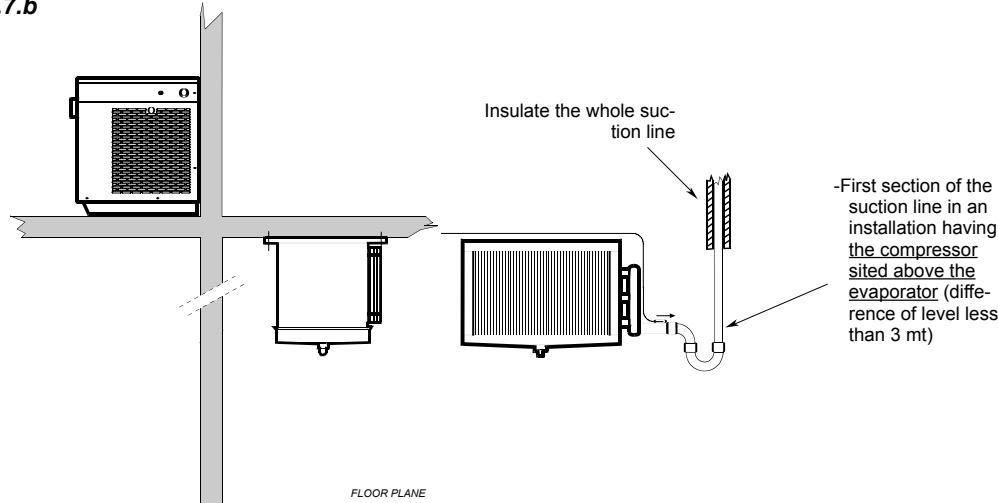
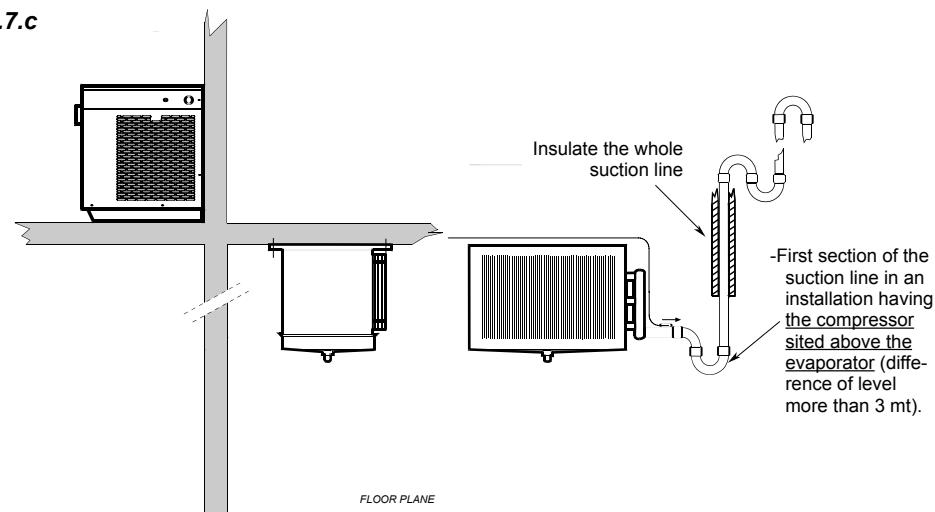


fig.7.c



6.1 Cleaning the unit

Carefully clean the unit with detergents or degreasing substances, removing dust, dirt and any foreign matter that may have deposited on it during transportation.

GB

CAUTION! Do not use solvents

D

6.2 Connecting the unit to external energy sources

6.2.1 Power mains connection

Before making the electrical connection, ensure that the voltage and frequency of the mains supply are as indicated on the unit's serial plate and that the power supply is within +/- 10% of nominal value

F

Having conducted a preliminary inspection of the elements of the panel, make the electrical connection. Connection to the mains supply must be made through a magnetothermal or fused switch.

Safety devices (magnetothermal and/or fused switches) should be installed on the power supply line taking into account the current absorption indicated on the plate. For instance:

Current absorption indicated on the plate:

Operating current	12KW - 28,5 A
Maximum current	40 A
Starting absorption	134A

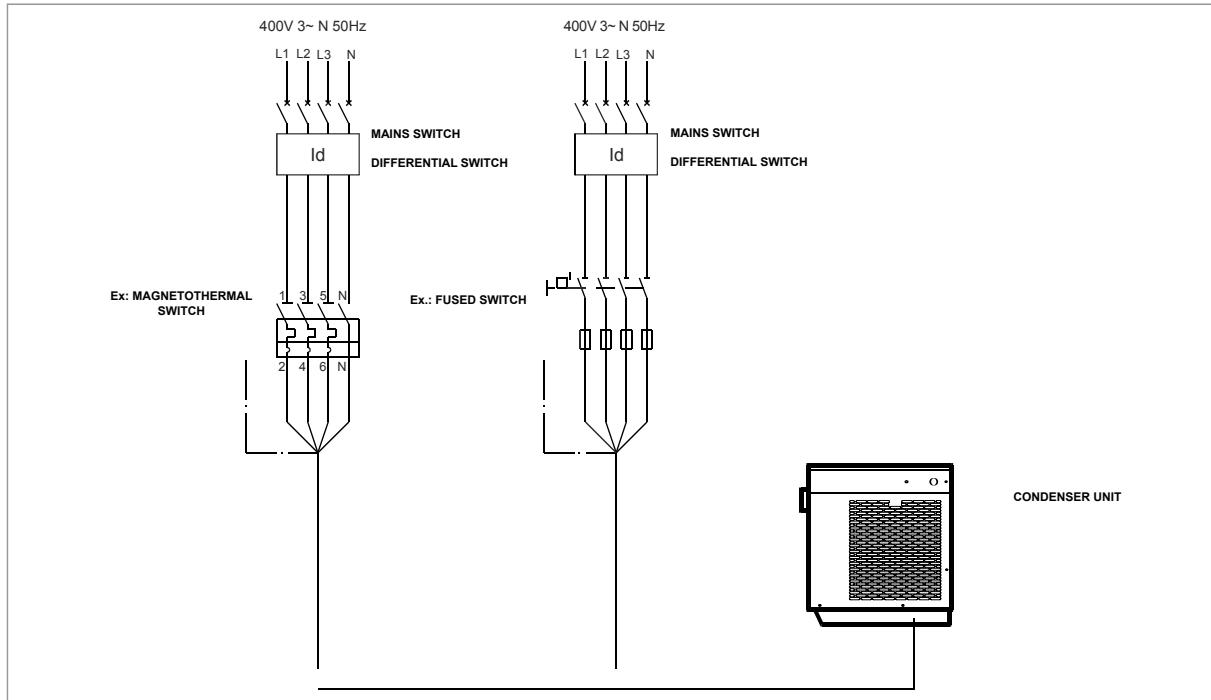
I

In this case, a 40A magnetothermal switch with a "C" curve (CEI 23.3 IV -EN 60-898) should be installed. Alternatively, an appropriately sized fused switch should be used for the maximum 40A current, which should also be capable of withstanding a 134A starting current without being tripped. The system must be fitted with an adequate equipotential safety circuit (earth connection).

It is also advisable to install a differential switch at source.

Follow the diagram below to make the electrical connection correctly for CU-O :

fig.8



When a cell contains more than one unit, each should be fitted with its own magnetothermal switch.

Now connect the unit paying attention to the colour of the wires that make up the power supply cable:

a) 230V/3~/50-60 Hz	4 wires	Blue	=	phase
		Yellow/green	=	earth
		Brown	=	phase
		Black	=	phase

b) 400V/3N~/50-60 Hz	5 wires	Blue	=	neutral
		Yellow/Green	=	earth
		Brown	=	phase
		Black	=	phase
		Black	=	phase

N.B.: All units are supplied with terminals 3-4 to which it is possible to connect any device not alive; for example an ambient thermostat.

CAUTION

Magnetothermal safety switches should be used to protect the main power supply line from power surges.

Only qualified personnel is authorised to replace the safety thermal relays fitted on motors.

Only qualified personnel must be authorised to make electrical connections.

6.2.2 Connection to the water mains (water condenser)

The water condenser must be connected to the water mains following the indications on the plates next to the tubes, which are marked IN (ENTRATA) and OUT (USCITA). The diameter of the pipes used to make the connection must not be smaller than the unit's outlet tubes. Pressure in the water circuit must be at least 1 bar.

6.3 Checks, adjustments and settings

Before switching the machine on, ensure that:

- locking screws are fixed tight
- electrical connections have been made correctly

When the unit is opened, check that:

- no tools have been left inside
- assembly has been correctly performed
- there are no gas leaks
- panels have been correctly fixed.

6.4 Setting of the control and power devices

During the testing on make the setting of these devices. Below we list the rated values of the pressure switches settings; these values must be considered approximates as size order.

Low pressure switch 0,2 bar

high pressure switch 28 bar working with R404A

7. PLACING INTO SERVICE OF THE UNIT

To start the machine up proceed as follows:

A) Adjust the ambient thermostat, which is on the evaporator, to the desired temperature inside the refrigerating cell. Units with remote control panels are equipped with an electronic room thermostat which is located on the remote control panel itself. The thermostat can be connected following the scheme; or it can work on the solenoid valve which pipes the refrigerant to the evaporator.

B) Position the switch preheating/stop/running, arranged by the customer, on preheating (the indication for the connection is in the electric scheme).

C) Move the mains switch to position (ON). Leave the unit in the pre-start position for at least 4 hours. If the temperature is particularly cold, keep the unit in the pre-start position for at least 12 hours.

D) At the end of the pre-start phase, move the pre-start/stop/start switch to operating position.

E) If the compressor fails to start, check:

- connection to the power supply

- a blockage in the minimum pressure switch due to the lack of refrigerating gas. In this case the leak must be identified and repaired before refilling the compressor and proceeding again with the operations illustrated above.

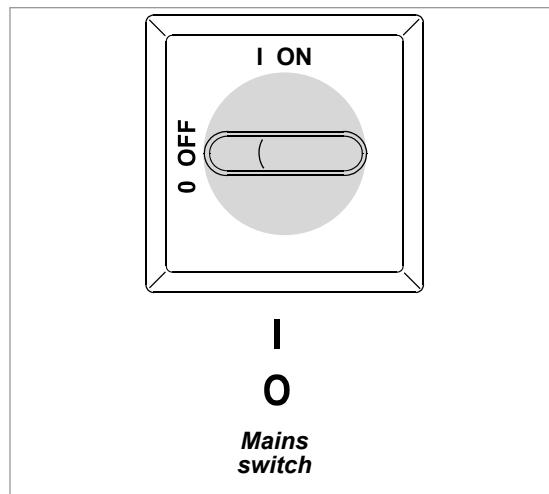
- Faulty auxiliary fuse = identify and eliminate the cause.

7.1 Electrical controls

7.1.1 Control panel

The CU-O units use only one model of control panel. (fig.9)

fig.9



8. HOW TO OPERATE THE UNIT

8.1 Description of the unit working cycle

Uniblock CU refrigerating units operate through a sealed or semi-sealed refrigerating compressor, powered by mains a/c supply (three phase) and use HFC refrigerating liquids.

8.2 Diagram of the unit's electrical system

Units in the CU-O range feature a special electrical system, a diagram of which is attached to this manual.

9. MAINTENANCE AND REPAIRS

D

F

I

9.1 General maintenance

Adquate maintenance is an important factor to ensure the long life and optimum performance of the unit and the safety conditions required by the Manufacturer.

It is essential to clean the condenser which is located in the lower part of the compressor unit (externally to the cell) in an easily accessible position. The condenser is used to cool the refrigerating gas and it will work more effectively if it is kept free of dust. The unit can be cleaned by simply using a dry brush and reaching deep between the condenser's fins or, better still, by using an air jet and blowing from the inside out. This operation must be carried out while the unit is switched off. If there are traces of oil on the condenser, check where they come from and, having repaired the leak, clean using a detergent such as alcohol or petrol.

WARNING: To avoid cutting your hands, use protective gloves.

9.2 Special maintenance operations

Periodically check the wear of electrical contacts and remote control switches and replace if necessary.

9.3 Operations to be carried out by qualified personnel or by the Manufacturer

Below is a list of maintenance operations that require specific technical competencies and must therefore be carried out by qualified personnel or by the Manufacturer.

The User must on no account:

- replace electrical components
- tamper with the electric system
- make repairs on mechanical parts
- tamper with the refrigerating system
- tamper with the control panel
- tamper with safety and protection devices

9.4 Troubleshooting guide

Technical problems that may occur during the operation of the machine:

1. In case of **malfunction of the system**, check the refrigerating gas through the flow indicator located on all units (this must be checked when the unit is operating and the cell temperature is close to the required temperature). Normally the indicator is clear, while, in the absence of gas, gas bubbles will appear.

2. If the **compressor or fan stop**, check the following:

- whether the safety fuses of the main and auxiliary circuit have been blown, in which case they should be replaced, after checking the suitability of the mains tension and ensuring that phase polarity is correct.
- if the compressor has blocked, it is necessary to wait for the automatic resetting of the internal protection.
- if the fan is blocked, it will automatically reactivate, never the less it is necessary to look for the cause of the blocking.

WARNING:

It absolutely forbidden to remove the safety devices provided by the manufacturer to protect operators while the machine is in operation.

3. Other malfunctions may be due to the triggering of the following electrical safety devices:

a) Fan thermal protection (incorporated in the motor) - automatic resetting. This device is designed to safeguard electrical fans against excessive current absorption due to:

- overheating
- lack of one phase (only for three phase models)
- dirt in the condenser

b) High pressure switch - manual resetting

It is designed to protect the compressor from excessive pressure, which cause the pressure switch to be triggered too often, deriving from:

- dirt in the condenser
- condenser fans not working
- excessive temperature in the room where the system is located
- use of the system in unsuitable conditions or with inappropriate products.

To reset press the button on the pressure switch.

c) Low pressure switch - automatic resetting.

If the thermostat, arranged by the customer, works on the solenoid valve which pipes the refrigerant to the evaporator, the unit will stop at every closure of the solenoid valve, through the switch L/P (pump down). The intervention of the air pressure switch can be caused even by some anomalies as:

- lack of gas due to the breakage of a pipe or to loose hub
- clogged up filters
- solenoid valve failure
- ice in the evaporator

The minimum and maximum temperature pressure switches and the oil pressure switch are located inside the motor casing. Before resetting, disconnect from mains.

d) Thermistors or thermostats - automatic resetting

These are inserted in the compressor's coil to protect the motor from overheating (see electrical diagram)

e) Minimum and maximum tension electronic relay (Monitor)optional - automatic reset (where applicable).

It is used to protect the unit against anomalies in the power supply (+/-12% of nominal value). The unit starts with a delay of 8 minutes, indicated on the panel by a LED.

The main factors that cause the triggering of the device are anomalies in the power supply (for further information see attachment)

f) Condenser fan pressure switch

it is designed to control the condensing temperature.

In case of failure it can determine the activation of the h.p. pressure switch.

9.5 Parts subject to wear and spares

Only qualified personnel or the Manufacturer are authorised to replace worn parts.

10. DISPOSAL OF PACKING MATERIAL

Materials such as wood, plastics, polystyrene are used in packing and must be disposed of in compliance with local legislation.

11. DISMANTLING THE UNIT

When, for whatever reason, the owner wishes to dispose of the machine and dismantle it, it is necessary to follow some fundamental rules for protecting human health and the environment in which we live.

Conduits, flexible tubes, plastic or non-metallic components must be disassembled and disposed of separately.

Electrical components such as switches, transformers, etc. must be disassembled in order to be reused if they are still in good condition, or to be reconditioned and recycled where possible.

Pneumatic and electrical components such as valves, electrical valves, pressure regulators must be disassembled in order to be reused if they are still in good condition, or to be reconditioned and recycled where possible.

The refrigerating liquid must be drained completely and disposed of by specialists.

The casing and all metal parts of the unit should be disassembled and different materials should be separately grouped. The various parts thus obtained will thus

GB

be allowed to be demolished and melted to allow the recycling of the unit's components.

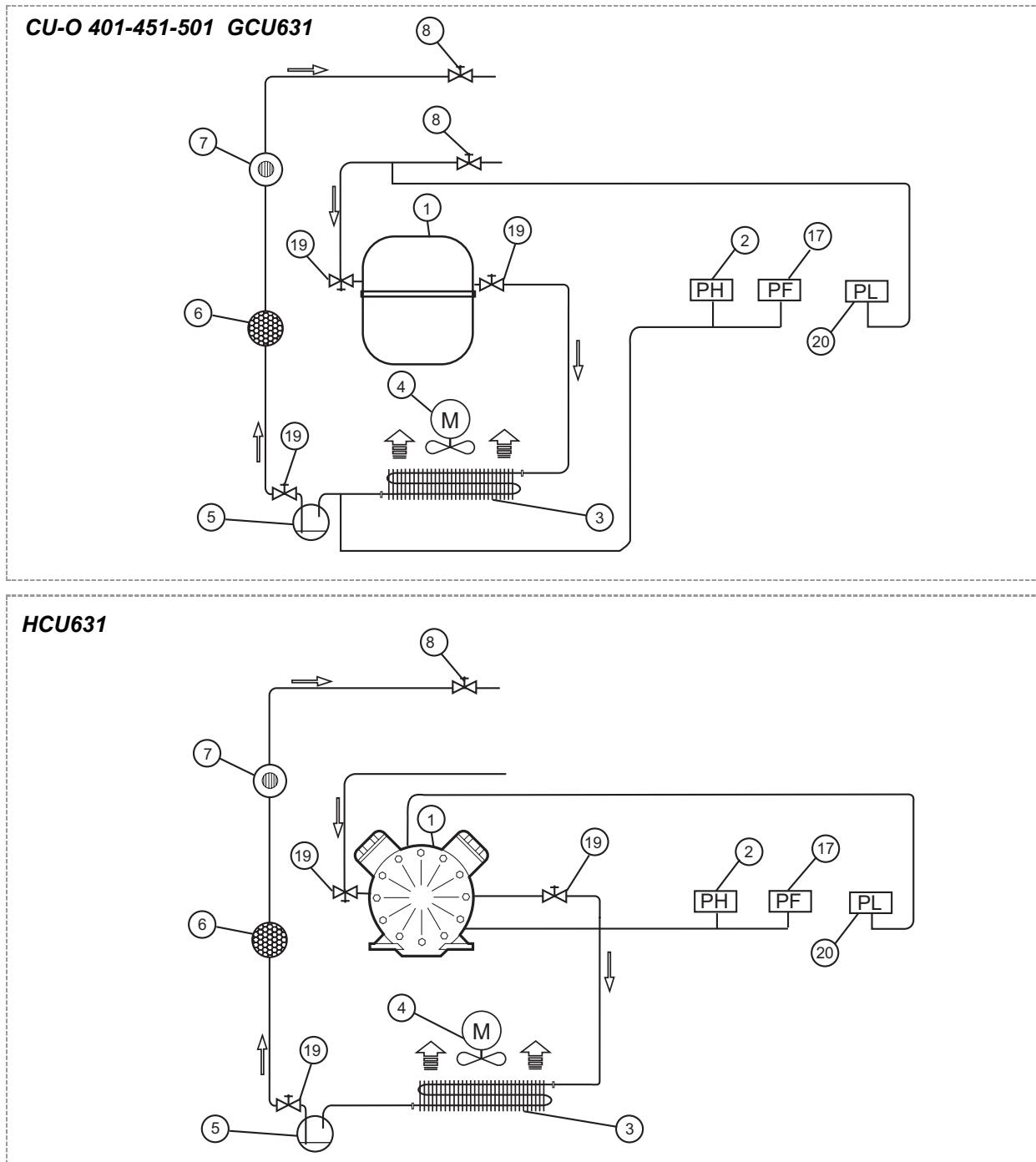
D**F****I**

LIST OF FUSES

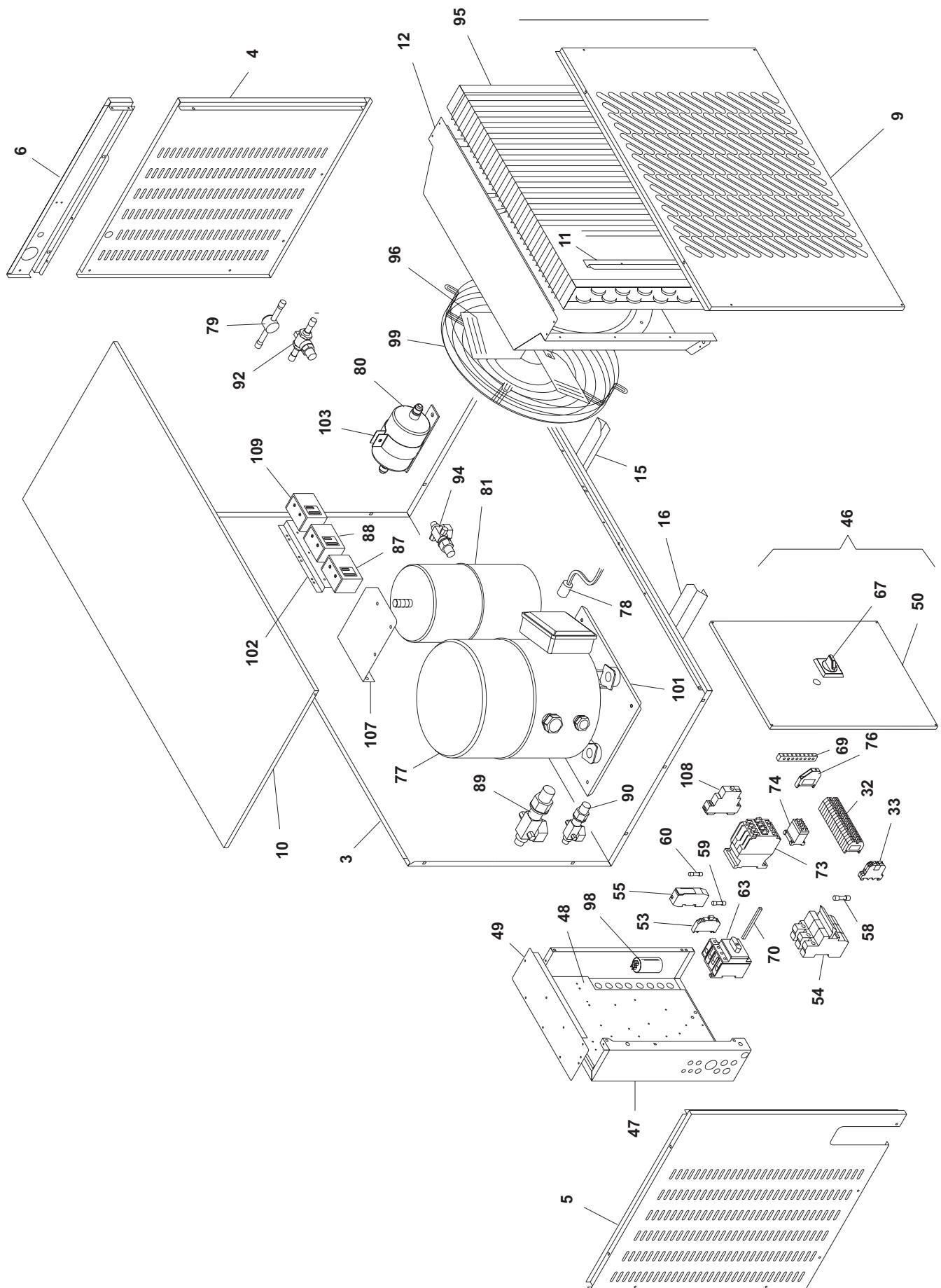
UNIBLOCK			Power current fuse	
MODEL	Gas	Voltage	nº.	Ampere
GCU401NO170F	R404A	400V/3N~/50	3	20
GCU401TO170F	R404A	400V/3N~/50	3	25
HCU401NO170F	R404A	400V/3N~/50	3	50
GCU451NO170F	R404A	400V/3N~/50	3	35
HCU451TO170F	R404A	400V/3N~/50	3	50
GCU501TO170F	R404A	400V/3N~/50	3	35
HCU501NO170F	R404A	400V/3N~/50	3	63
HCU501TO170F	R404A	400V/3N~/50	3	80
GCU631NO170F	R404A	400V/3N~/50	3	63
GCU631TO170F	R404A	400V/3N~/50	3	63
HCU631NO170F	R404A	400V/3N~/50	3	63
HCU631TO170F	R404A	400V/3N~/50	3	80

POWER CURRENT FUSE: This is a fuse fitted in the line.

12. REFRIGERATION DIAGRAM-KÄLTETECHNIKSCHAEMA-SCHEMA FRIGORIFIQUE-SCHEMA FRIGORIFERO

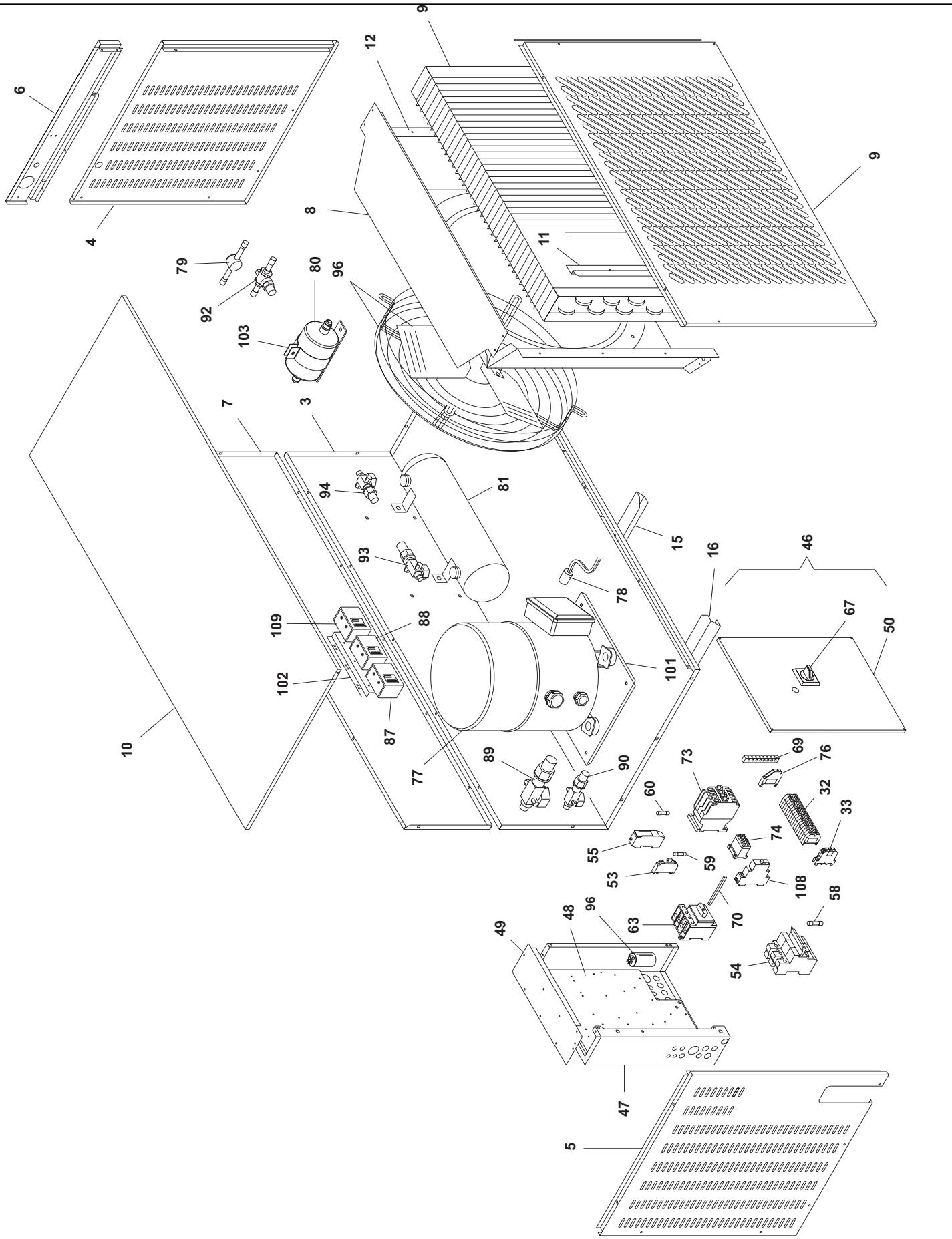


N	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
1	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSEORE
2	H.P. SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO ALTA PRESS.
3	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE
4	CONDENSER FAN	KONDENSATORVENTILATOR	VENTILATEUR CONDENSEUR	MOTOVENTILATORE COND.
5	LIQUID RECEIVER	FLÜSSIGKEITSSAMMLER	RESERVOIR LIQUIDE	RICEVITORE LIQUIDO
6	FILTER	FILTER	FILTRE	FILTRO
7	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	SPIA LIQUIDO
8	FLANGE	FLANSCH	BRIDE	FLANGIA
17	CONDENSER FAN SWITCH	KOND. VENTILATORPRESSOSTAT	PRESSOSTAT VENTILATEUR CONDENSEUR	PRESSOSTATO VENTOLA CONDENSATORE
19	SHUT-DOWN VALVE ROTALOCK	SPERRVENTIL ROTALOCK	SOUPAPE DE RETENUE ROTALOCK	RUBINETTO ROTALOCK
20	L/P SWITCH	NIEDERDRUCKPRESSOSTAT	PRESSOSTAT HAUTE PRESSION	PRESSOSTATO BASSA PRESSIONE



Tav n°		Modello :
	14	CU401
Data :		Disegnatore :
	18/05/99	Arfini

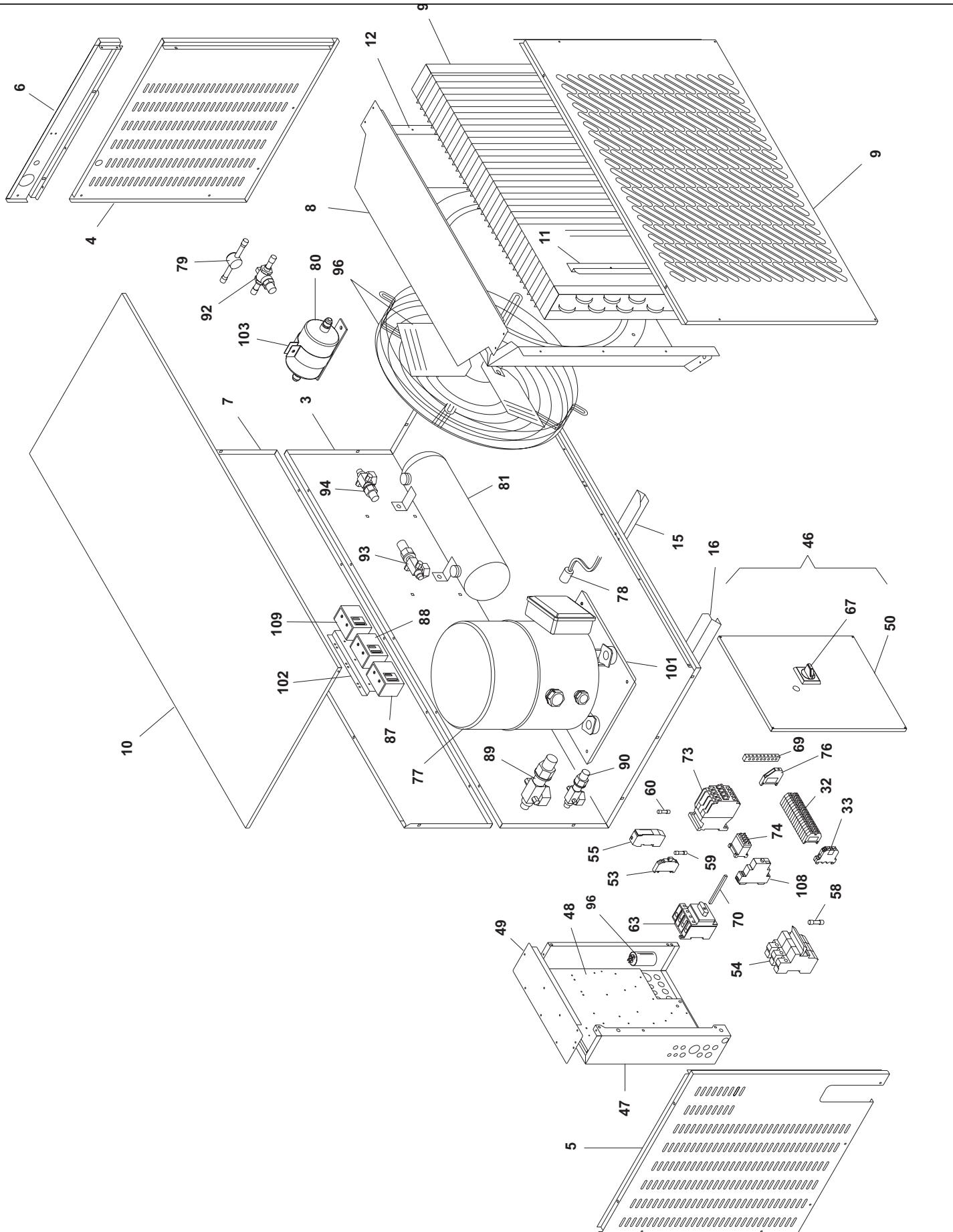
LEGEND - LEGENDE - LEGENDE - LEGENDA :					GCU401NO170F	GCU401TO170F	HCU401NO170F
Tav.n° 14 CU401							
Pos.	Description - Beschreibung - Description - Descrizione				Code-Code Code-Codice		
	English	Deutsch	Francais	Italiano			
3	UNIT BASE FRAME	RAHMENGESTELL	BASE	BASAMENTO	2235441/B	1	1
4	RIGHT-HAND SIDE	RECHTE SEITENWAND	FLANC DROIT	FIANCO DESTRO	2235442/A	1	1
5	LEFT-HAND SIDE	LINKE SEITENWAND	FLANC GAUCHE	FIANCO SINISTRO	2235443/A	1	1
6	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2235446/A	1	1
9	FRONTAL PANEL	KOPFBAND	PANNEAU FRONTAL	FRONTALE	2235445/A	1	1
10	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2235444/A	1	1
11	DEFLECTOR SWITCH	ABLEITER	DETOURNEUR	DEVIATORE	2235410/A	1	1
12	SHROUD	LUFTLEITER	CONVEYEUR D'AIR	CONVOGLIATORE	2235405	1	1
15	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2235431	1	1
16	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2235432	1	1
32	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS007	15	15
33	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS004	1	1
46	ELECTRIC PANEL	SCHALTTFABEL	PANNEAU ELECTRIQUE	QUADRO ELETTRICO	2QEC330	1	
					2QEC3475	1	
					2QEC3232		1
47	ELEC.PAN.BOX	DOSE	BOITE	SCATOLA Q.E.	2235448/A	1	1
48	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2235411	1	1
49	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2235449/A	1	1
50	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2235465	1	1
53	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF014	1	1
54	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF041	1	1
55	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF050	1	1
58	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB137	3	
					3FSB138		3
					3FSB168		3
59	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB160	1	1
60	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB164	1	1
63	SELECTOR	WÄHLER	SECTIONNEUR	SEZIONATORE	3ING026	1	1
					3ING028		1
67	HANDLE	HANDGRIFF	POIGNÉE	MANIGLIA	3MNG009	1	1
69	TERMINAL BOARD	KLEMMKASTEN	BOITE A'BORNES	MORSETTERIA	3MRS028	1	1
70	EXTENSION	VERLÄNGERUNG	RALLONGE	PROLUNGA	3PRL009	1	1
73	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR192	1	
					3TLR191		1
					3TLR170		1
74	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR152	1	1
76	TERMNAL	KLEMME	BORNE	TERMINALE	3TRM005	1	1
77	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSORE	3CMP483	1	
					3CMP382		1
					3CMP854		1
78	HEATER	HEIZELEMENT	RESISTANCE	RESISTENZA	3RST014	1	1
79	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	INDICATORE	3INJ006	1	1
80	FILTER	FILTER	FILTRE	FILTRO	3FLT043	1	1
81	RECEIVER	SAMMLER	RESERVOIR	SERBATOIO	3ACL051	1	1
87	SWITCH L/P	PRESSOSTAT MIN	PRESSOS. BAS. PRES.	PRESSOSTATO MIN	3PRS011	1	1
88	H/P SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO MAX	3PRS009	1	1
89	VALVE	VENTIL	VANNE	RUBINETTO	3RBN038	1	
					3RBN042		1
90	VALVE	VENTIL	VANNE	RUBINETTO	3RBN071	1	1
					3RBN059		1
92	VALVE	VENTIL	VANNE	RUBINETTO	3RBN113	1	1
94	VALVE	VENTIL	VANNE	RUBINETTO	3RBN102	1	1
95	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE	3CND124	1	1
96	MOTOR DRIVEN FAN	ELEKTROVENTILATOR	ELECTROVENTILATEUR	MOTOVENTILATORE	3MOT028	1	1
98	ELEC. CONDENSER	ELEC. KONDENSATOR	CONDENSEUR ELEC.	CONDENSATORE ELET.	3COE011	1	1
99	FAN GUARD	GITTER	GRILLE	GRIGLIA	3GRI042	1	1
101	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2235406	1	1
102	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2235454	1	1
103	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2730027	1	1
107	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2235408/A	1	1
108	TIMER	ZEITSCHALTER	TEMPORIZATEUR	TEMPORIZZATORE	3TMP039	1	1
109	PRESSURE SWITCH	DRUCKSCHALTER	PRESSOSTAT	PRESSOSTATO	3PRS006	1	1



Tav n°	Modello :
15	CU451
Data :	Disegnatore :
18/05/99	Arfini

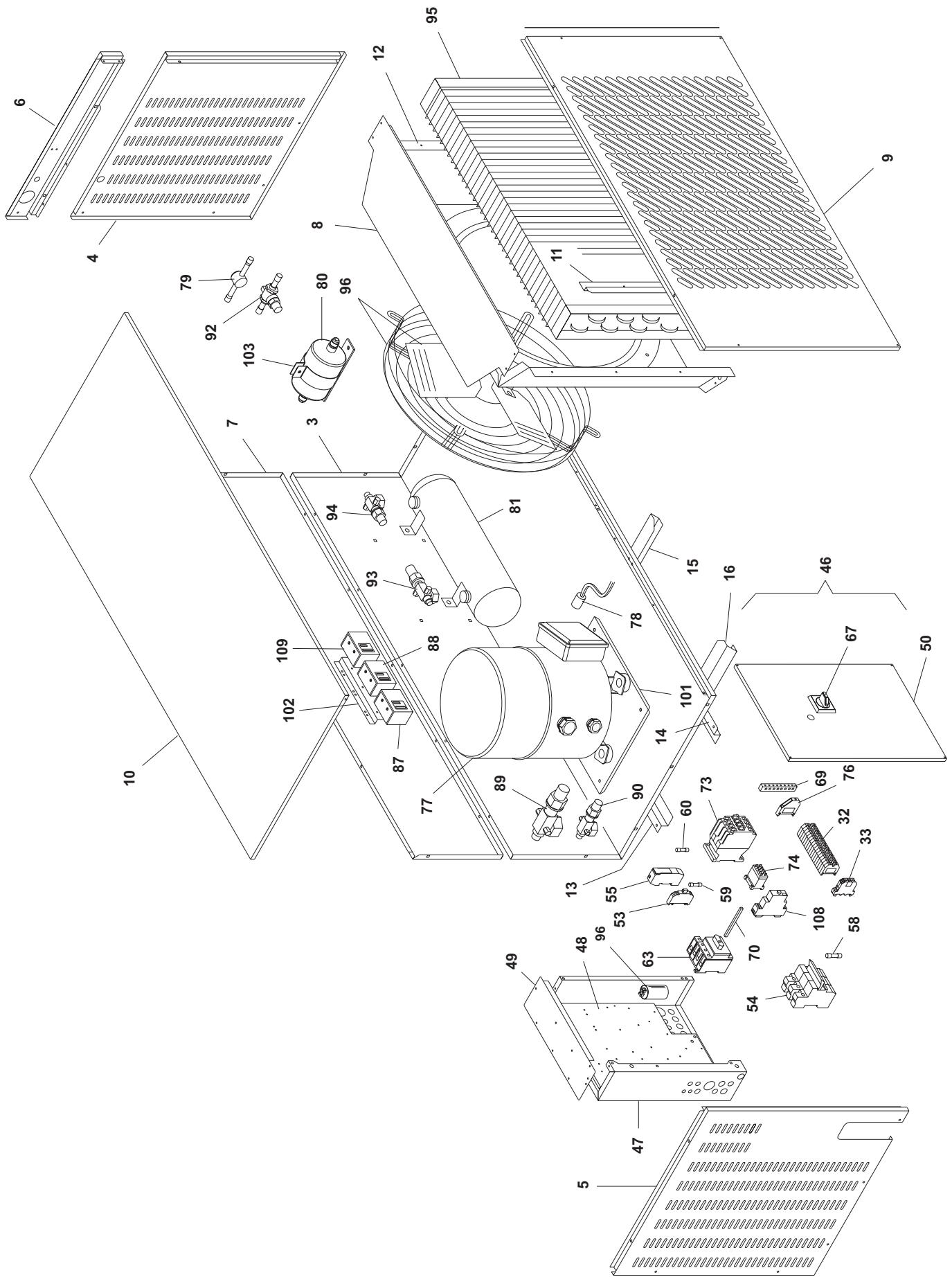
LEGEND - LEGENDE - LEGENDE - LEGENDA :
Tav.n° 15
CU451

Pos.	Description - Beschreibung - Description - Descrizione				Code-Code Code-Codice	GCU451NO170F	HCU451TO170F
	English	Deutsch	Francais	Italiano			
3	UNIT BASE FRAME	RAHMENGESTELL	BASE	BASAMENTO	2335441/B	1	1
4	RIGHT-HAND SIDE	RECHTE SEITENWAND	FLANC DROIT	FIANCO DESTRO	2335442/A	1	1
5	LEFT-HAND SIDE	LINKE SEITENWAND	FLANC GAUCHE	FIANCO SINISTRO	2335443/A	1	1
6	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335452/A	1	1
7	REAR PANEL	RUECKBLENDE	PANNEAU POSTERIEUR	SCHIENA	2335446/B	1	1
8	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335435/A	1	1
9	FRONTAL PANEL	KOPFBAND	PANNEAU FRONTAL	FRONTALE	2335451/A	1	1
10	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335444/A	1	1
11	DEFLECTOR SWITCH	ABLEITER	DETOURNEUR	DEVIATORE	2335424/A	1	1
12	SHROUD	LUFTLEITER	CONVEYEUR D'AIR	CONVOGLIATORE	2335434/B	1	1
15	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2335429	2	2
16	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2335430	1	1
32	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS007	15	15
33	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS004	1	1
46	ELECTRIC PANEL	SCHALTAFEL	PANNEAU ELECTRIQUE	QUADRO ELETTRICO	2QEC3331	1	
					2QEC3476		1
47	ELEC.PAN.BOX	DOSE	BOITE	SCATOLA Q.E.	2335448/A	1	1
48	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2335415	1	1
49	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335449	1	1
50	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335461	1	1
53	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF014	1	1
54	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF041	1	1
55	FUSE HOLDER	SICHERUNGSSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF050	1	1
58	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB141	3	3
59	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB160	1	1
60	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB164	1	1
63	SELECTOR	WÄHLER	SECTIONNEUR	SEZIONATORE	3ING028	1	1
67	HANDLE	HANDGRIFF	POIGNÉE	MANIGLIA	3MNG009	1	1
69	TERMINAL BOARD	KLEMMKASTEN	BOITE A'BORNES	MORSETTIERA	3MRS028	1	1
70	EXTENSION	VERLÄNGERUNG	RALLONGE	PROLUNGA	3PRL009	1	1
73	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR170	1	
					3TLR173		1
74	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR152	1	1
76	TERMNAL	KLEMME	BORNE	TERMINALE	3TRM005	1	1
77	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSORE	3CMP461	1	
					3CMP406		1
78	HEATER	HEIZELEMENT	RESISTANCE	RESISTENZA	3RST014	1	1
79	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	INDICATORE	3INU007	1	1
80	FILTER	FILTER	FILTRE	FILTRO	3FLT047	1	1
81	RECEIVER	SAMMLER	RESERVOIR	SERBATOIO	3ACL095	1	1
87	SWITCH L/P	PRESSOSTAT MIN	PRESSOS. BAS. PRES.	PRESSOSTATO MIN	3PRS011	1	1
88	H/P SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO MAX	3PRS009	1	1
89	VALVE	VENTIL	VANNE	RUBINETTO	3RBN042	1	
					3RBN110		1
90	VALVE	VENTIL	VANNE	RUBINETTO	3RBN059	1	1
					3RBN038		1
92	VALVE	VENTIL	VANNE	RUBINETTO	3RBN114	1	1
93	VALVE	VENTIL	VANNE	RUBINETTO	3RBN065	1	
					3RBN073		1
94	VALVE	VENTIL	VANNE	RUBINETTO	3RBN071	1	1
95	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE	3CND131	1	1
96	MOTOR DRIVEN FAN	ELEKTROVENTILATOR	ELECTROVENTILATEUR	MOTOVENTILATORE	3MTV011	1	1
101	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2340427	1	1
102	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2335453	1	1
103	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335411	1	1
108	TIMER	ZEITSCHALTER	TEMPORISATEUR	TEMPORIZZATORE	3TMP039	1	1
109	PRESSURE SWITCH	DRUCKSCHALTER	PRESSOSTAT	PRESSOSTATO	3PRS006	1	1



Tav n°	Modello :
16	CU501
Data :	Disegnatore :
18/05/99	Arfini

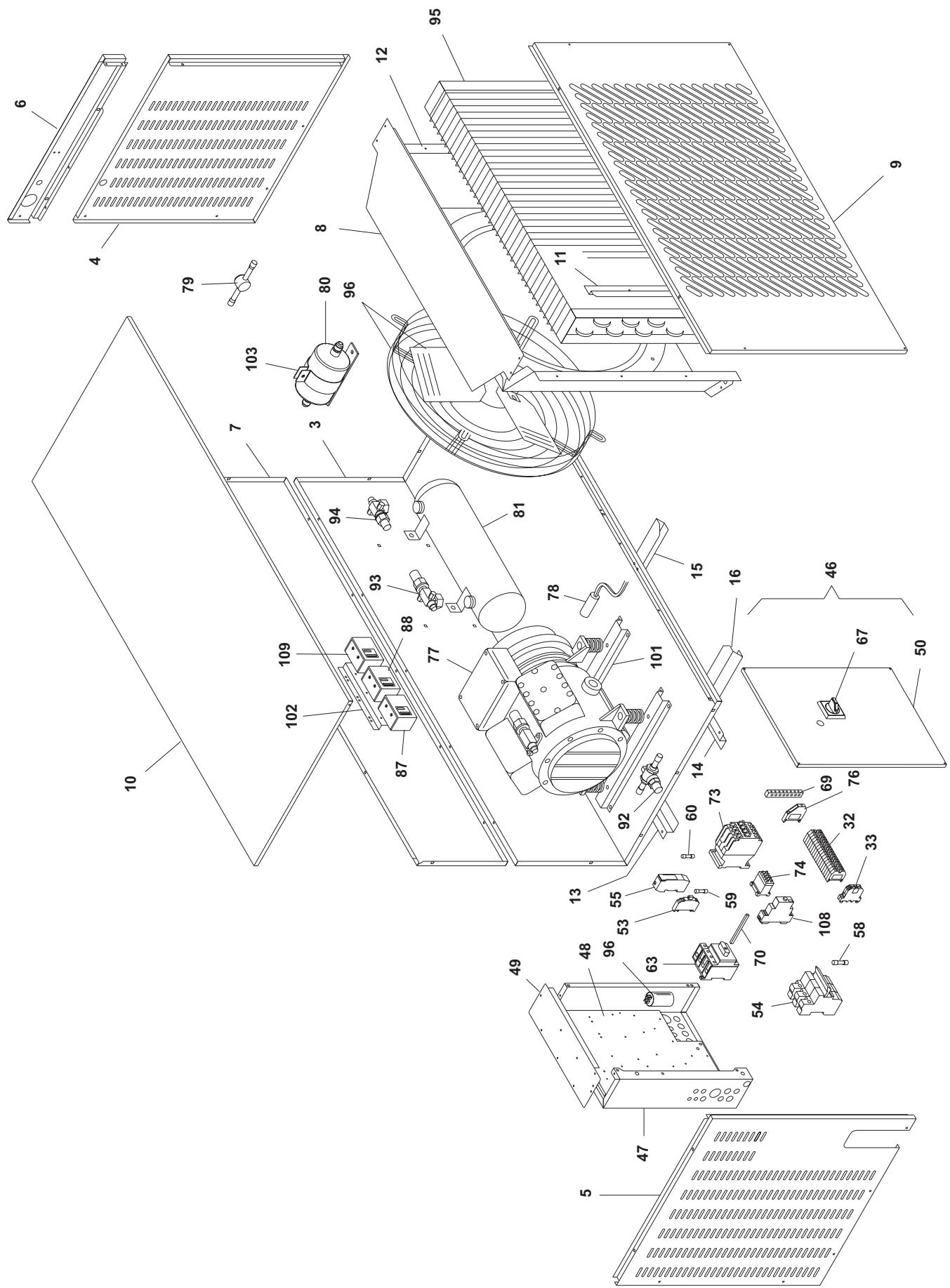
LEGEND - LEGENDE - LEGENDE - LEGENDA :					GCU501TO17F	HCU501NO17F	HCU501TO17F
Tav.n° 16		CU501					
Pos.	Description - Beschreibung - Description - Descrizione				Code-Code Code-Codice		
	English	Deutsch	Francais	Italiano			
3	UNIT BASE FRAME	RAHMENGESTELL	BASE	BASAMENTO	2335441/B	1	1
4	RIGHT-HAND SIDE	RECHTE SEITENWAND	FLANC DROIT	FIANCO DESTRO	2335442/A	1	1
5	LEFT-HAND SIDE	LINKE SEITENWAND	FLANC GAUCHE	FIANCO SINISTRO	2335443/A	1	1
6	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335452/A	1	1
7	REAR PANEL	RUECKBLEINDE	PANNEAU POSTERIEUR	SCHIENA	2335446/B	1	1
8	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335409/A	1	1
9	FRONTAL PANEL	KOPFBAND	PANNEAU FRONTAL	FRONTALE	2335445/A	1	1
10	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335444/A	1	1
11	DEFLECTOR SWITCH	ABLEITER	DETROUVEUR	DEVIATORE	2335424/A	1	1
12	SHROUD	LUFTLEITER	CONVEYEUR D'AIR	CONVOGLIATORE	2335405/B	1	1
15	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2335429	2	2
16	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2335430	1	1
32	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS007	15	15
33	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS004	1	1
46	ELECTRIC PANEL	SCHALTAFEL	PANNEAU ELECTRIQUE	QUADRO ELETTRICO	2QEC3329	1	
					2QEC3477	1	
					2QEC3478		1
47	ELEC.PAN.BOX	DOSE	BOITE	SCATOLA Q.E.	2335448/A	1	1
48	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2335415	1	1
49	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335449	1	1
50	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335461	1	1
53	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF014	1	1
54	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF041	1	3
					3BSF042		1
55	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF050	1	1
58	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB140	3	
					3FSB141	1	
					3FSB144		3
59	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB160	1	1
60	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB164	1	1
63	SELECTOR	WÄHLER	SECTIONNEUR	SEZIONATORE	3ING028	1	1
					3ING029		1
67	HANDLE	HANDGRIFF	POIGNÉE	MANIGLIA	3MNG009	1	1
69	TERMINAL BOARD	KLEMMKASTEN	BOITE A'BORNES	MORSETTIERA	3MRS028	1	1
70	EXTENSION	VERLÄNGERUNG	RALLONGE	PROLUNGA	3PRL009	1	1
73	CONTACTOR	FERNSCHALTER	TELERUPTEUR	TELERUTTORE	3TLR171	1	1
					3TLR173	1	1
74	CONTACTOR	FERNSCHALTER	TELERUPTEUR	TELERUTTORE	3TLR152	1	1
76	TERMNAL	KLEMME	BORNE	TERMINALE	3TRM005	1	1
77	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSEORE	3CMP385	1	
					3CMP855	1	
					3CMP986		1
78	HEATER	HEIZELEMENT	RESISTANCE	RESISTENZA	3RST014	1	1
79	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	INDICATORE	3INU007	1	1
80	FILTER	FILTER	FILTRE	FILTRO	3FLT047	1	1
81	RECEIVER	SAMMLER	RESERVOIR	SERBATOIO	3ACL095	1	1
87	SWITCH L/P	PRESSOSTAT MIN	PRESSOS. BAS. PRES.	PRESSOSTATO MIN	3PRS011	1	1
88	H/P SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO MAX	3PRS009	1	1
89	VALVE	VENTIL	VANNE	RUBINETTO	3RBN042	1	
					3RBN110	1	1
90	VALVE	VENTIL	VANNE	RUBINETTO	3RBN059	1	
					3RBN038	1	1
92	VALVE	VENTIL	VANNE	RUBINETTO	3RBN114	1	1
93	VALVE	VENTIL	VANNE	RUBINETTO	3RBN065	1	
					3RBN073	1	1
94	VALVE	VENTIL	VANNE	RUBINETTO	3RBN071	1	1
95	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE	3CND125	1	1
96	MOTOR DRIVEN FAN	ELEKTROVENTILATOR	ELECTROVENTILATEUR	MOTOVENTILATORE	3MTV014	1	1
101	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2340427	1	1
102	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2335453	1	1
103	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335411	1	1
108	TIMER	ZEITSCHALTER	TEMPORIZATEUR	TEMPORIZZATORE	3TMP039	1	1
109	PRESSURE SWITCH	DRUCKSCHALTER	PRESSOSTAT	PRESSOSTATO	3PRS006	1	1



Tav n°	Modello :
17	GCU631
Data :	Disegnatore :
18/05/99	Arfini

LEGEND - LEGENDE - LEGENDE - LEGENDA :
Tav.n° 17
GCU631

Pos.	Description - Beschreibung - Description - Descrizione				Code-Code Code-Codice	GCU631NO170F	GCU631TO170F
	English	Deutsch	Francais	Italiano			
3	UNIT BASE FRAME	RAHMENGESTELL	BASE	BASAMENTO	2340444/B	1	1
4	RIGHT-HAND SIDE	RECHTE SEITENWAND	FLANC DROIT	FIANCO DESTRO	2340448/A	1	1
5	LEFT-HAND SIDE	LINKE SEITENWAND	FLANC GAUCHE	FIANCO SINISTRO	2340447/A	1	1
6	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340449/A	1	1
7	REAR PANEL	RUECKBLENDE	PANNEAU POSTERIEUR	SCHIENA	2340445/B	1	1
8	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340407/A	1	1
9	FRONTAL PANEL	KOPFBAND	PANNEAU FRONTAL	FRONTALE	2340432/A	1	1
10	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340446/A	1	1
11	DEFLECTOR SWITCH	ABLEITER	DETOURNEUR	DEVIATORE	2340410/A	1	1
12	SHROUD	LUFTLEITER	CONVEYEUR D'AIR	CONVOGLIATORE	2340412	1	1
13	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340450	1	1
14	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340451	1	1
15	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2340415	2	2
16	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2340416	1	1
32	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS007	15	15
33	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS004	1	1
46	ELECTRIC PANEL	SCHALTTAFEL	PANNEAU ELECTRIQUE	QUADRO ELETTRICO	2QEC3328	1	
					2QEC3328A		1
47	ELEC.PAN.BOX	DOSE	BOITE	SCATOLA Q.E.	2335448/A	1	1
48	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2335415	1	1
49	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335449	1	1
50	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340457	1	1
53	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF014	1	1
54	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF042	1	1
55	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF050	1	1
58	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB143	3	3
59	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB160	1	1
60	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB165	1	1
63	SELECTOR	WÄHLER	SECTIONNEUR	SEZIONATORE	3ING028	1	1
67	HANDLE	HANDGRIFF	POIGNÉE	MANIGLIA	3MNG009	1	1
69	TERMINAL BOARD	KLEMMKASTEN	BOITE A'BORNES	MORSETTIERA	3MRS028	1	1
70	EXTENSION	VERLÄNGERUNG	RALLONGE	PROLUNGA	3PRL009	1	1
73	CONTACTOR	FERNSCHALTER	TELERUPTEUR	TELERUTTORE	3TLR173	1	1
74	CONTACTOR	FERNSCHALTER	TELERUPTEUR	TELERUTTORE	3TLR152	1	1
76	TERMNAL	KLEMME	BORNE	TERMINALE	3TRM005	1	1
77	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSORE	3CMP407	1	
					3CMP406		1
78	HEATER	HEIZELEMENT	RESISTANCE	RESISTENZA	3RST014	1	1
79	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	INDICATORE	3INU007	1	1
80	FILTER	FILTER	FILTRE	FILTRO	3FLT047	1	1
81	RECEIVER	SAMMLER	RESERVOIR	SERBATOIO	3ACLO95	1	1
87	SWITCH L/P	PRESSOSTAT MIN	PRESSOS. BAS. PRES.	PRESSOSTATO MIN	3PRS011	1	1
88	H/P SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO MAX	3PRS009	1	1
89	VALVE	VENTIL	VANNE	RUBINETTO	3RBN042	1	1
90	VALVE	VENTIL	VANNE	RUBINETTO	3RBN034	1	1
92	VALVE	VENTIL	VANNE	RUBINETTO	3RBN114	1	1
93	VALVE	VENTIL	VANNE	RUBINETTO	3RBN065	1	1
94	VALVE	VENTIL	VANNE	RUBINETTO	3RBN071	1	1
95	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE	3CND126	1	1
96	MOTOR DRIVEN FAN	ELEKTROVENTILATOR	ELECTROVENTILATEUR	MOTOVENTILATORE	3MTV015	1	1
101	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2340427	1	1
102	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2340433	1	1
103	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335411	1	1
108	TIMER	ZEITSCHALTER	TEMPORIZATEUR	TEMPORIZZATORE	3TMP039	1	1
109	PRESSURE SWITCH	DRUCKSCHALTER	PRESSOSTAT	PRESSOSTATO	3PRS006	1	1



Tav n°	18	Modello :
Data :	18/05/99	Disegnatore : Arfini

LEGEND - LEGENDE - LEGENDE - LEGENDA :
Tav.n° 18
HCU631

Pos.	Description - Beschreibung - Description - Descrizione				Code-Code Code-Codice	HCU631NO170F	HCU631TO170F
	English	Deutsch	Francais	Italiano			
3	UNIT BASE FRAME	RAHMENGESTELL	BASE	BASAMENTO	2340444/B	1	1
4	RIGHT-HAND SIDE	RECHTE SEITENWAND	FLANC DROIT	FIANCO DESTRO	2340448/A	1	1
5	LEFT-HAND SIDE	LINKE SEITENWAND	FLANC GAUCHE	FIANCO SINISTRO	2340447/A	1	1
6	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340449/A	1	1
7	REAR PANEL	RUECKBLENDE	PANNEAU POSTERIEUR	SCHIENA	2340445/B	1	1
8	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340407/A	1	1
9	FRONTAL PANEL	KOPFBAND	PANNEAU FRONTAL	FRONTALE	2340432/A	1	1
10	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340446/A	1	1
11	DEFLECTOR SWITCH	ABLEITER	DETOURNEUR	DEVIATORE	2340410/A	1	1
12	SHROUD	LUFTLEITER	CONVEYEUR D'AIR	CONVOGLIATORE	2340412	1	1
13	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340450	1	1
14	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2340451	1	1
15	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2340415	2	2
16	SUPPORT	HALTERUNG	SUPPORT	PIEDE	2340416	1	1
32	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS007	19	19
33	TERMINAL	KLEMME	BORNE	MORSETTO	3MRS004	1	1
46	ELECTRIC PANEL	SCHALTTAFEL	PANNEAU ELECTRIQUE	QUADRO ELETTRICO	2QEC3479	1	
					2QEC3480		1
47	ELEC.PAN.BOX	DOSE	BOITE	SCATOLA Q.E.	2335448/A	1	1
48	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2335415	1	1
49	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2335449	1	1
50	COVER	ABDECKUNG	COUVERCLE	COPERCHIO	2340457	1	1
53	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF014	1	1
54	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF042	1	1
55	FUSE HOLDER	SICHERUNGSOCKEL	SUPPORT FUSIBLE	BASE FUSIBILE	3BSF050	1	1
58	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB143	3	
					3FSB145		3
59	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB160	1	1
60	FUSE	SICHERUNG	FUSIBLE	FUSIBILE	3FSB165	1	1
63	SELECTOR	WÄHLER	SECTIONNEUR	SEZIONATORE	3ING029	1	1
67	HANDLE	HANDGRIFF	POIGNÉE	MANIGLIA	3MNG009	1	1
69	TERMINAL BOARD	KLEMMKASTEN	BOITE A'BORNES	MORSETTIERA	3MRS028	1	1
70	EXTENSION	VERLÄNGERUNG	RALLONGE	PROLUNGA	3PRL009	1	1
73	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR173	1	
					3TLR175		1
74	CONTACTOR	FERN SCHALTER	TELERUPTEUR	TELERUTTORE	3TLR152	1	1
76	TERMNAL	KLEMME	BORNE	TERMINALE	3TRM005	1	1
77	COMPRESSOR	KOMPRESSOR	COMPRESSEUR	COMPRESSORE	3CMP628	1	
					3CMP643		1
78	HEATER	HEIZELEMENT	RESISTANCE	RESISTENZA	3RST029	1	1
79	SIGHT GLASS	SCHAUGLAS	VOYANT LIQUIDE	INDICATORE	3INU007	1	1
80	FILTER	FILTER	FILTRE	FILTRO	3FLT047	1	1
81	RECEIVER	SAMMLER	RESERVOIR	SERBATOIO	3ACL095	1	1
87	SWITCH L/P	PRESSOSTAT MIN	PRESSOS. BAS. PRES.	PRESSOSTATO MIN	3PRS011	1	1
88	H/P SWITCH	HOCHDRUCKSCHALTER	PRESSOSTAT H.P.	PRESSOSTATO MAX	3PRS009	1	1
92	VALVE	VENTIL	VANNE	RUBINETTO	3RBN114	1	1
93	VALVE	VENTIL	VANNE	RUBINETTO	3RBN073	1	1
94	VALVE	VENTIL	VANNE	RUBINETTO	3RBN071	1	1
95	CONDENSER	KONDENSATOR	CONDENSEUR	CONDENSATORE	3CND126	1	1
96	MOTOR DRIVEN FAN	ELEKTROVENTILATOR	ELECTROVENTILATEUR	MOTOVENTILATORE	3MTV015	1	1
101	SUPPORT PLATE	HALTERUNGSPLATTE	PLAQUE SUPPORT	PIASTRA SUPP.	2340428	2	2
102	CLAMP	BUEGEL	PIECE D'APUI	STAFFA	2340433	1	1
103	SUPPORT	HALTERUNG	SUPPORT	SUPPORTO	2335411	1	1
108	TIMER	ZEITSCHALTER	TEMPORIZATEUR	TEMPORIZZATORE	3TMP039	1	1
109	PRESSURE SWITCH	DRUCKSCHALTER	PRESSOSTAT	PRESSOSTATO	3PRS006	1	1

WIRING DIAGRAM - SCHALTPLAN - SCHEMA ELETTRIQUE - LEGENDA SCHEMA ELETTRICO

BA	SONDA TEMPERATURA AMBIENTE ROOM SENSOR SONDE CHAMBRE FROIDE RAUMSONDE SONDA CAMARA SONDA TEMPERATURA AMBIENTE	F5TK TERMOCONTATTO VENTOLA COND. M5 CONDENSER FAN SAFETY OVERLOAD CONTACT(M5) THERMOCONTACT PROTECTION VENTILATEUR CONDENSEUR M5 THERMOKONTAKT ZUM KOND.-VENTILATOR-SCHUTZ (M5) TERMOCONTACTO PROTECCION VENTILADOR CONDENSADOR M5 TERMOCONTATO DO VENTILADOR COND. M5	INTERRUPTOR VENTILADOR DO CONDENSADOR M5
BVR	VARIATORE DI VELOCITA' SPEED REGULATOR VARIANT VITESSE GESCHWINDIG- KEITSREGLER VARIADOR DE VELOCIDAD VARIADOR DE VELOCIDADE	F6 FUSIBILE VENTOLA CONDENSATORE CONDENSER FAN FUSE FUSIBLE VENTILATEUR CONDENSEUR KOND.-VENTILATORSICHERUNG FUSIBLE VENTILADOR CONDENSADOR FUSIVEL DO VENTILADOR DO CONDENSADOR	K6 TELERUTTORE VENTOLA CONDENSATORE M6 CONDENSER FAN CONTACTOR M 6 TELERUPTEUR VENTILATEUR CONDENSEUR M 6 KOND.-VENTILATORFERNSCHALTER (M 6) CONTACTOR VENTILADOR CONDENSADOR M 6 INTERRUPTOR VENTILADOR CONDENSADOR M6
BVRS	SONDA VARIATORE VELOCITA' SPEED REGULATOR SENSOR SONDE VARIATEUR VITESSE GESCHWINDIGKEITSREGLER SONDE SONDA VARIADOR VELOCIDAD SONDA VARIADOR DE VELOCIDADE	F6TK TERMOCONTATTO VENTOLA COND. M6 CONDENSER FAN SAFETY OVERLOAD CONTACT(M6) THERMOCONTACT PROTECTION VENTILATEUR CONDENSEUR M6 THERMOKONTAKT ZUM KOND.-VENTILATORSCHUTZ (M6) TERMOCONTACTO PROTECCION VENTILADOR CONDENSADOR M6 TERMOCONTATO DO VENTILADOR COND. M6	KP1MX RELE' AUSILIARIO PRESSOSTATO VENTOLA COND. PRESSURE SWITCH AUX.RELAY(COND.FAN) RELAIS AUX. PRESSOSTAT (VENT.COND.) PRESSOSTATHILFRELAYS(KOND.-VENTIL.) RELE' AUX.PRESOSTATO(VENTIL.COND.) RELÉ AUXILIAR PRESSOSTATO VENTILADOR COND.
CPM	MODULO PROTEZIONE COMPRESSORE COMPRESSOR PROTECTION CARD FICHE PROTECTION COMPRESEUR KOMPRESSORSCHUTZKARTE MÓDULO PROTECCIÓN COMPRESSOR MÓDULO DE PROTEÇÃO DO COMPRESSOR	FM MONITOR VOLTAGE REGULATOR MONITOR MONITOR MONITOR MONITOR	KP2MX RELE' AUSILIARIO PRESSOSTATO VENTOLA COND. PRESSURE SWITCH AUX.RELAY (COND. FAN) RELAIS AUX. PRESSOSTAT (VENT. COND.) PRESSOSTATHILFRELAYS (KOND.-VENTIL.) RELE' AUX. PRESOSTATO (VENTIL. COND.) RELÉ AUXILIAR PRESSOSTATO VENTILADOR COND.
E1	RESISTENZA CARTER COMPRESSORE M1 COMPRESSOR CRANKCASE HEATER RESISTANCE CARTER COMPRESEUR KOMP.-ÖLSUMPFHEIZUNG RESISTENCIA DEL CARTER DEL COMPRESOR RESISTÊNCIA DO CARTER COMPRESSOR M1	FMF MAGNETOTERMICO THERMOMAGNETIC SWITCH INTERRUPTEUR MAGNETOTHERMIQUE THERMOMAGNET- SCHALTER INTERRUPTOR MAGNETOTERMICO DISJUNTOR	M1 MOTORE COMPRESSORE n°1 COMPRESSOR MOTOR Nr.1 MOTEUR COMPRESEUR Nr.1 KOMPRESSORMOTOR Nr.1 MOTOR COMPRESOR N°1 MOTOR COMPRESSOR nº1
F1	FUSIBILE COMPRESSORE M1 COMPRESSOR Nr.1 FUSE FUSIBLE COMPRESEUR Nr.1 KOMPRESSORSICHERUNG (Nr.1) FUSIBLE COMPRESOR Nº1 FUSÍVEIS DO COMPRESSOR M1	FTA TERMOSTATO AMBIENTE ROOM THERMOSTAT THERMOSTAT CHAMBRE RAUMTHERMOSTAT TERMOSTATO AMBIENTE TERMOSTATO AMBIENTE	M5 MOTORE VENTOLA CONDENSATORE n°1 CONDENSER Nr.1 FAN MOTOR MOTEUR VENTILATEUR CONDENSEUR Nr.1 KOND.-VENTILATORMOTOR Nr.1 MOTOR VENTILADOR CONDENSADOR N°1 MOTOR VENTILADOR CONDENSADOR n°1
F13	FUSIBILE MONITOR VOLTAGE REGULATOR FUSE FUSIBLE MONITOR MONITORSICHERUNG FUSIBLE MONITOR FUSÍVEIS DO MONITOR	K1 TELERUTTORE COMPRESSORE M1 (Part-winding) COMPRESSOR M 1 CONTACTOR (Part winding) TELERUPTEUR COMPRESSEUR M 1 (Part-winding) KOMPRESSORFERNSCHALTER M 1 (Teilwicklung) CONTACTOR COMPRESOR M 1 (Part-winding) INTERRUPTOR COMPRESSOR M1 (Part-winding)	M6 MOTORE VENTOLA CONDENSATORE n°2 CONDENSER Nr.2 FAN MOTOR MOTEUR VENTILATEUR CONDENSEUR Nr.2 KOND.-VENTILATORMOTOR Nr.2 MOTOR VENTILADOR CONDENSADOR n°2 MOTOR VENTILADOR CONDENSADOR n°2
F1T	RELE' TERMICO COMPRESSORE M1 COMPRESSOR OVERLOAD RELAY M1 RELAIS THERMIQUE COMPRESEUR M1 KOMPR.-THERMORELAIS M1 RELE' TERMICO COMPRESOR M1 RELÉ TÉRMICO DO COMPRESSOR M1	K39 TIMER LIMITATORE MANOVRE COMPR.CONTROL TIMER TIMER CONTROLE COMPRESSEUR KOMPR.-KONTROLLZEITREGLER TEMPORIZADOR CONTROL COMPRESOR TIMER LIMITADOR DE OPERAÇÃO	P1MX PRESSOSTATO INSERZIONE VENTOLA COND. COND. FAN STARTING PRESSURE SWITCH PRESSOSTAT MISE EN MARCHE VENTILATEUR COND. KOND.-VENTILATORANLAUPPRESSOSTAT PRESOSTATO INSERCIÓN VENTILADOR COND. PRESSOSTATO ACIONADOR VENTILADOR COND.
F1TR	TERMISTORE COMPRESSORE M1 COMPRESSOR M1 THERMISTOR THERMISTEUR COMPRESEUR M1 KOMPRESSORTHERMISTOR (M1) TERMISTOR COMPRESOR M1 TERMISTOR COMPRESSOR M1	K5 TELERUTTORE VENTOLA CONDENSATORE M5 CONDENSER FAN CONTACTOR M 5 TELERUPTEUR VENTILATEUR CONDENSEUR M 5 KOND.-VENTILATORFERNSCHALTER (M 5) CONTACTOR VENTILADOR CONDENSADOR M 5	
F20	FUSIBILE AUSILIARIO AUXILIARY FUSE FUSIBLE AUXILIAIRE HILFSICHERUNG FUSIBLE AUXILIAR FUSÍVEIS AUXILIARES		
F5	FUSIBILE VARIATORE VELOCITA' SPEED REGULATOR FUSE FUSIBLE VARIATEUR VITESSE GESCHW.-REGLERSICHERUNG FUSIBLE VARIADOR VELOCIDAD FUSÍVEL DO VARIADOR DE VELOCIDADE		

P2MX

PRESSOSTATO INSERZIONE VENTOLA
COND.
COND.FAN STARTING PRESSURE
SWITCH
PRESSOSTAT MISE EN MARCHE VENTI-
LATEUR COND.
KOND.-VENTILATORANLAUPPRESSO-
STAT
PRESOSTATO INSERCION VENTILA-
DOR COND.
PRESSOSTATO ACIONADOR VENTILA-
DOR COND.

PMI

PRESSOSTATO BASSA PRESSIONE
L/P SWITCH
PRESSOSTAT BASSE PRESSION
NIEDERDRUCKPRESSOSTAT
PRESOSTATO BAJA PRESION
PRESSOSTATO BAIXA PRESSÃO

PMX

PRESSOSTATO ALTA PRESSIONE
H/P SWITCH
PRESSOSTAT HAUTE PRESSION
HOCHDRUCKPRESSOSTAT
PRESOSTATO ALTA PRESION
PRESSOSTATO ALTA PRESSÃO

PO

PRESSOSTATO OLIO
OIL PRESSURE SWITCH
PRESSOSTAT HUILE
ÖLPRESSOSTAT
PRESOSTATO ACEITE
PRESSOSTATO óLEO

Q1

INTERRUTTORE GENERALE
MAIN SWITCH
INTERRUPTEUR GENERAL
HAUPTSCHALTER
INTERRUPTOR GENERAL
INTERRUPTOR GENERAL

S3

INTERRUTTORE PRERISCALDO/ ARRESTO/ MAR-
CIA COMPRESSORE
COMPR. PRE-HEATING/STOP/ RUN SWITCH
INTERRUPTEUR PRECHAUFFAGE/ ARRET/
MARCHE COMPR.
KOMP.-VORWÄRMEN. / 'AUS'/'EIN' SCHAL-
TER
INTERRUPTOR PRECALENTAMIENTO/ PARADA/
MARCHA COMPR.
INTERRUPTOR PREAMPLIFICACION/ ARRESTO/
MARCHA COMPRESSOR

X

MORSETTIERA-CONNETTORE
TERMINAL BOARD-CONNECTOR
PLAQUE DE JONCTION-CONNECTEUR
KLEMMKASTEN-VERBINDER
REGLETA-CONECTOR
TERMINAL-CONECTOR

NOTE (NOTES) : _____

NOTE (NOTES) : _____

