

USE AND INSTALLATION HANDBOOK

AMMC/Hp

CONTROL PANEL FOR 1 ELECTRIC PUMP WITH
CURRENT CONTROL.

AMMC / Hp



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1. WARNINGS

The following symbols, accompanied by the words: “Danger”, “Warning”, indicate the potential hazard resulting from failure to observe the associated warning, as specified below:



**DANGER
RISK OF ELECTRIC
SHOCK**

Failure to observe this warning may result in electric shock



DANGER

Failure to observe this warning may cause personal injury and/or damage to property



WARNING

Failure to observe this warning may cause damage to the pump, the unit or the system

- **CAUTION:**
Make sure the pumps are fully primed before you start them.
- **CAUTION:**
The control panel must be connected by a qualified electrician in compliance with the electrical regulations in force.
- **CAUTION:**
The electric pump or the motor and the panel must be connected to an efficient grounding system in compliance with the electrical regulations locally in force.
- **CAUTION:**
Ground the unit before carrying out any other operation.
- **CAUTION:**
The electric pump or the motor can start up automatically.
- **CAUTION:**
As a general rule, always disconnect the power supply before proceeding to carry out any operation on the electrical or mechanical components of the unit or system.

2. OVERVIEW

The purpose of this manual is to provide the necessary information for the proper installation, use and maintenance of AMM/C. The user should read this manual before operating the unit. Improper use may cause damage to the machine and lead to the forfeiture of the warranty coverage. Always specify the model identification code and the construction number when requesting technical information or spare parts from our Sales and Service department. The instruction and warnings given below concern the standard version; refer to the sale contract documentation for modifications and special version characteristics. For instructions, situations and events not considered in this manual or in the sale documents, please contact our customer service.

Our units must be installed in sheltered, well-ventilated, non-hazardous environments and must be used at a maximum temperature of +40°C and minimum of -5°C.

3. HANDLING



DANGER



WARNING

The panel must be handled with care, as falls and knocks can cause damage without any visible external signs.

If for any reason the unit is not installed and starter immediately after it has reached its destination it must be stored properly. The external packaging and the separately packed accessories must remain intact, and the whole must be protected from the weather, especially from freezing temperatures, and from any knocks or falls.

PRELIMINARY INSPECTION: after you have removed the external packaging, visually inspect the control panel to make sure it has suffered no damage during shipping.

If any damage is visible, inform a FOURGROUP dealer as soon as possible, no later than **five days** from the delivery date.

4. APPLICATION AND WORKING LIMITS



DANGER
RISK OF ELECTRIC
SHOCK



WARNING

These control panels are designed for controlling 1 motor or electric pump used in pressurization systems or in applications for emptying wells or water tanks.

FOURGROUP S.r.l. shall not be liable for any damage caused or suffered by the unit as a result of its unauthorised or improper use.

TECHNICAL FEATURES :

- Electric control panel;
- Power Supply 1~50/60Hz 230V +/- 10%;
- Selector for operating motor "0-1" ;
- "Motor on" LIGHT;
- Restore protection button;
- Motor protection by thermal switch;
- Output with cable clamps;
- ABS box;
- Protection IP55;
- Ambient temperature: -5/+40 °C;
- Relative humidity 50% at 40 °C (not condensed);

Do not use the product in environments where dust, acids, corrosive and/or flammable gases etc. are present.

5. STANDARD OPERATION



DANGER
RISK OF ELECTRIC
SHOCK



DANGER



WARNING

The motor can be governed directly by the operator by the selector 0-1.

When the selector is switched in 1 position the motor starts immediately.

The green LED lights up to indicate that the motor is working properly.

The thermal protection breaks the motor supply if an overcurrent occurs (pag. 7).

6. INSTALLATION



DANGER
RISK OF ELECTRIC
SHOCK



DANGER



WARNING

Line of supply current

Connect the unit at ground before carrying out any other operation.

The voltage input corresponds to the data written on the panel and on the pump (**230V** \pm 10% 50/60Hz).

Make sure that the power-supply-cable can bear the nominal current and connect it to the terminals of the control panel.

If the cables are exposed, they must be appropriately protected.

The line must be protected with an Earth leakage and magnetic switch measured in accordance with the regulations locally in force.

Line of motor power supply

Connect the unit at ground before carrying out any other operation.

The voltage input corresponds to the data written on the motor (**230V** \pm 10% 50/60Hz).

Doing some starting make sure that the motor respects the right direction of rotation usually indicated by an arrow printed on the motor.

- TO FIX THE CABLES IN THEIR TERMINALS USE A TOOL OF THE PROPER SIZE TO AVOID THE DAMAGING OF THE SCREWS OR OF THEIR SEAT. If use an electric screwier pay attention not to spoil the thread or the screws.
- FIX THE CONTROL PANEL TO A WALL WITH SCREWS AND SCREW ANCHOR USING THE HOLES ARRANGED IN THE BOX OR THE FIXING BRACKET IF PRESENT.

AFTER THE FIXING, REMOVE EVERY PLASTIC OR METALLIC SURPLUS (ex. Pieces of copper of the cables or plastic shavings of the box) INSIDE THE BOX BEFORE SUPPLING POWER.

N.B. : DO NOT INSTALL THE CONTROL PANEL CLOSE TO OBJECTS IN CONTACT WITH FLAMMABLE LIQUIDS, WATER OR GAS.

7. ELECTRICAL CONNECTION AMMC / Hp



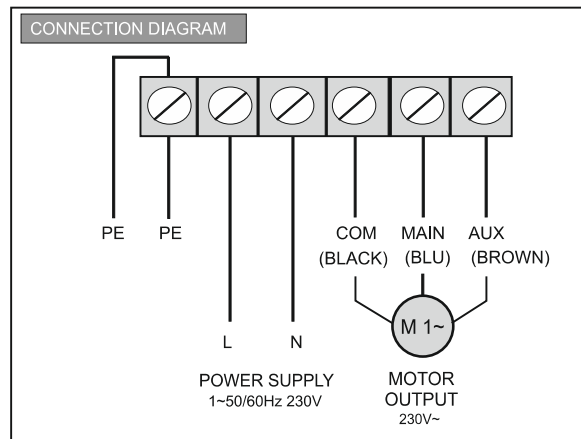
DANGER
RISK OF ELECTRIC
SHOCK



DANGER



WARNING



8. START/ STOP AND PROTECTION OF THE PUMP.



WARNING

The MOTOR can be switched ON turning the general switch to "1" position.

The MOTOR can be switched OFF turning the general switch to "0" position.

PROTECTION



N.B. :

**ADJUSTMENT IS NOT NECESSARY BECAUSE THE VALUE OF THE THERMAL IS
ALREADY SUITABLE FOR THE MODEL ON THE BASIS OF THE HORSE POWER (Hp).**

9. MAINTENANCE



**DANGER
RISK OF ELECTRIC
SHOCK**



DANGER



WARNING

AMMC /Hp does not require any routine maintenance provided that their working limits are observed. Any maintenance operations must be performed by qualified and experienced personnel, in compliance with the safety regulations in force.

DANGER!

Make sure that AMMC is disconnected from the power supply before performing any maintenance operations.

10. WASTE DISPOSAL

After the control panel has been installed and started, the customer must provide for the appropriate elimination/disposal of the waste materials according to the legislation locally in force.

If the control panel or parts of it must be taken out of service and dismantled, follow local regulations regarding sorted waste disposal. Refer to the appropriate recycling centres.

CAUTION: Contamination of the environment with hazardous substances such as battery acid, fuel, oil, plastic, copper, etc., may cause serious damage to the environment and endanger people's health.

11. WARRANTY

Refer to the sales documents for any information.

12. SPARE PARTS

Always state the exact model identification number and construction number when requesting technical information or spare parts from our sales and service centre.



Use only original spare parts when replacing any faulty components.



The use of unsuitable spare parts can cause malfunctions, personal injury and damage to property.

13. CONFORMITY DECLARATION

FOURGROUP S.r.l. with center in Polverara via Enrico Fermi, 8 – Padova – Italy,
declare that the products

AMMC/Hp

are in compliance with the following European directives and with the national directives of actuation :

- Machine 2006/42/CE
- European Directive 2006/95/CE
- Electromagnetic compatibility 2004/108/CE and following changes in compliance with the following technical rules:
- EN 60439-1, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3

Polverara – Italy, 05/08/2009

TECHNICAL MANAGER

(Grigoletto Per. Ind. Walter)

