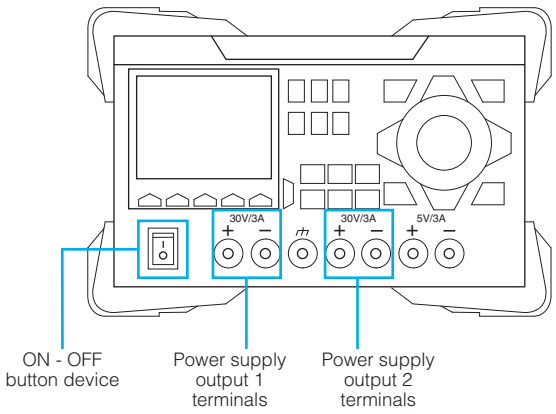
QUICKSTART - RC02 testing bench - series 22

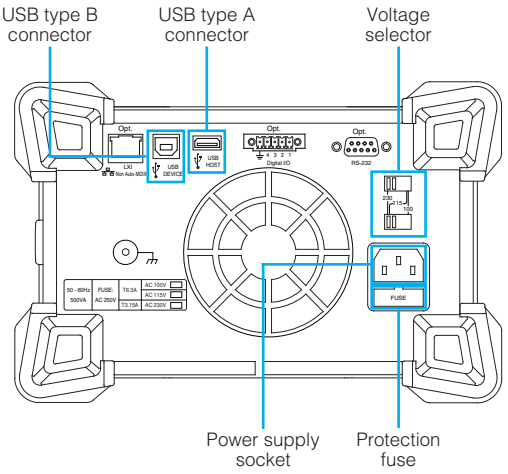
1 INSTALLATION TOOLS

CODE	DESCRIPTION	NOTE
ESP-RC02-P	Programmable DC Power Supply - RIGOL DP832	
ESP-RC02-M	RC02-M - Main Test Bench	
ESP-RC02-S	Solenoids	
ESP-RC02-I1	RC02-I1 - Interface 1 Test Bench	
ESP-RC02-I3	RC02-I3 - Interface 3 Test Bench	
SW-KEY	USB key	Software drivers and documentation
E-A-SB-USB/OPT	USB isolator adapter - from PC USB port to driver USB cable	Highly recommended for PC protection
E-A-SB-USB/OPT	USB isolator adapter - from PC USB port to RC02-M USB cable	Highly recommended for PC protection
E-A-SB-USB/OPT	USB isolator adapter - from RC02-M USB OUT port to RC02-C-USB-AB cable	Highly recommended for PC protection
E-A-PS-USB/DB9	USB to serial adapter	
E-A-PS-USB/IR	USB to IR infrared adapter	Single cable - E-MI-AS-IR
E-C-SB-USB/M12	USB cable	Single cable - TES/LES, PES, TEZ/LEZ, E-RI-AES s40
E-C-SB-USB/BM	USB cable	Single cable - E-BM-AES/RES/TE*/LE*, Z-BM-*
E-C-PS-DB9/RJ45	PS serial RJ45 cable	Single cable - E-BM-AS
ESP-RC02-C-220V-EU	Power supply cable - European Standard	Single cable - RIGOL DP832
ESP-RC02-C-POWER-RB	24VDC power supply cables	4 single cables (2 red and 2 black cables) - RIGOL DP832
ESP-RC02-C-USB-AB	USB cable Type-A - B	Single cable - RIGOL DP832
ESP-RC02-C-220V-EU	Power supply cable - European Standard	Single cable - RC02-M
ESP-RC02-C-USB-AB	USB cable Type-A - B	Single cable - RC02-M
ESP-RC02-C-PE	PE cable - from RC02-M to RC02-I* PE terminals	Single cable - RC02-M
ESP-RC02-C-COILS-I1-01	Coils connection cable	Single cable - on-board drivers and axis controls
ESP-RC02-C-COILS-I1-02	Coils connection cable	Single cable - off-board drivers
ESP-RC02-C-COILS-I1-03	Coils connection cable	Single cable - E-RI-PES-S series 44 or higher
ESP-RC02-C-COILS-I1-01-EXT	Extension for coils cable - branch COIL 1 and COIL 2	Connector - on-board drivers and axis controls
ESP-RC02-C-COILS-I2-01	Coils connection cable	Single cable - from RC02-M to RC02-I3
ESP-RC02-C-COILS-I1-04	Coils connection cable	Single cable - E-RI-TID
ESP-RC02-C-I1-A-01	Main connectors cable	Multicable - on-board drivers and axis controls
ESP-RC02-C-I1-A-02	Main connectors cable	Single cable - PES
ESP-RC02-C-I1-A-03	Main connectors cable	Single cable - E-RI-TEB/LEB-IL series 20 or higher
ESP-RC02-C-I1-B-01	Feedback cable - FEED L, T, D, E, P	Multicable - on-board drivers and axis controls
ESP-RC02-C-I1-B-01-ETX	Extension for feedback cable - branch FEED T	Single cable - on-board drivers and axis controls
ESP-RC02-C-I1-B-02	Connection cable	Multicable - E-BM-TE*/LE*, Z-BM-*
ESP-RC02-C-I1-C-01	SSI connector cable	Single cable - TEZ/LEZ-D
ESP-RC02-C-I1-C-02	Feedback cable - FEED TR	Single cable - E-RI-TEB/LEB series 20 or higher
ESP-RC02-C-I1-C-02-EXT	Extension for feedback cable - branch FEED TR, D	Single cable - E-RI-TEB/LEB series 20 or higher
ESP-RC02-C-I1-X-01	Connection cable	Multicable - E-BM-AES, E-BM-RES
ESP-RC02-C-I1-X-02	Connection cable	Multicable - E-BM-AS
ESP-RC02-C-I1-X-03	Connection cable	Multicable - E-BM-TE*/LE*, Z-BM-*
ESP-RC02-C-I1-X-07	Connection cable	Multicable - E-BM-TID/LID, E-BM-TEB/LEB series 20 or higher
ESP-RC02-C-I2-A-01	Connection cable	Single cable - E-MI-AS-IR with /M12 option
ESP-RC02-C-I2-A-02	Connection cable	Single cable - E-MI-AC
ESP-RC02-C-I2-X-01	Monitor connection cable	Single cable - E-MI-AC
ESP-RC02-C-I2-X-02	Monitor connection cable	Single cable - E-BM-AC
ESP-RC02-C-I2-X-03	Monitor connection cable	Single cable - E-BM-AC
ESP-RC02-C-PE-02	PE cable	Single cable - E-BM-AC
ESP-RC02-T-TID-01	Electronic board holder	E-RI-TID-NP version

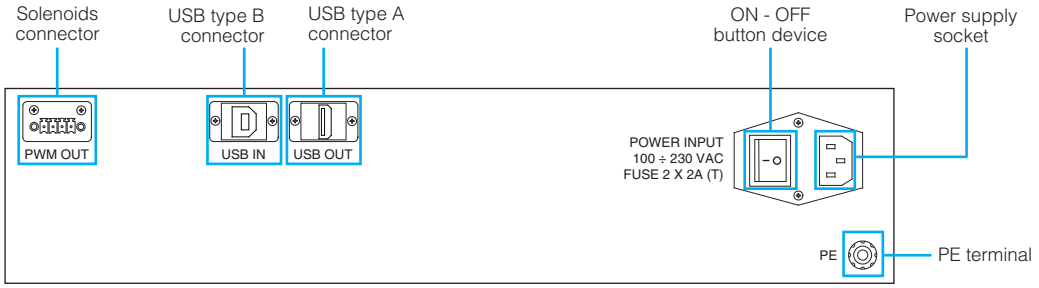
2 OVERVIEW

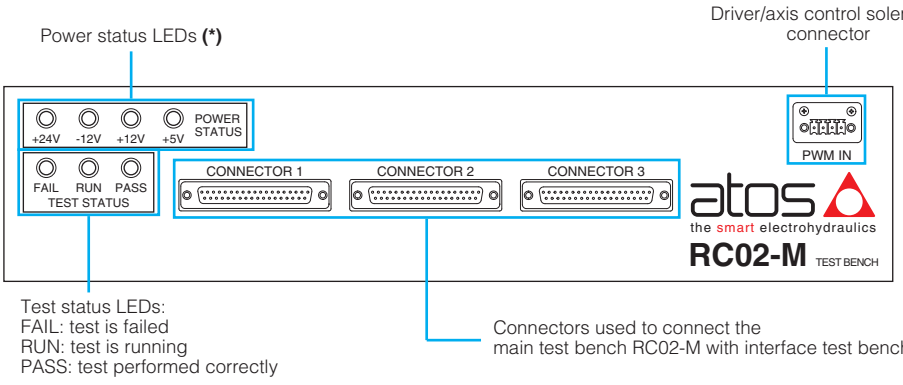
2.1 ESP-RC02-P - Programmable DC Power Supply - RIGOL DP832





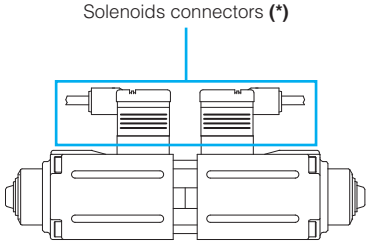
2.2 ESP-RC02-M - Main test bench





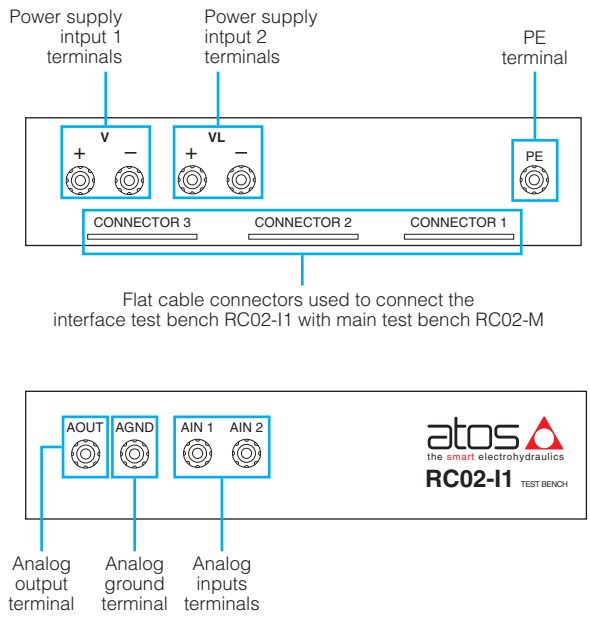
(*): With RC02-M switched on, all leds have to be turned on: if one or more leds are turned off, please contact the Atos technical support service

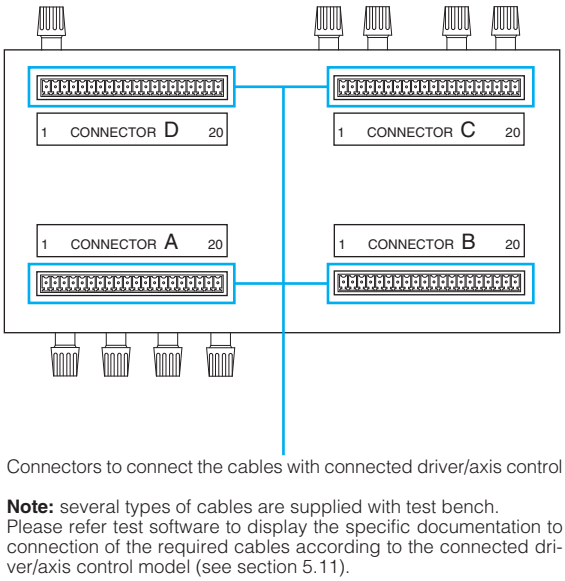
2.3 ESP-RC02-S - Solenoids



(*): solenoids are supplied with cable for the connection to PWM OUT connector of the ESP-RC02-M

2.4 **ESP-RC02-I1 -** Interface 1 test bench

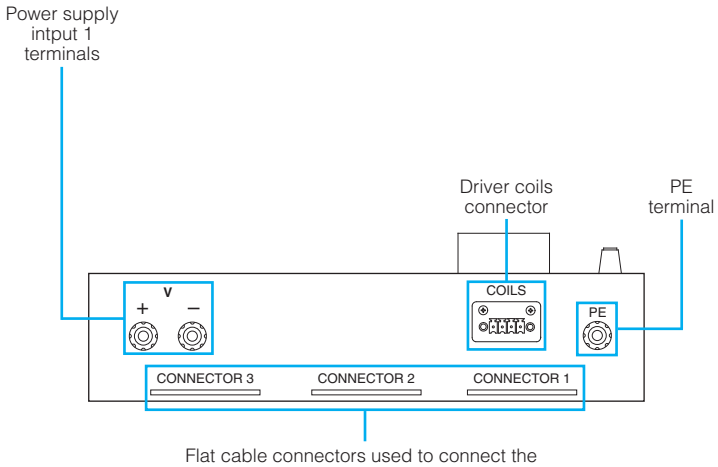


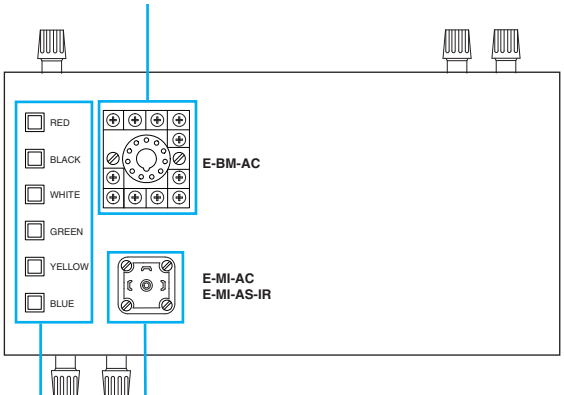


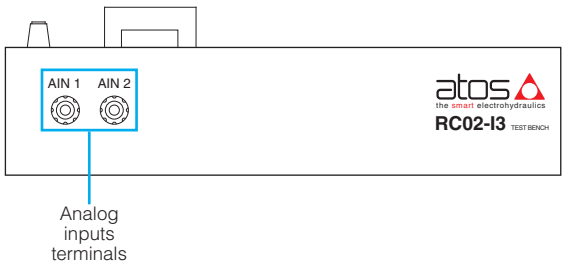
Note: several types of cables are supplied with test bench. Please refer test software to display the specific documentation to connection of the required cables according to the connected driver/axis control model (see section 5.11).

2.5 **ESP-RC02-I3 -** Interface 3 test bench

Note: several types of cables are supplied with test bench. Please refer test software to display the specific documentation to connection of the required cables according to the connected driver model (see section 5.11).





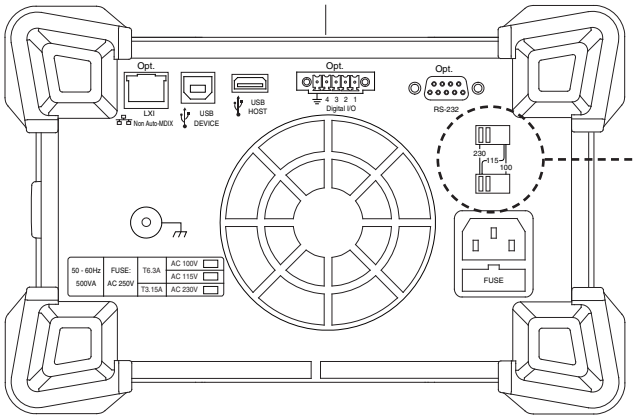


3 HARDWARE INSTALLATION

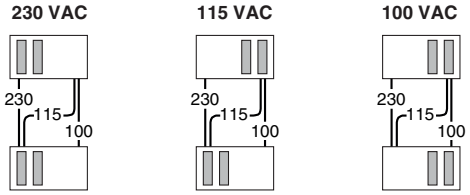
3.1 ESP-RC02-P - set voltage

WARNING! Set voltage according to the country/community where the ESP-RC02-P will be used.

ESP-RC02-P



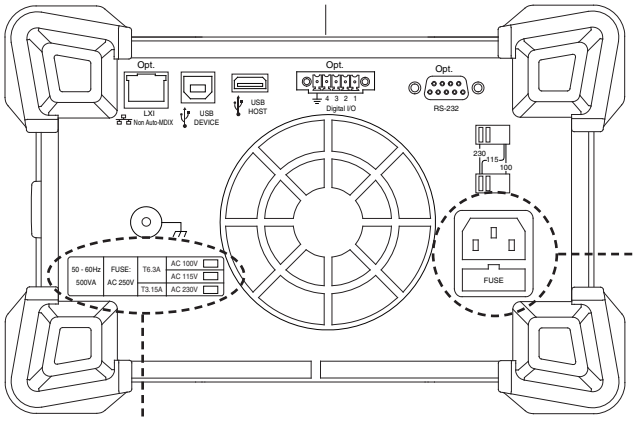
VOLTAGE SELECTOR SETTINGS



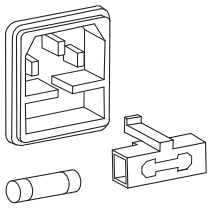
Note: default 230 VAC

WARNING! Check and eventually replace the fuse supplied with the ESP-RC02-P, according to the input voltage.

ESP-RC02-P



FUSE REPLACING



1. switch off the ESP-RC02-P
2. remove the cable ESP-RC02-C-220V-EU
3. use a straight screwdriver to extract the fuse holder
4. remove gently out the fuse

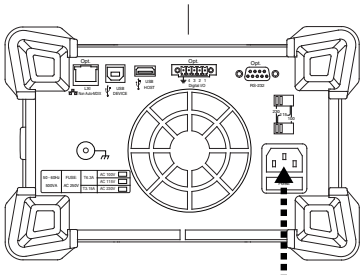
Refer label on rear panel of the instrument for the fuse specifications:

50 - 60Hz 500VA	FUSE: AC 250V	T6.3A	AC 100V ☐
			AC 115V ☐
		T3.15A	AC 230V ☐

Note: default T3.15A AC 230V

3.2 ESP-RC02-P - power supply cable connection

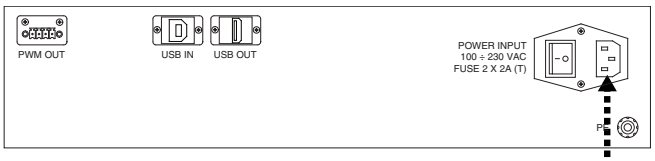
ESP-RC02-P



ESP-RC02-C-220V-EU

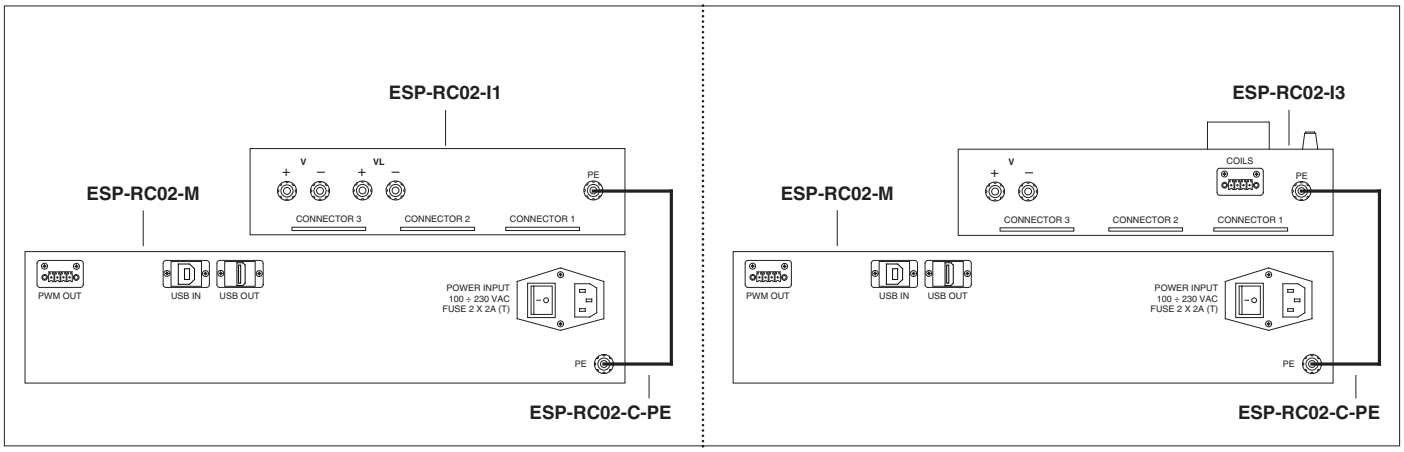
3.3 ESP-RC02-M - power supply cable connection

ESP-RC02-M

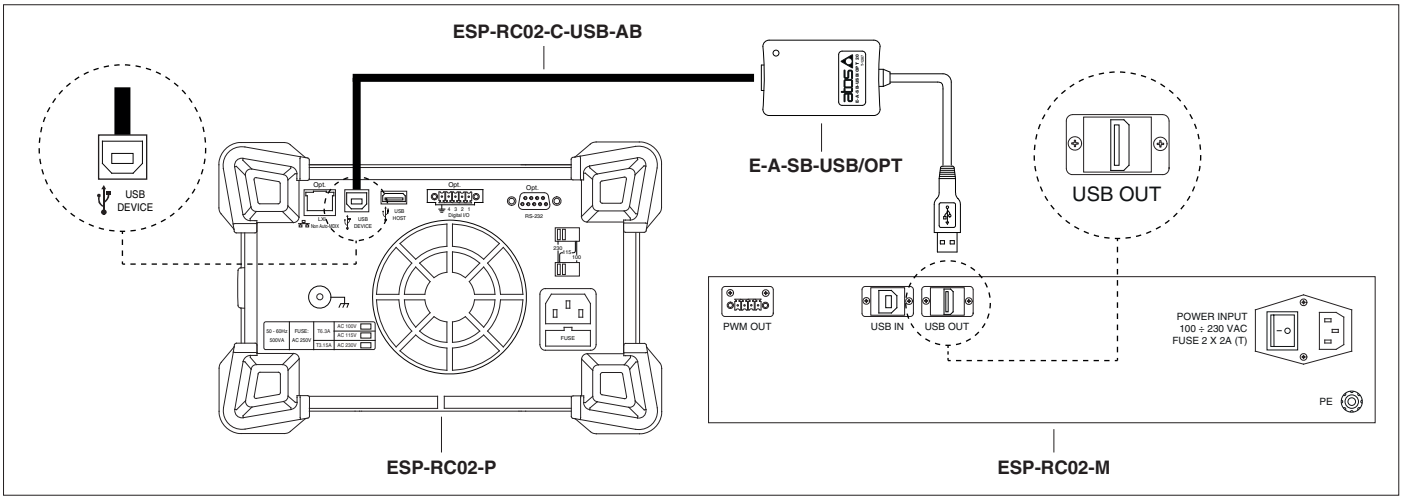


ESP-RC02-C-220V-EU

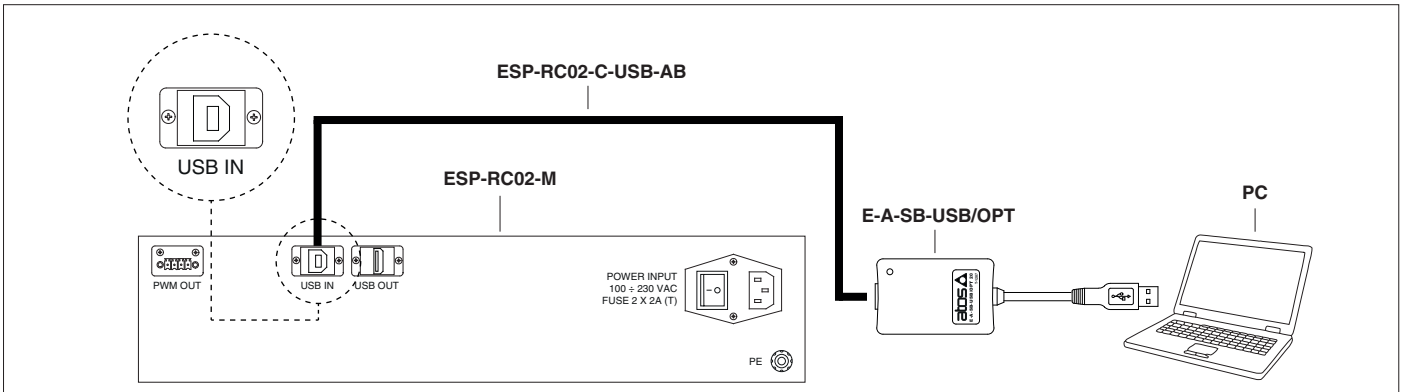
3.4 ESP-RC02-C-PE - PE cable connection from ESP-RC02-M to ESP-RC02-I*



3.5 ESP-RC02-C-USB-AB - USB cable connection from ESP-RC02-P to ESP-RC02-M

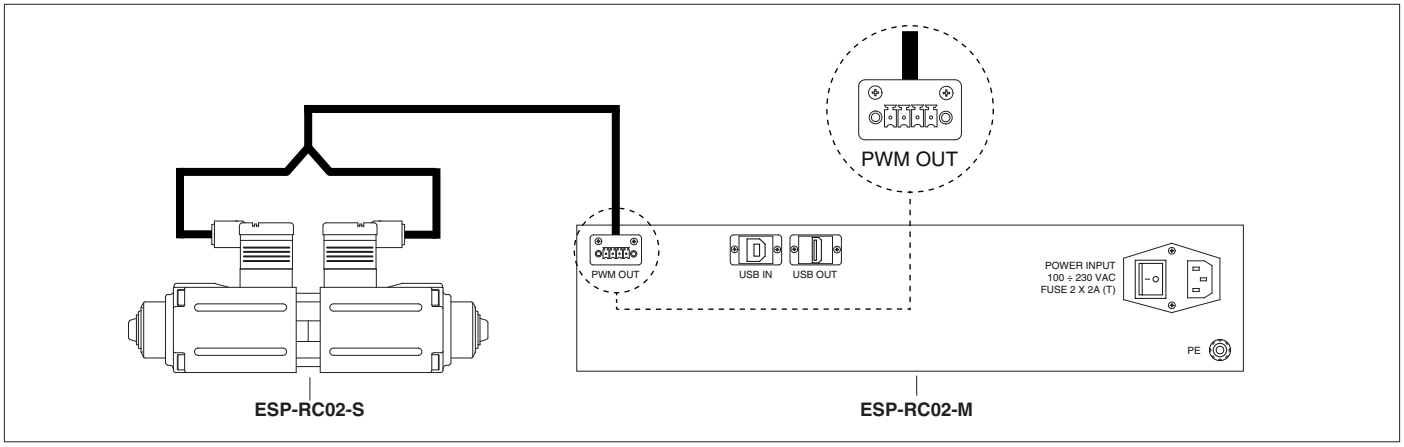


3.6 ESP-RC02-C-USB-AB - USB cable connection from ESP-RC02-M to PC



WARNING: USB port is not isolated! The use of isolator adapter is highly recommended for PC protection.

3.7 ESP-RC02-S - solenoids connection to ESP-RC02-M



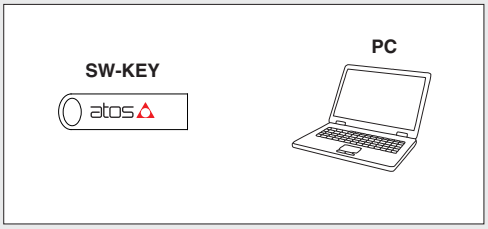
4 DRIVERS AND SOFTWARE INSTALLATION

4.1

Once terminated the hardware installation install on PC the drivers and software.

ATTENTION: all drivers and software have to be correctly installed on PC before to start with the test procedure

1. Connect the **SW-KEY** in USB PC
2. Open **Atos Software** directory
3. Go to section **4.2**



4.2 DRIVERS - installation

1. Open **USB-IR** directory:
   - click on ***.exe** to start driver installation
   - follow displayed instructions to complete the installation process
   - terminated the installation see the step **2**
2. Open **USB-M12** directory:
   - click on ***.exe** according to the 32-bit or 64-bit operating system installed on PC to start driver installation
   - follow displayed instructions to complete the installation process
   - terminated the installation see the next step **3**
3. Open **USB-SERIAL** directory:
   - click on ***.exe** to start driver installation
   - follow displayed instructions to complete the installation process
   - terminated the installation go to section **4.3**

4.3 SOFTWARE - installation

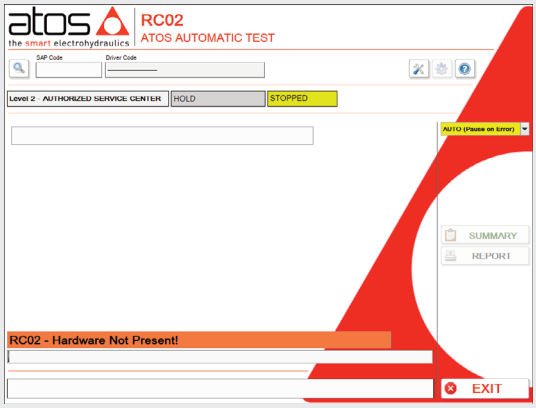
1. Open **E-SW-FULL** directory:
   - click on **setup.exe** to start software installation
   - follow displayed instructions to complete the installation process
   - terminated the installation see the step **2**
2. Open **Z-SW-FULL** directory:
   - click on **setup.exe** to start software installation
   - follow displayed instructions to complete the installation process
   - terminated the installation see the next step **3**
3. Open **AtosAutoTest** directory:
   - click on **setup.exe** to start software installation
   - follow displayed instructions to complete the installation process
   - terminated the installation see section **5**

5 ATOS AUTOMATIC TEST SOFTWARE STARTUP

Note: for more information about Atos Automatic Test (AAT) software, please refer the operating manual E-MAN-AAT available in MyAtos - Download area.

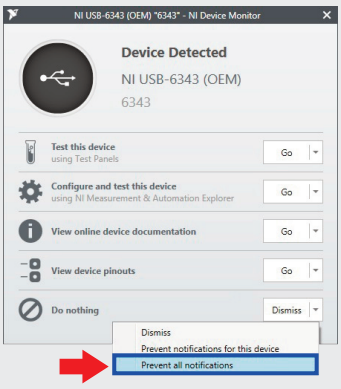
5.1

Launch the AAT software using the proper icon on PC



5.2

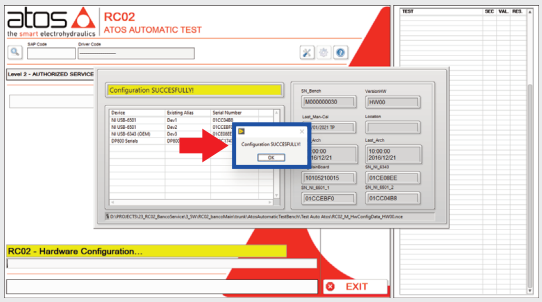
Switch on the **ESP-RC02-P** (see section **2.1**) and afterwards switch on the **ESP-RC02-M** (see section **2.2**)



If appears the image to the side select **Prevent all notification**

5.3

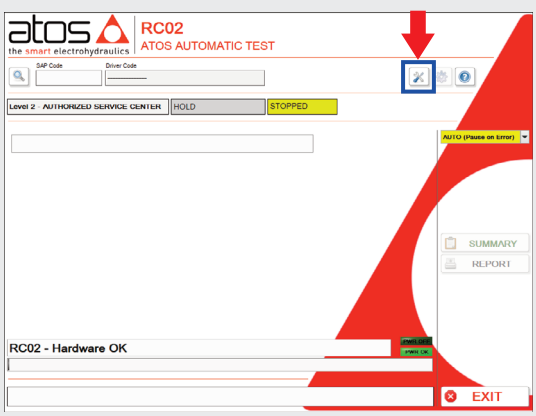
The system is configured automatically on the first run.
Press **OK** button.



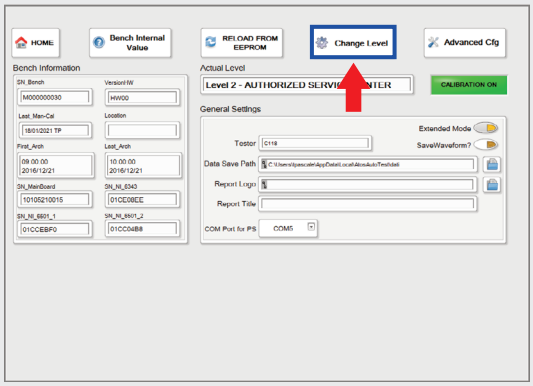
Note: in case of **Configuration Failed**, switch off the ESP-RC02-M and repeat the procedure starting from step **5.1**.
If the configuration is failed again, please contact the Atos technical support service

5.4

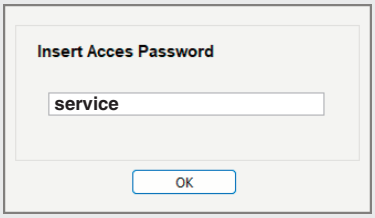
Press **Config** button



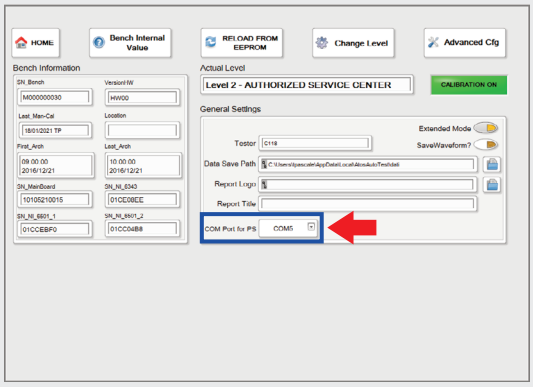
5.5 Press **Change Level** button



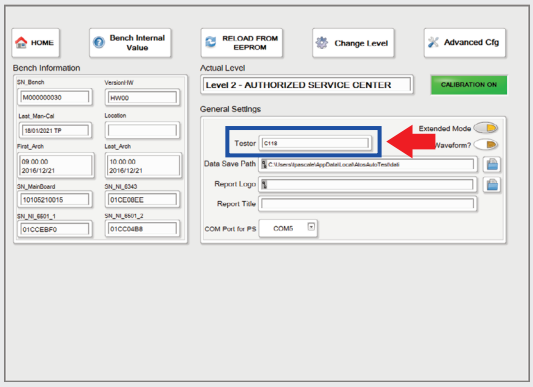
5.6 Insert access password: **service**
Press **OK** button



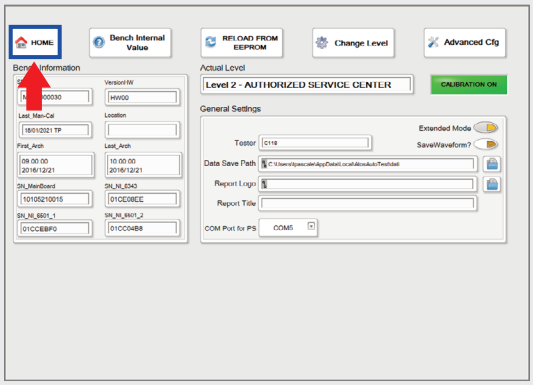
5.7 Only for drivers in **PS** execution (serial RS 232), press **COM** button and select the serial COM port



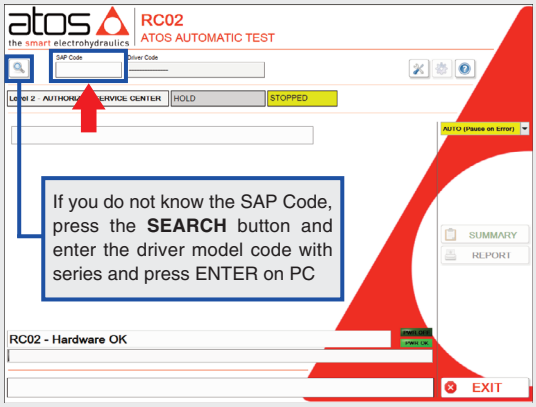
5.8 Insert the tester name and press ENTER on PC



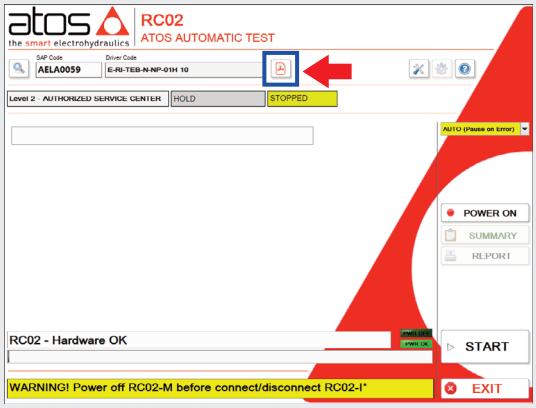
5.9 Press **HOME** button



5.10 Enter the **SAP Code** assigned to the driver/axis control to be tested, and press ENTER on PC

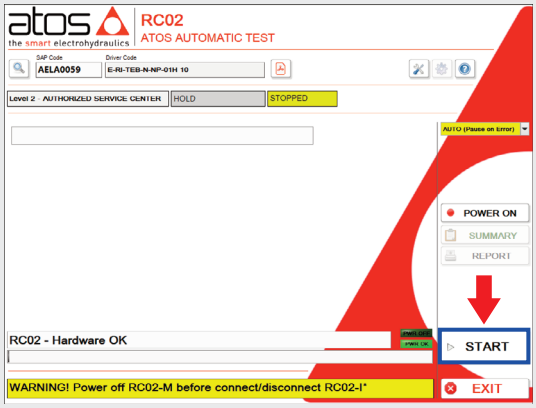


5.11 Before start the test procedure open the documentation (click on button showed by the red arrow) and connect the driver or axis control to be tested



WARNING: the RC02-M must be **SWITCHED-OFF** before to connect or disconnect the interface test bench RC02-I*

5.12 Check all connections and if they are OK press **START** button

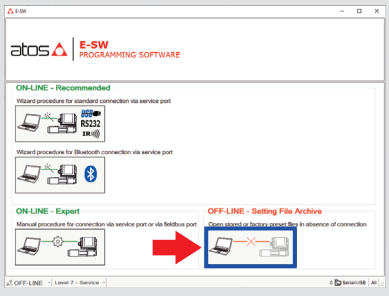


TEST PROCEDURE BEGINS !

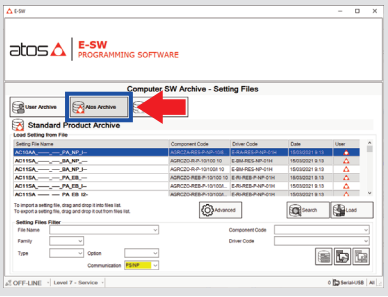
6 SETTING FILE DOWNLOAD PROCEDURE - E-SW or Z-SW level 7 functionality

ATTENTION: only for digital drivers and axis controls the test procedure erases all setting parameters!
Before to start the test procedure, save the user parameters: e.g. "**driver/axis control serial number_customer name**".
Once terminated the test, restore the parameters as showed below.

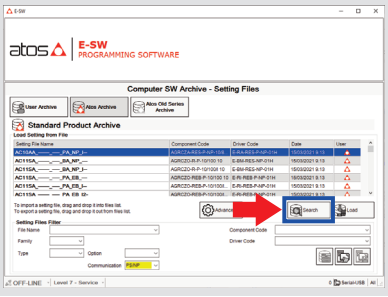
6.1 Switch off the driver/axis control and go to **OFF-LINE** mode.
Press **SETTING FILE ARCHIVE** button



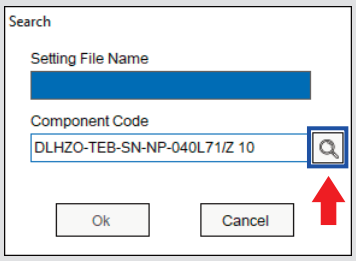
6.2 Press **Atos Archive** button



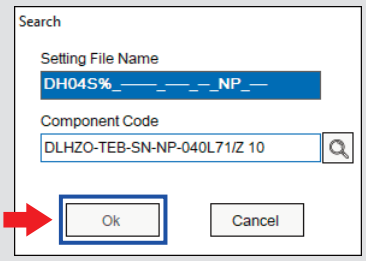
6.3 Press **Search** button



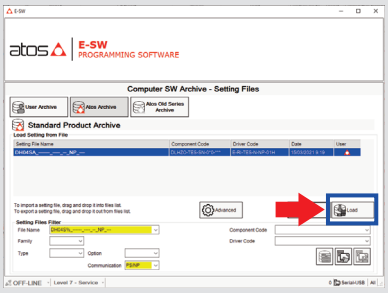
6.4 Insert Valve Code in **Component Code** field and press button on the right



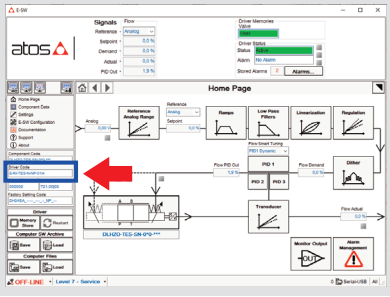
6.5 If Setting File Name is found, press **OK** button.
If Setting File Name is not found, contact: **ele-support@atos.com**



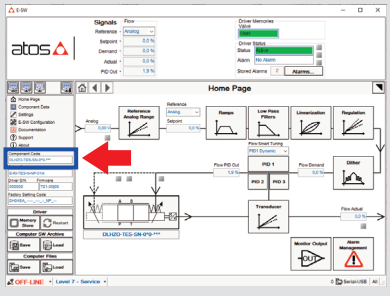
6.6 Press **Load** button



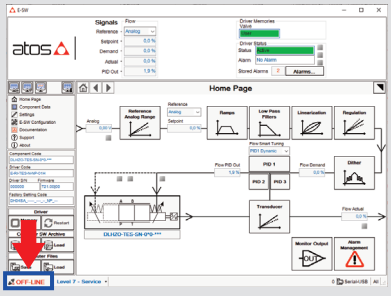
6.7 If Driver Code has no option, jump to step **6.8**
If Driver Code has options, modify Driver Code



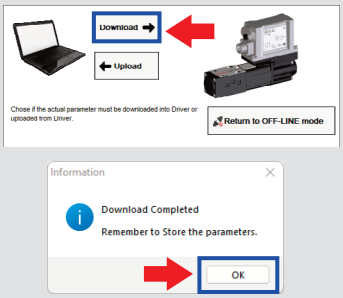
6.8 Insert Component Code



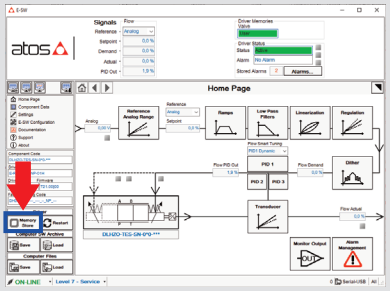
6.9 Switch on the driver/axis control and go to **ON-LINE** mode.



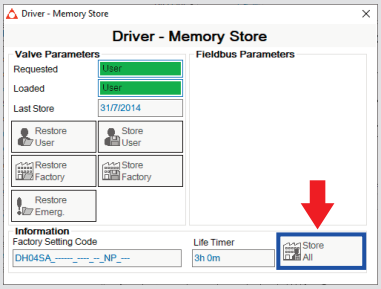
6.10 Press **Download** button and afterwards press **OK** button



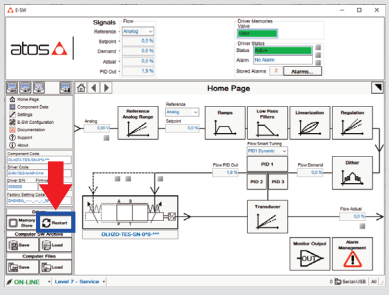
6.11 Press **Memory Store** button



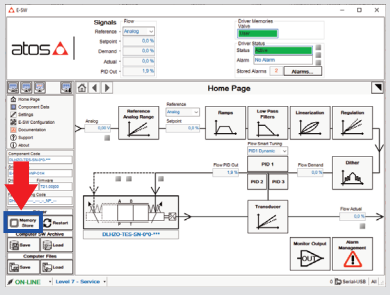
6.12 Press **Store All** button



6.13 Press **Restart** button



6.14 If required by the customer, download customer setting and press **Memory Store** button



6.15 Press **Store User** button