

Manual and user instructions

Index

Manual and user instructions.....	1
Index.....	1
General remarks	1
General features	1
Description.....	2
Installation and use.....	2
Installation example.....	3
Dimensions.....	3
Connection instructions Multipress with connector	4
Connection instructions Multipress on expansion board HC MM/MT ADV.....	5

General remarks

The purpose of the present manual is to provide essential information for the installation, use and maintenance of the **Multipress 4 product**.

It is important that the user and/or installer reads this manual thoroughly before installing and using the product. Improper use may cause damage and cause the warranty to become void.

Always specify the exact identification code of the model, should you need to request technical details from our sales and assistance service.

In the event of any instructions, situations and events that are not contemplated in the present manual or sales documentation, please contact our assistance centre.

IMPORTANT:



- MAC3 S.p.A. will not accept responsibility for any damage caused by **Multipress 4** as the result of improper or prohibited use.
- The **Multipress 4** device must be installed by qualified personnel.

General features

Multipress 4	
Code	
Power supply	24 V ~ 50 ÷ 60 Hz (see Note1)
Consumption	1 VA
N° pressure selection channels	4
N° solenoid inputs	16 (4 inputs per channel)
Max. solenoid input voltage	24 Vac – 24Vdc (50 ÷ 60 Hz)
Max. solenoid input absorbed current	50 mA max. per channel
Protection category	IP 20
Operating temperature	0 ÷ +50 °C
Storage temperature	-10 ÷ +60 °C
Container	PPO UL94V0
Dimensions	105x90x73 mm
Weight	g. 260

Table 1. General features



MAC3 S.p.A.

Via Maestri del lavoro 25/27

50013 Campi Bisenzio (FI)

TEL. 055.8877372-055.8877672-055.8879276

FAX. 055.8877068

E-mail: mac3@mac3.it - Sito Web: www.mac3.it

Description

Multipress 4 is a device that can be used in irrigation systems. The device can be used if interposed between a common irrigation programmer available on the market and the **HydroController (HC)**.

Multipress 4 permits the interfacing of an irrigation channel associated with a pressurization set piloted by an **HC** inverter, the device sends a signal to the **HC**, so it can automatically select the pressure level supplied to the irrigation system.

It is capable of selecting between 4 different pressure levels previously set on the **HC** device. Pressure selection is simply effected by the activation of one of the solenoids to which the irrigation control box is connected.

Multipress 4 can be connected to 16 solenoids and there are 4 connections available for each pressure level as shown in figure 1.

According to the connection position on the terminal board of the **Multipress 4**, it is possible to identify the pressure at which the pressurization system is set on activation of the solenoid.

Multipress 4 is a truly innovative solution for the dispensing of the required water pressure according to the sector that enabled by the irrigation programmer.

In the design of the irrigation system different pressure levels are set according to the different sectors. On closing the solenoid, for the supply of a specific sector, **Multipress 4** pilots the inverter that supplies water at the required pressure level.

Installation and use

The **Multipress 4** has an attachment for assembly on DIN rail EN 50022, in accordance with standard DIN 43880 and occupies the space of 6 modules (see section Dimensions and/or Table 1).

The wiring diagram is shown in Figure 2. Wiring diagram. Table 2 shows the terminal connections. The system pressure selection command is sent to the **HC** (connections **CH1 ÷ CH4 + COMMON** on diagram) using a 4-pole insulated cable 4 4X0.15 25 AWG (code /355002021) supplied with device. The cable that is of 2.5 m in length is equipped with a special circular connector with screw safety ring for **HC** connection.

Note 1: Multipress 4 is supplied without power pack device. The supply voltage can in general be taken directly from the programmer power pack, that usually has the same features (24 VAC). Should it be decided to use the programmer power supply always check that it has the required requisites in terms of power voltage (24 V ~ 50 ÷ 60 Hz; 1 VA available in addition to those used for the solenoids).

In the case it was necessary to use a DC voltage to the solenoid input (24Vdc max), the device **Multipress 4** must NOT be powered.

The **Active** led lit on the front panel indicates that it is live. On installation, to check that the connection with the **HC** is correct, **Multipress 4** permits to manually select the system pressure, without the programmer being in operation, by pressing the buttons P1 ÷ P4 as shown in figure 1.

The pressure values corresponding to the 4 activated channels can be set using the **HydroController** device, and for instructions on this operation reference should be made to the manual provided with the device itself.

Installation example

The programmer activates solenoid EV1 connected to terminal 1, **Multipress 4** records the activation power, sends the command to the **HC** activating channel 1 (CH1 – OUT PRESS. 1) and at the same time led CH1 lights up, on the front panel indicating that the channel has been activated (see figure 1).

It is also possible to activate channel 1 by connecting one or more solenoids to terminals 2,3 and 4. If the solenoids are connected to the terminals 5 to 8, channel 2 is activated (CH2 – OUT PRESS. 2), from 9 to 12 activates channel 3 (CH3 – OUT PRESS. 3) and 13-16 activates channel 4 (CH4 – OUT PRESS. 4).

Note 2: In the event, that as the result of faulty installation for example, two solenoids are activated at the same time, that relate to two distinctive channels on the terminal board, the **HC** device is activated to provide a minimum pressure of 1 bar. It must be pointed out that such a situation is an anomaly as it requires two different pressure levels at the same time on the system.

Multipress 4 terminal board			
1	PRESSURE SOLENOID INPUT 1	13	PRESSURE SOLENOID 3 INPUT
2		14	
3		15	
4		16	
5	PRESSURE SOLENOID INPUT 2	17	COMMON
6		18	COMMON
7		19	CH1 OUT PRESS. 1 (conn. cond. 1)
8		20	CH2 OUT PRESS. 2 (conn. cond. 2)
9	PRESSURE SOLENOID INPUT 3	21	CH3 OUT PRESS. 3 (conn. cond. 3)
10		22	CH4 OUT PRESS. 4 (conn. cond. 4)
11		23	POWER SUPPLY 24 VAC 50 ÷ 60 Hz
12		24	(see Note1)

Table 2. Terminal connection board

Dimensions

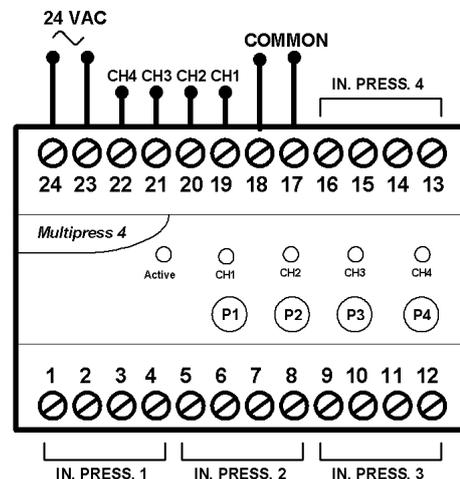
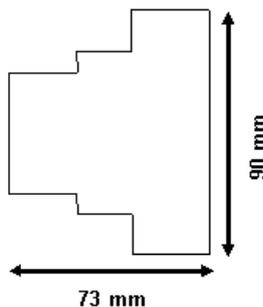
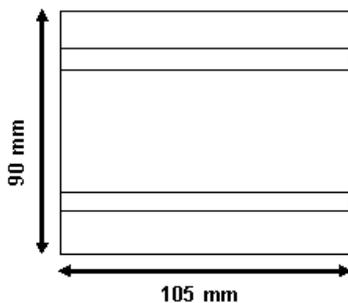


Figure 1

Connection instructions Multipress with connector

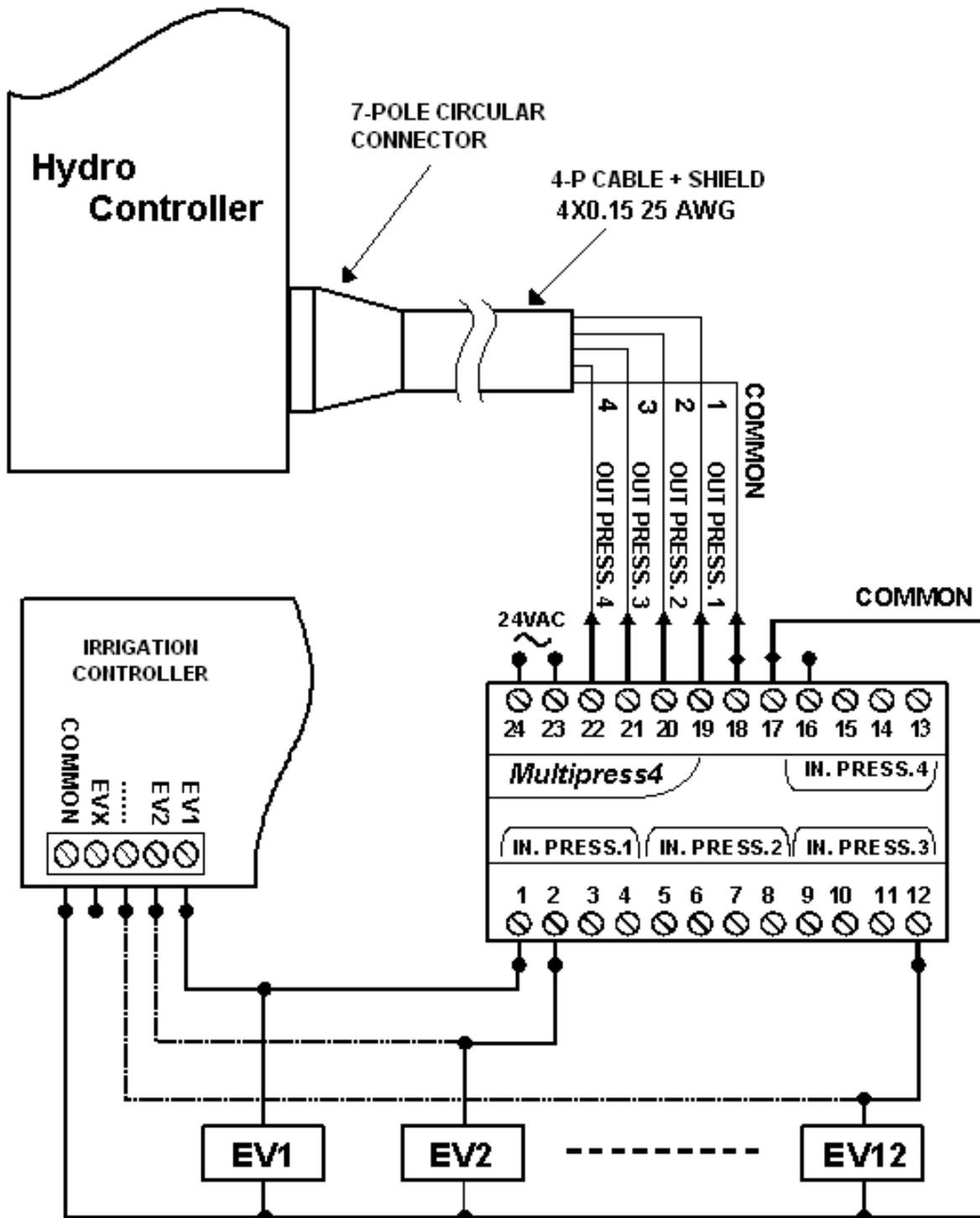
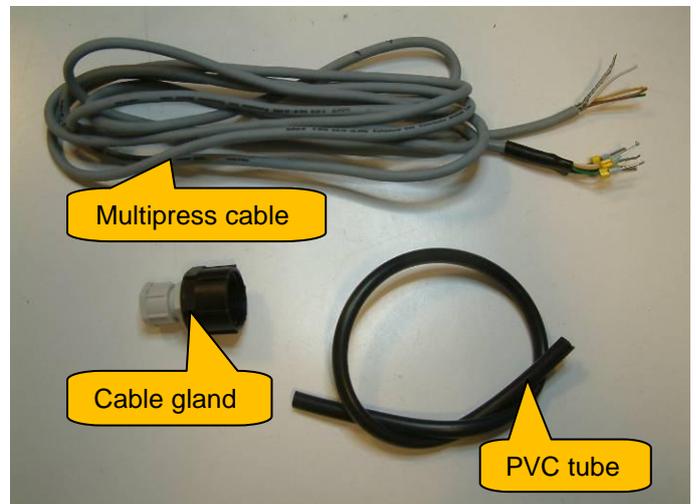
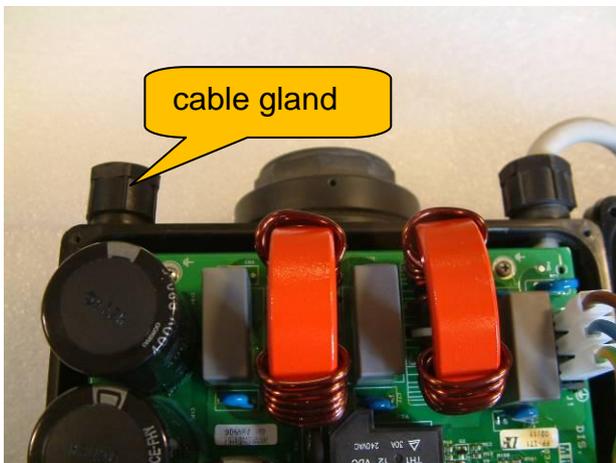


Figure 2. Wiring diagram

Connection instructions Multipress on expansion board HC MM/MT ADV



- Make sure to remove power to the drive and then unscrew the 6 screws on the cover
- Open the cover carefully



- Unscrew the cable gland shown in the
- The Multipress comes with cable, cable

figure

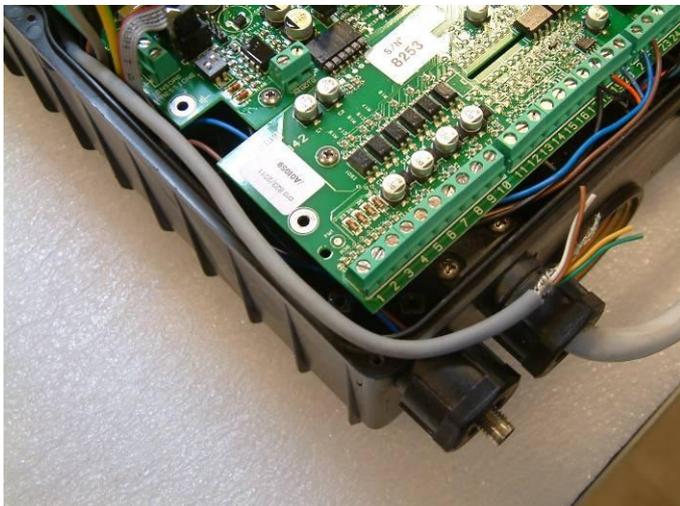
gland and insulation PVC tube (code /358001101)



- Assemble the cable as shown in Figure



- Insert the cable assembly inside the inverter



- Slide the cable passing it under the inverter board



- Overview after passing the cable



- Insert the cable multipress within the PVC tube



- Make the connections on the terminal block J6 and J7 in the sequence of colors:
 Terminal 8 → White
 Terminal 9 → Yellow
 Terminal 10 → Green
 Terminal 11 → Brown
 Terminal 12 → Black



- Overview finished the connection



- After the passage of the cable, you can tighten the cable gland and close the inverter.