

# DCA D9'DCI F 'GD5 "Type 9J C@ L



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#### **ENGLISH**

#### 1. ASSUMPTION

- Please read these instructions carefully before use.
   Damages resulting as consequence of instructions disregards will not be covered by manufacturer's warranty.
- Please pay particular attention to the chapter relating the safety instructions.
- Save these instructions and refer to them anytime your are in doubt.

#### 2. APPLICATION

These submersible electric pumps are made mainly for the applications listed below:

Continuously rated

Water lift from 7 metres depth maximum (condition normally referred at sea level)

Max liquid temperature operating 35°C

Suitable for closed circuit coolant systems

Domestic irrigation

Domestic pressure boosting

#### 3. USE CONDITIONS

- Liquid temperature must not exceed 35° C.
- These pumps are suitable to be used in to chemically neutral liquids.
- Do not pump hydrocarbons or any other inflammable liquid.
- Pumping liquids containing sand or other abrasive substances may reduce sensitively the life of the pumps. In this case we recommend to assemble a strainer at the suction.
- Never run pump dry. Dry runs may damage seals and cause possible hazards of burns to persons handling the pump.

#### 4. SAFETY

Careless use of electric appliances is always dangerous. Electric appliances used into water represent a potential hazards of electric shock. Thus we strongly recommend to pay full attention to the next instructions. If you still have doubts, contact an expert electrician or the manufacturer.

Eventual connection of a power cord must performed by an expert electrician in accordance of the regulations is use in your Country HAZARD! Do not touch the plug with wet hands! Switch off and unplug the pump before any maintenance.

Do not cut or engrave the power cable.

Mains system must be provided of a residual current device of max 30 mA capacity.

#### 5. INSTALLATION

Installation may result to be fairly complicated therefore it should be carried out by a skilled person.

Install your pump as close to the well as possible in a dry and environmentally protected place where temperature should not exceed 40° C.

- Use the fewest possible elbows and fittings to connect the pipe from well to the pump suction port.
- The pipe can be either rigid or flexible with smooth internal surface in order to reduce at minimum the flow resistance.
- The minimum pipe I.D. must be equal to the suction port and if you lift water deeper than 4 metres I.D. pipe should be 30% larger.
- Suction pipe must be equipped of foot valve and strainer.
- Suction pipe must be installed straight without bends to avoid air pockets.
- Remove all impurities from the pump housing before first use.
- Check the free motor rotation before start acting with a screwdriver into the groove of the fan side motor shaft.
- Sit the pump on a smooth surface and fix it with proper bolts in order to avoid vibrations.

#### 6. OPERATION

Before starting the pump should be filled to prime. Thus, fill the pump housing completely through the nut hole located next to the outlet (fig. 2).

Please do not insist to run the pump if water does not come in two-three minutes and refill the pump once again. If water does not come at all it is necessary to check eventual losses of the system and actual water level to be not deeper than 7 metres.

Repeat the prime operation anytime the pump returns to service after long breaks.

IMPORTANT: if sand is pumped it is necessary to install a strainer in the suction side. The presence of sand into the pump renders the warranty null and void.



#### 7. CLEANING AND MAINTENANCE

Switch off and unplug the pump before any maintenance. A damage pump must be workmanlike repaired before further use.

It is advisable to empty the pump during the winter season with freezing condition discharging the water buy the apposite cap on the lower part of the pump body.

If the pump is unused for a long time it's advisable to completely empty the pump, wash the hydraulic part with clean water and stock it in a dry place. To start up again the pump repeat the operation mentioned in this manual.

#### 8. PUMP STORAGE

- Do not use the pump during cold winter weather. Frost would certainly damage the pump.
- Unplug the pump. Dry it from residual water and store it in a dry and frost-free place.
- To dry the pump just remove the plug places in the lower part of the pump housing.

When the pump returns to service all rules described in this leaflet must be repeated.

## 9. FOR PUMPS EQUIPPED WITH PRESSURE TANK

If pump is equipped with pressure tank please check periodically tank air pressure. For this operation remove the plastic plug from one side of the tank and if necessary inflate the tank to 1,4 bar (Fig. 3)

#### 10. TROUBLESHOOTING

#### Motor does not start

- (?) Mains voltage missing
- Check the power cable, proper plug connection and mains fuse efficiency
- (?) Motor protector tripped for overheating
- Remove cause for overheating (pumped liquid too hot? Impeller blocked by foreign objects? Wrong voltage?).
- > After cooling the pump will return to operate automatically

#### Motor hums but does not run.

- (?) Impeller blocked by foreign objects
- ➤ Check the free rotation acting with a screwdriver into the groove of the fan side motor shaft (Fig. 1)

#### Pump works but water delivery is poor

- (?) Required head is too high compare the pump performance
- Check characteristics in data plate and reduce distance from pump and taps (in height) if necessary.

#### (?) Pipe bended, too small in size or clogged

- > Straight pipe, use larger piping or remove objects clogging
- (?) Pipes leak
- Check connections .

#### Pump does not deliver any water

- (?) Possible prime difficulties
- Check actual well depth (remember that it should be not lower than 7 metres at sea level, on hills this depth has to be reduced)
- > Check leaks along suction piping

#### Pump starts/stops continuously (for pumps with tank)

- (?) Tank air chamber is flat or too overinflated
- Check air tank pressure (fig. 3)

#### 11. CONDITIONS OF WARRANTY

Any repairs or maintenance during the period covered by warranty must be carried out by authorised staff. In the event of the pump being tampered with the warranty automatically becomes void.

The warranty comprises the free elimination of faults caused by errors in assembly or the use of faulty materials within 24 (twentyfour) months from the date of purchase. Materials subject to wear such as mechanical seals, oil seals and impellers are not included in the warranty.

Should intervention under warranty be required it is necessary to show a document which proves the date of purchase (delivery note, invoice or receipt).

## THIS PRODUCT COMPLIES WITH THE FOLLOWING EEC DIRECTIVES:

73/23/EEC Directive on low voltage

93/68/EEC Directive on the CE markings

89/336/EEC Directive on electromagnetic compliance

and that the standards EN60335-2-41:1996 have been applied for all the water pumps.









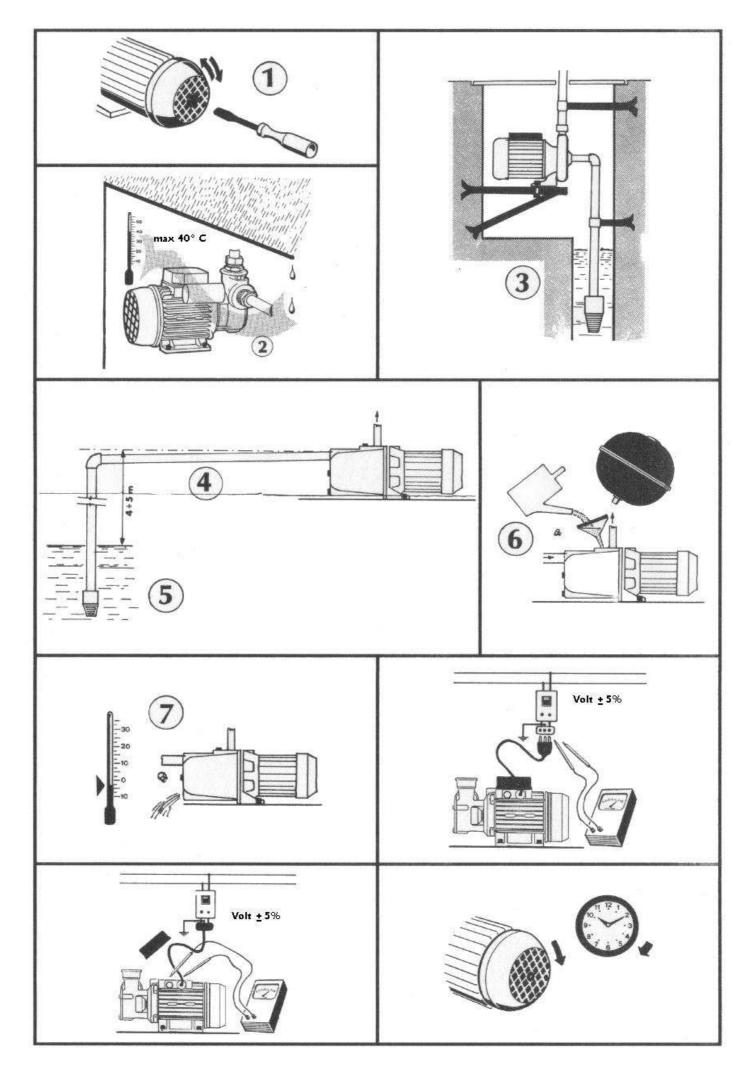




fig. 1



fig. 3







### SINGLE - PHASE CONNECTING FIGURE

