



MAN 652-OM4

F02 Non intrusive configuration tool

User's Manual



| | | | | |
|------|------------|-------------|----------|----------|
| | | | | |
| 0.0 | March 2006 | First issue | A.G.. | G.A. |
| Rev. | Date | DESCRIPTION | Prepared | Approved |

Note:

Biffi Italia has taken every care in collecting and verifying the documentation contained in this Instruction and Operating Manual.

The information herein contained is reserved property of Biffi Italia.

INDEX

| | | |
|----------|--|-----------|
| 1 | OPTIONAL MODULE 4: NON INTRUSIVE CONFIGURATION TOOL | 3 |
| 1.1 | MANUFACTURER | 3 |
| 1.2 | NON INTRUSIVE CONFIGURATION TOOL | 3 |
| 2 | INSTALLATION | 4 |
| 3 | DESCRIPTION OF OM4 NON INTRUSIVE CONFIGURATION TOOL | 9 |
| 4 | OM4 WIRING DIAGRAM | 10 |

1 OPTIONAL MODULE 4: NON INTRUSIVE CONFIGURATION TOOL

1.1 MANUFACTURER


Manufacturer with respect to Machinery Directive 98/37: BIFFI ITALIA as specified on the motor label.


1.2 NON INTRUSIVE CONFIGURATION TOOL


The Optional Module OM4 NON INTRUSIVE CONFIGURATION TOOL is supplied as an OPTION on BIFFI F02 actuators.


It is possible to receive the actuator already equipped with the OM4, if the module is ordered together with the basic version. Alternatively, it is possible to order the OM4 as a separate kit to be later installed on the basic actuator.


The **OM4** optional module, based on “Bluetooth™” technology as a stand-alone unit, allows your PDA or PC to have direct access to the F02 actuator for non-intrusive operation, configuration and diagnostics.

| | |
|--|---|
| Warning:  | F02 actuator must be electrically isolated before all disassembling and reassembling operations. Before any disassembling or reassembling operations, please follow closely the relevant paragraph of the Basic Instruction and Operating Manual MAN 652 (latest revision available). |
|--|---|

| | |
|--|---|
| Warning:  | The electronic parts of F02 actuators and all optional modules can be damaged by a discharge of static electricity. Before you start, touch a grounded metal surface to discharge any static electricity. |
|--|---|

| | |
|--|--|
| Warning:  | It is assumed that the installation, setting, commissioning, maintenance and repair works are carried out by qualified personnel and checked by responsible Specialists. |
|--|--|

| | |
|--|--|
| <p>Warning:</p>  | <p>Repair work, other than the operations outlined in this manual, is strictly reserved to qualified BIFFI ITALIA personnel or to personnel directly authorized by the Company itself.</p> |
|--|--|

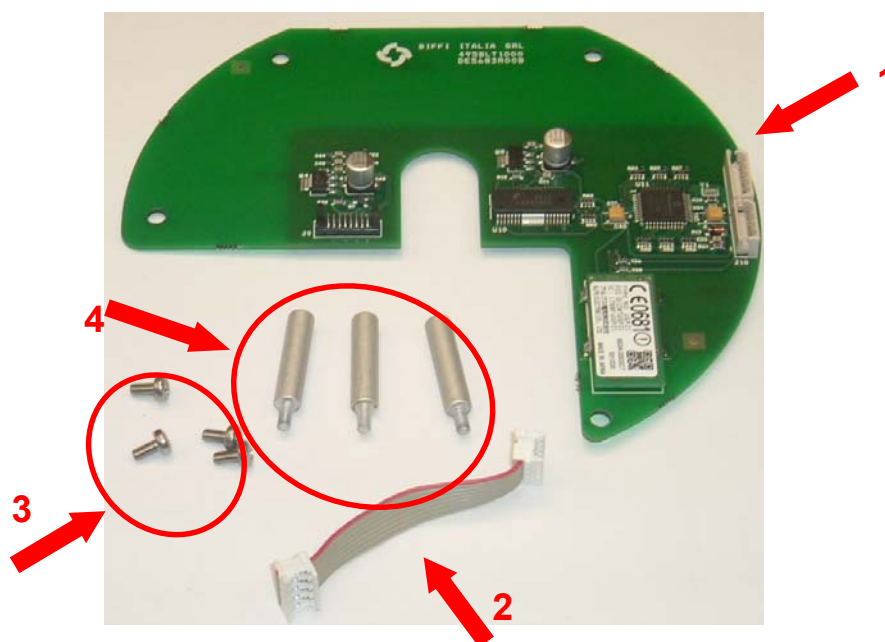
| | |
|--|--|
| <p>Warning:</p>  | <p>The controls available via Bluetooth™ allow full actuator operability at a distance also when the valve is not visible. Special attention must be paid under this condition to avoid all damages or injuries to people working close to the valve. BIFFI will not accept any responsibility for damages or injuries caused by an improper use of your Bluetooth™ PDA.</p> |
|--|--|

2 INSTALLATION

To assemble the OM4 module onto the F02 actuator, proceed as follows:

- a. Ensure that all the parts received with the OM4 are available (see Picture 1):

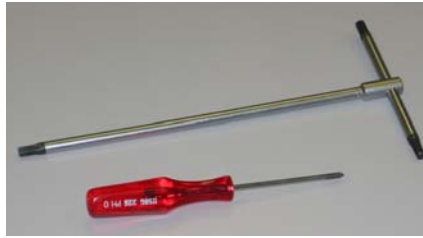
| POS. | Description | Q.TY |
|------|---|------|
| 1 | Bluetooth Stand Alone Electronic Card | 1 |
| 2 | Connecting Cable | 1 |
| 3 | Screws for Fixing Electronic Card | 4 |
| 4 | Spacers (only for F02 models 063 & 125) | 3 |



Picture 1: OM4 kit for F02 actuator

F02 Quarter-turn Electric Actuators Instruction and operating manual

- b. Gather the right tools for the assembly (a 5 mm Allen key and a screwdriver, Picture 2):



Picture 2: Tools for installing OM4 kit

- c. With the Allen key, loosen the 4 cover screws and remove the actuator enclosure (see Pictures 3 and 4). The inner actuator will appear as shown in Picture 5.



Pictures 3/3a: Removing F02 Actuator Enclosure



Picture 4: Actuator Cover and Screws



F02 Model 063/125



F02 Model 250/500

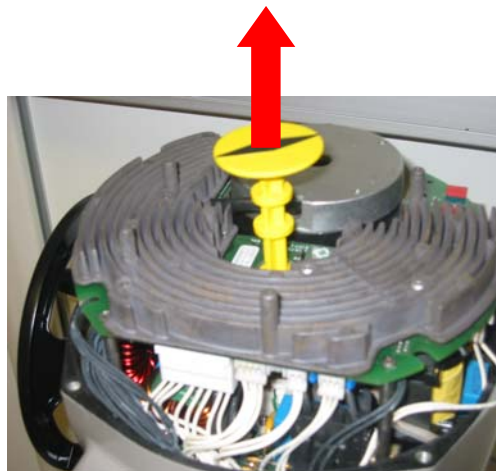
Picture 5/5a: Actuator inner part

Warning:



Pay attention not to damage the joint surfaces of the cover and the cover gasket.

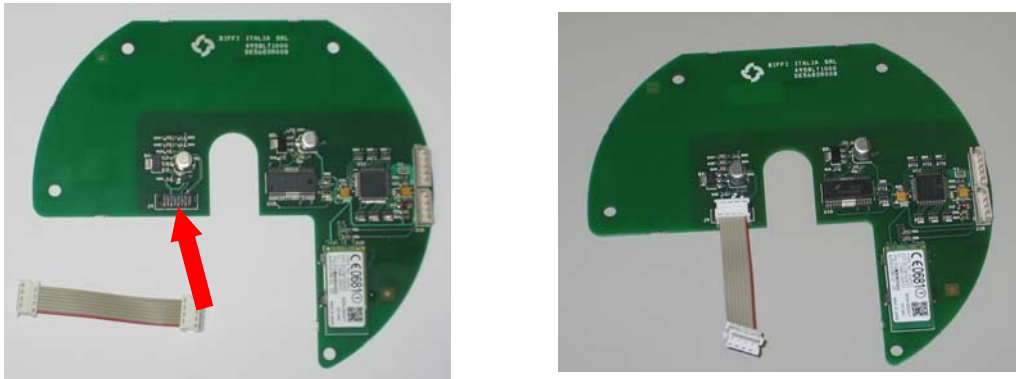
d. Remove the Indicator Shaft from its position



Picture 6: Removing the Indicator Shaft

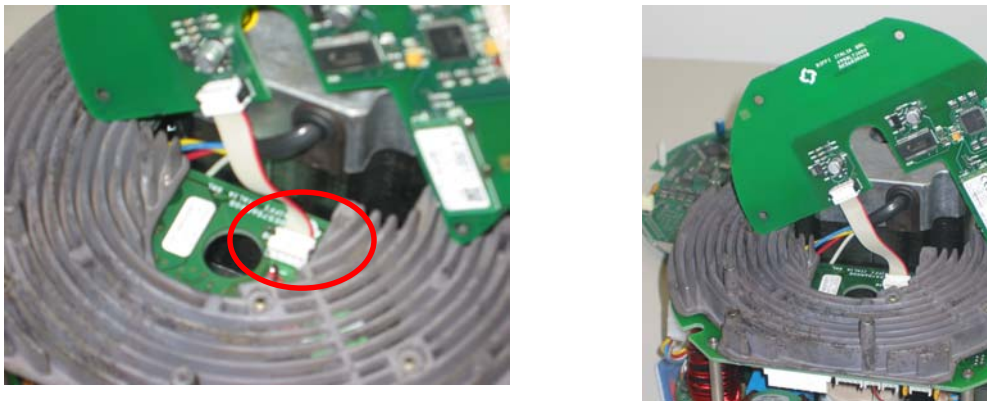
F02 Quarter-turn Electric Actuators Instruction and operating manual

- e. Connect the Connecting Cable to the Bluetooth™ Stand Alone Electronic Card as shown in Picture 7.



Picture 7/7a: Installing the Cable on the Electronic Card

- f. Install the Electronic Card just assembled on the Actuator, connecting the cable on connector J8 on the Card as shown in Picture 8.

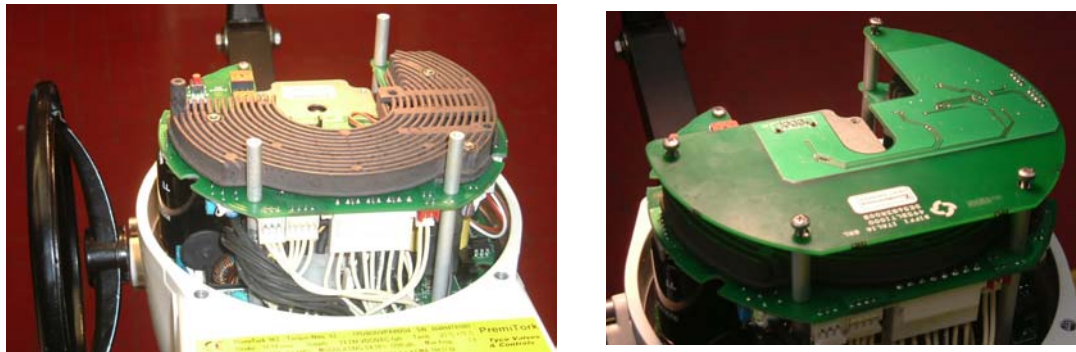


Picture 8/8a: Installing the Electronic Card on the F02 Actuator

- g. Fix the Card to the actuator with the 4 screws supplied in the optional kit (F02 models 250/500) or with the 3 spacers and the 4 screws (F02 models 063/125):



Picture 9: Electronic Card Fixed on F02 models 250/500



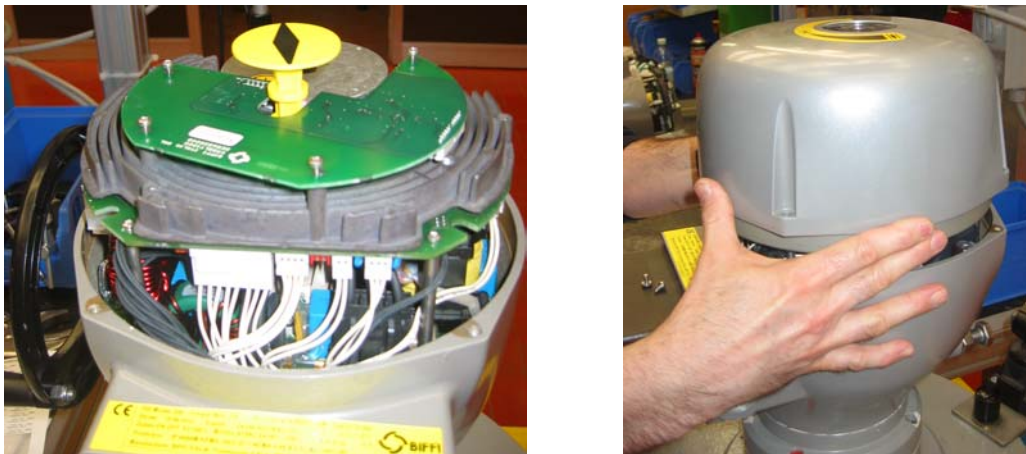
Picture 9: Fixing Spacers and Electronic Card on F02 models 063/125

Warning:



Pay attention not to drop the screws inside the actuator during this operation: if this happens make sure they are removed in order to avoid serious damages to the actuator.

- h. The Electronic Card is now installed on the F02 Actuator.
- i. Re-assemble the Indicator Shaft removed during operation “d” and the Enclosure Cover:



Picture 10: Re-assembling the Indicator Shaft and Cover Enclosure


- j. The installation of OM4 Non-Intrusive Configuration Tool module onto the F02 actuator is now complete.

3 DESCRIPTION OF OM4 NON INTRUSIVE CONFIGURATION TOOL

When Bluetooth connection to the F02 is requested, simply follow the connection procedure indicated in MAN 659 and 660 for PDA and PC.

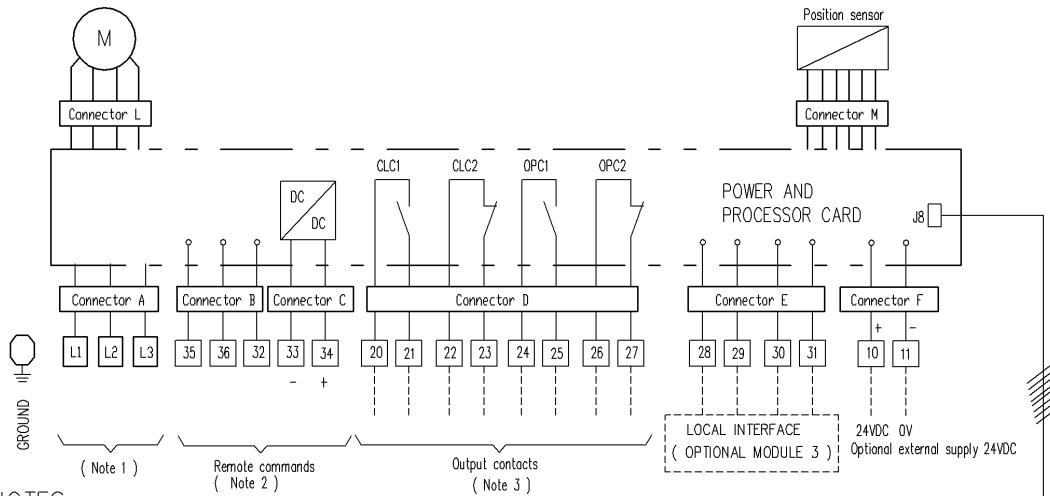
Once OM4 module is installed, all commands from PDA or PC have priority on remote commands to the F02.

If F02 is provided with OM3 (Local Interface Module), please bring the local selector to Remote position to set the actuator to establish connection.

| | |
|---|---|
| <p>Warning:</p>  | <p><u>When operating with Bluetooth™, the controls available via PDA or PC have priority on all other remote commands and allow full actuator operability at a distance also when the valve is not visible.</u></p> <p>Special attention must be paid under this condition to avoid all damages or injuries to people working close to the valve. BIFFI will not accept any responsibility for damages or injuries caused by an improper use of your Bluetooth™ PDA or PC.</p> |
|---|---|

For all information about the installation and use of the “A Manager” software with the OM4 module, please follow closely the relevant Installation and User Manual MAN 659 (“A Manager” Software for PDA) or MAN 660 (“A Manager” Software for PC), latest revision available.

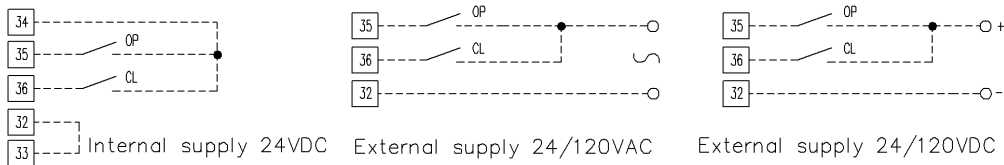
4 OM4 WIRING DIAGRAM



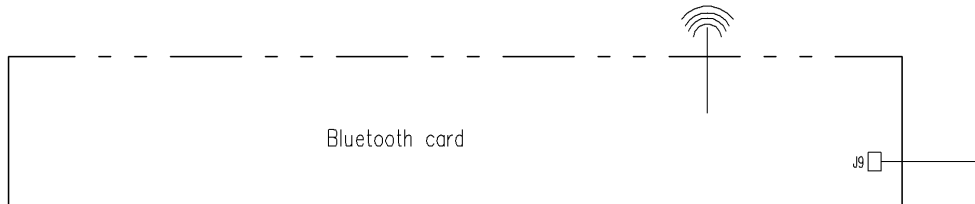
NOTES :

- 1) Connection L1-L2 FOR VDC or VAC single phase motor supply from 24 to 240 Volt
 Connection L1-L2-L3 for 3 phase motor supply from 208 to 575V (Check on the actuator label the correct voltage to be applied.)

2) Remote commands options



- 3) Contacts shown in intermediate position CLC1-CLC2 end of travel signalling in CLOSING
 Contacts shown in intermediate position OPC1-OPC2 end of travel signalling in OPENING





tyco *flow control*

BIFFI ITALIA s.r.l.
Loc. Caselle S. Pietro
29017 Fiorenzuola d'Arda -Piacenza - ITALY -
Tel. (0523) 944411 - Fax (0523) 941885
E_mail: biffi_italia@biffi.it