

INSTRUCTION MANUAL FOR COOLING UNIT

YOU ARE ADVISED TO READ THIS MANUAL, PAYING PARTICULAR ATTENTION TO THE SAFETY REGULATIONS, BEFORE INSTALLING, USING OR CARRYING OUT ANY MAINTENANCE ON THE UNIT. IF YOU DO NOT FULLY UNDERSTAND THESE INSTRUCTIONS, CONTACT YOUR SUPPLIER.

1 SAFETY REGULATIONS

1.1 INTRODUCTION

Before use, all persons authorized to operate, repair or inspect the unit must read the following safety and operating instructions.

Remember: YOUR SAFETY DEPENDS ON YOU !





The operator is responsible for his own safety, and for that of other persons in the working area. He must therefore be aware of, and respect, all safety regulations. NOTHING CAN REPLACE COMMON SENSE !

2 GENERAL DESCRIPTION

2.1 SPECIFICATIONS

This apparatus is a self-contained cooling unit, designed to cool the torches used in TIG, MIG, MAG welding and plasma cutting equipments.

2.2 EXPLANATION OF TECHNICAL DATA

 <p>Via A.Costa, 24 - 40057-Cadriano Bologna-Italy</p>		
GRV 12 Art: 1683		
N°:		
		
U ₁ = 1x230V-50/60Hz		
I _{1max} = 1,2 A		
P (1l/min) = 1,5 kW		
P _{max} = 0,35 Mpa		

N° Serial number which must be stated for any demands relating to the machine.

U₁ Rated supply voltage.

1xV Single-phase power supply.

50/60 Hz Frequency.

I₁ Maximum input current .

IP23 Grade of protection of the body

2.3 DESCRIPTION OF PROTECTIONS

2.3.1 Electric protection.

The cooling unit is protected against overload by means of a fuse.

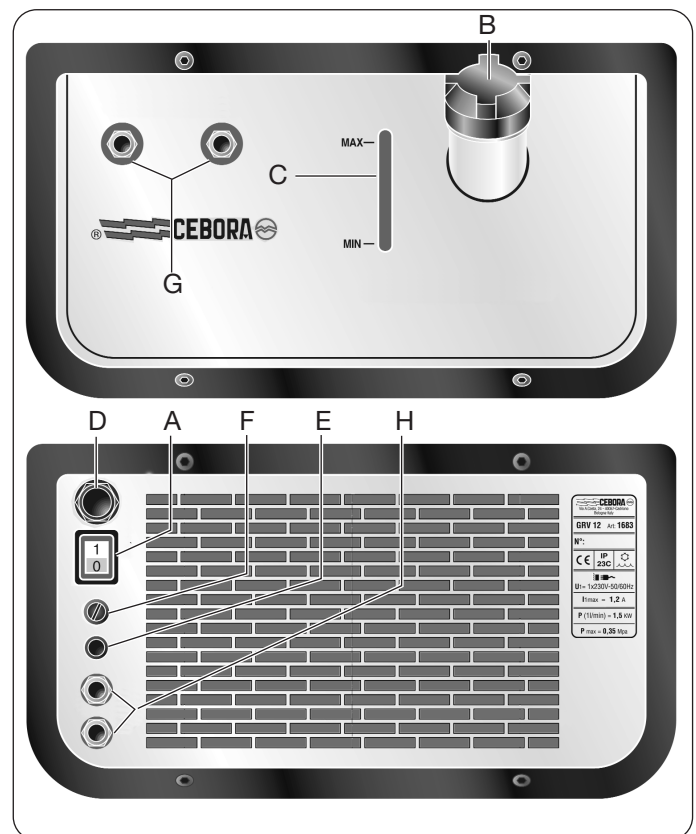
2.3.2 "Coolant pressure" protection.

This protection is created by a pressure switch, fitted on the coolant delivery circuit, which controls a microswitch fitted.

N.B.: To use this protection, connector (E) must be inserted in the welding or cutting generator's special socket.

2.4 DESCRIPTION OF THE APPARATUS

- A) ON/OFF switch (I/O).
- B) Tank cap.
- C) Slot for checking the coolant level.
- D) Mains lead.
- E) "Coolant pressure" protection connector.
- F) Fuse holder.
- G) Quick fittings for the torch cooling hoses.
Cold water outlet. - Blue.
Hot water inlet. - Red.
- H) Quick fittings for the cooling hoses.
Cold water outlet. - Blue.
Hot water inlet. - Red.



3 INSTALLATION

3.1 SETTING UP

Place the apparatus according to the instructions given in the manual of the machine with which it is to be used.

3.2 INSTALLATION

The unit must be installed by qualified personnel. All connections effected must comply with the current standards and with the law on safety at work.

Before connecting up the mains lead, ensure that the hoses are already connected, the power supply voltage corresponds to that indicated on the technical data plate, and the earth plug is efficient.

The cooling unit is supplied without coolant. To fill the tank, unscrew the cap (B) and pour in approximately 5 litres of coolant.

Connect the welding torch and all of the connecting hoses, set the switch (A) to the ON position so that the coolant begins to circulate, then top up the tank to the "max." level.

It is important to keep the tank filled to the "max." level during use. This ensures improved performance.

You should therefore regularly check the level through slot (C). The coolant should be of the type used for cooling circuits in the automobile sector. This is obtained by mixing water (preferably deionized) with a glycol-based antifreeze, in quantities which depend on the ambient conditions. To facilitate this operation, follow these indications:

20% antifreeze when the ambient temperature is -9°C

30% antifreeze when the ambient temperature is -17°C

40% antifreeze when the ambient temperature is -26°C

50% antifreeze when the ambient temperature is -38°C

Important: This mixture not only maintains the fluidity of the coolant at extremely low temperatures, but also prevents the formation of chalky deposits from hard water which would compromise the life of the system, in particular of the pump. For this reason, you are advised to use antifreeze even during the summer.

Warning: Prolonged dry operation of the pump may compromise its functionality and life.

To protect the torch, a pressure switch which controls delivery pressure has been fitted at the pump outfeed. Should the pressure drop due to a lack of fluid or because the pump is jammed, the flow meter stops the power source through the connector (E). This problem is indicated by a specific warning lamp that lights on the power source itself.

Remember to shut off the machine when you have finished welding.

4 MOTOR PUMP TECHNICAL SPECIFICATIONS

U1 = 230V

Frequency = 50 Hz

Input power = 200 W

Input current = 1 A

Motor revolutions = 2850 rpm

Max. capacity = 7 liters/min.

Max. head = 3 Bar

Frequency = 60 Hz

Input power = 270 W

Input current = 1.2 A

Motor revolutions = 3300 rpm

Max. capacity = 8,5 liters/min.

Max. head. = 4 Bar

5 MAINTENANCE

Disconnect the mains lead before any internal inspection of the unit.

Regularly remove any dust and extraneous materials from the inside of the unit, and in particular the radiator.

Check that all of the hose tightening clips are closed, that the fittings are in perfect condition, and the coolant is at the correct level.

5.1 PROCEDURES TO FOLLOW WHEN REPAIRS HAVE BEEN MADE

After making repairs, ensure that the wiring is arranged in such a way as to guarantee the insulation of parts connected to the supply circuit from those connected to the low tension circuit.

Make sure that the wires cannot come into contact with moving parts, or any parts which heat up during operation. Replace all clips, as on the original machine, so that if a lead accidentally breaks or is disconnected, a contact between the supply circuit and the low tension circuits is impossible.

QUESTA PARTE È DESTINATA ESCLUSIVAMENTE AL PERSONALE QUALIFICATO.

THIS PART IS INTENDED SOLELY FOR QUALIFIED PERSONNEL.

DIESER TEIL IST AUSSCHLIEßLICH FÜR DAS FACHPERSONAL BESTIMMT.

CETTE PARTIE EST DESTINEE EXCLUSIVEMENT AU PERSONNEL QUALIFIE.

ESTA PARTE ESTÁ DESTINADA EXCLUSIVAMENTE AL PERSONAL CUALIFICADO.

ESTA PARTE È DEDICADA EXCLUSIVAMENTE AO PESSOAL QUALIFICADO.

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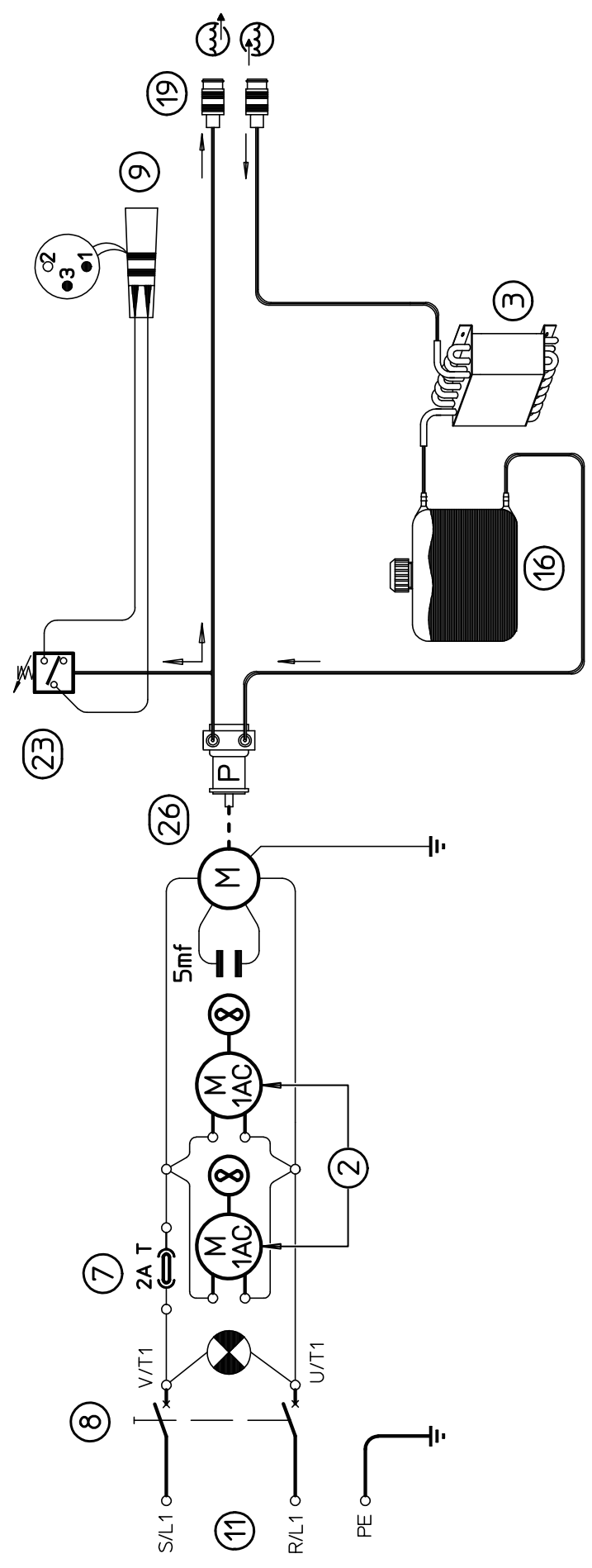
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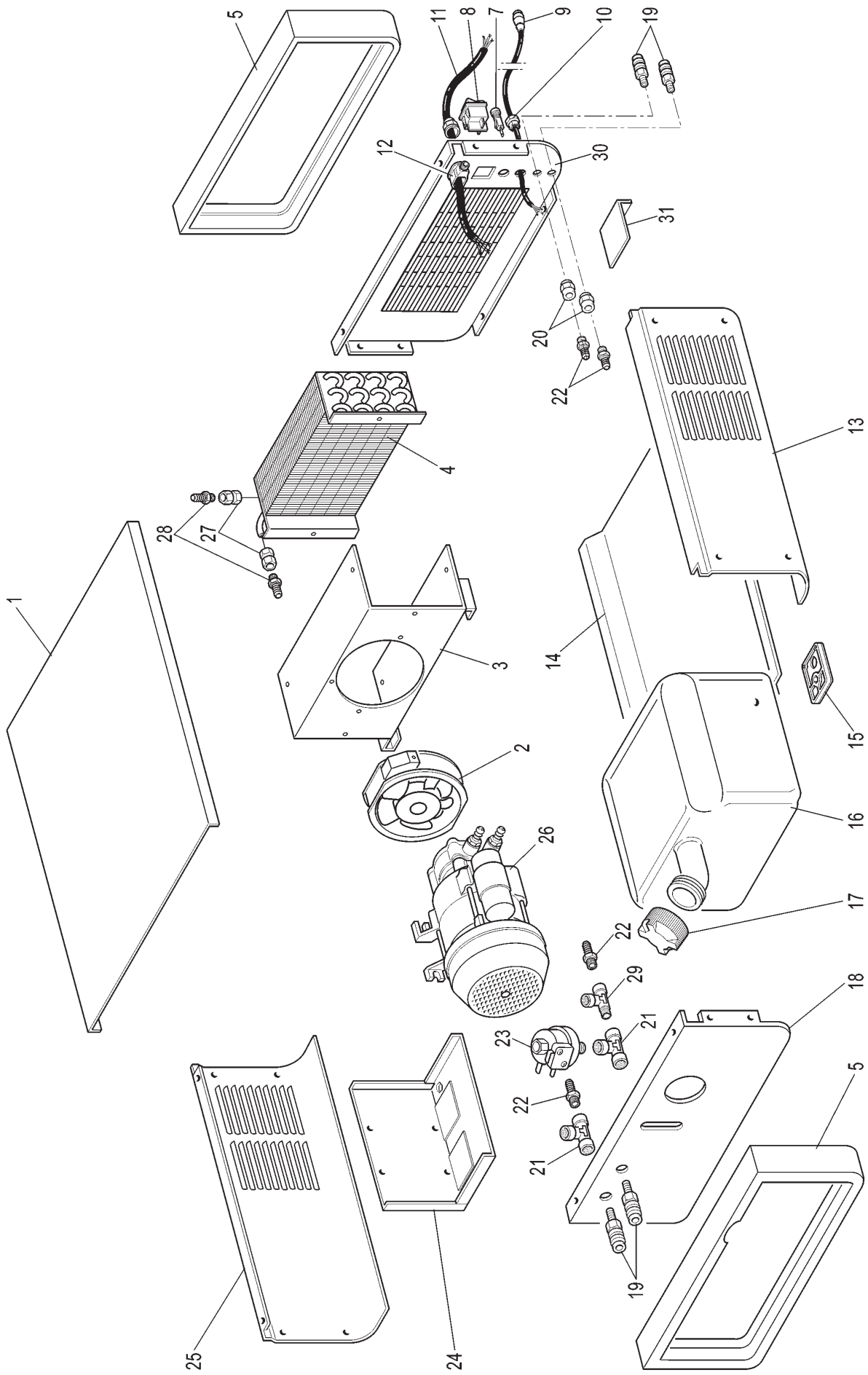
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ΑΥΤΟ ΤΟ ΤΜΗΜΑ ΠΡΟΟΡΙΖΕΤΑΙ ΑΠΟΚΛΕΙΣΤΙΚΑ ΓΙΑ ΤΟ ΕΙΔΙΚΕΥΜΕΝΟ ΠΡΟΣΩΠΙΚΟ.

Art. 1683 GRV 12





pos	DESCRIZIONE	DESCRIPTION
01	COPERCHIO	COVER
02	MOTOVENTILATORE	MOTOR FAN
03	SUPPORTO	SUPPORT
04	RADIATORE	RADIATOR
05	CORNICE	FRAME
07	PORTAFUSIBILE	FUSE HOLDER
08	INTERRUTTORE	SWITCH
09	CONNETTORE	CONNECTOR
10	PRESSACAVO	STRAIN RELIEF
11	CAVO RETE	MAINS CABLE
12	PRESSACAVO	STRAIN RELIEF
13	LATERALE DX	RIGHT SIDE PANEL
14	FONDO	BOTTOM
15	APPOGGIO	REST
16	SERBATOIO	TANK

pos	DESCRIZIONE	DESCRIPTION
17	TAPPO	PLUG
18	PANNELLO ANTERIORE	FRONT PANEL
19	RACCORDO RAPIDO	RAPID FITTING
20	RACCORDO	FITTING
21	RACCORDO	FITTING
22	RACCORDO	FITTING
23	PRESSOSTATO	PRESSURE SWITCH
24	SUPPORTO	SUPPORT
25	LATERALE	SIDE PANEL
26	ELETTROPOMPA	MOTOR PUMP
27	RACCORDO	FITTING
28	RACCORDO	FITTING
29	RACCORDO	FITTING
30	PANNELLO POSTERIORE	BACK PANEL
31	PROTEZIONE TUBI	PROTECTION TUBES

La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.

When ordering spare parts please always state the machine item and serial number and its purchase data, the spare part position and the quantity.



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