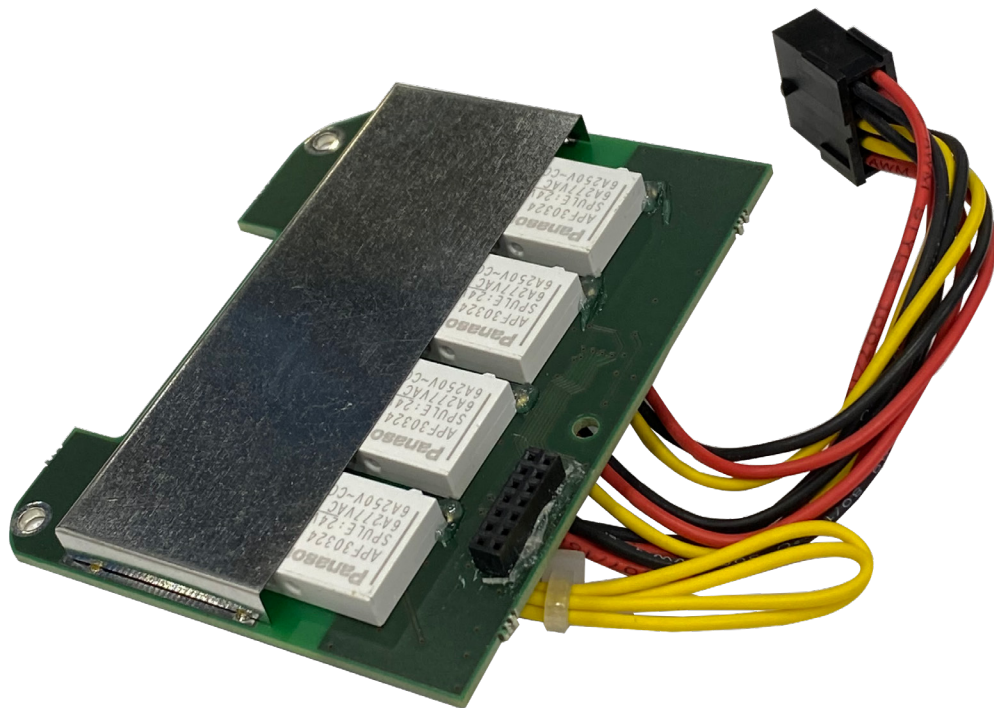


Bettis RTS Relay Board (RP4AF)

Electric Actuator



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Section 1: Tools

⚠ WARNING

Remove all power supplies before doing the exchange. Act always with caution during the exchange!

- Needle nose pliers
- Screw driver phillips
- Screw driver flat
- Allen key 5
- Socket wrench 5

Figure 1.



Section 2: Material

- 1x relay board RP4AF (ID:15772)
- 2x steel screw M3x16 (ID:952)
- 3x plastic distance 8 mm (ID:9896)
- 1x plastic screw M3x15 (ID:9895)
- 1x plastic nut M3 (ID:7084)
- 2x lock plates M3 red (ID:13674)

Figure 2.

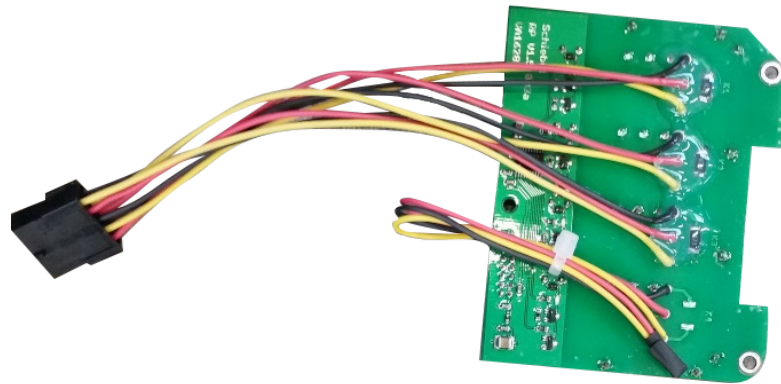


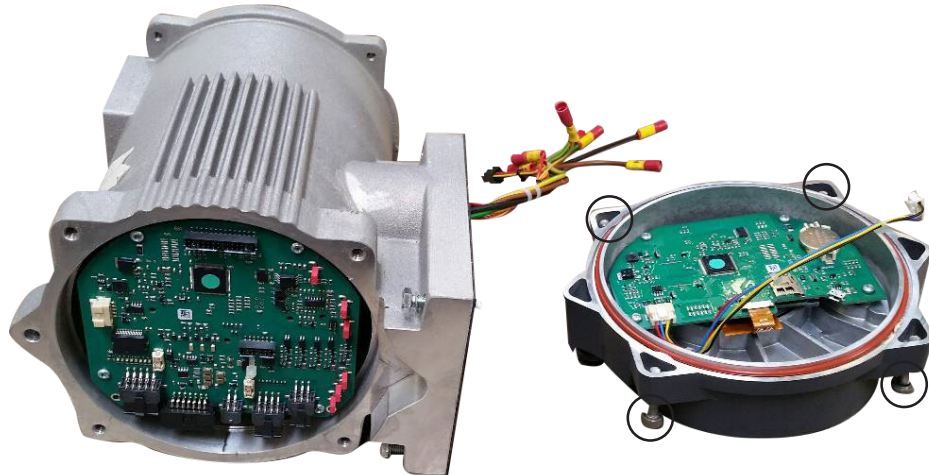
Figure 3.



Section 3: Installation

1. Unscrew the 4 hexagon socket screws from the cover and remove it carefully. Mind the connection cable between display and logic board.

Figure 4.



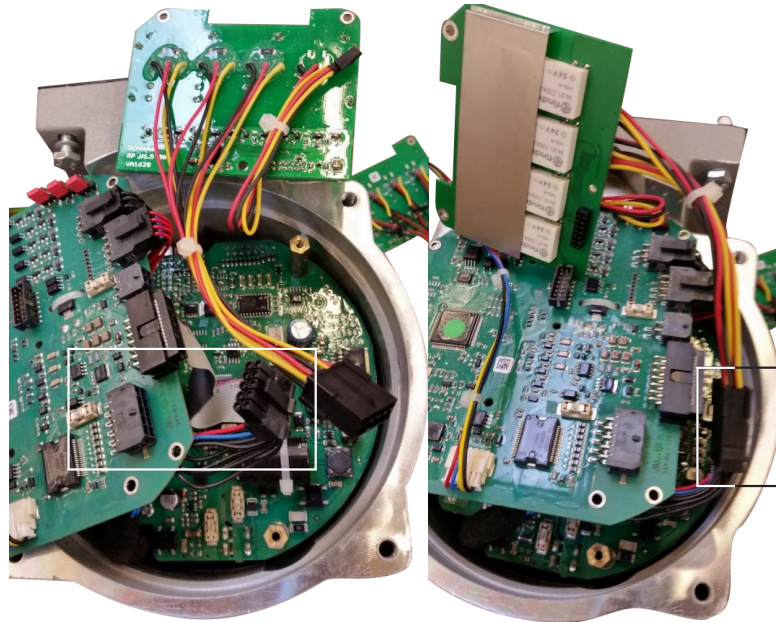
2. Unscrew the 4 cross recessed screws from the existing logic board and afterwards tilt it carefully to you.

Figure 5.



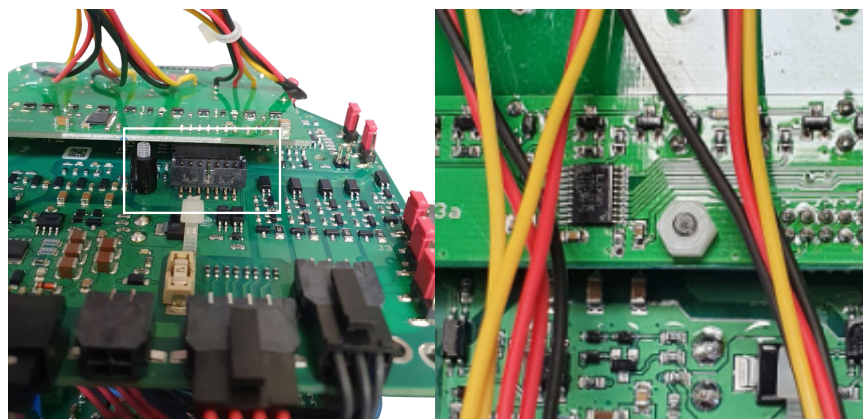
3. Remove the cable with the 10-pole connector and connect it with the relay board.

Figure 6.



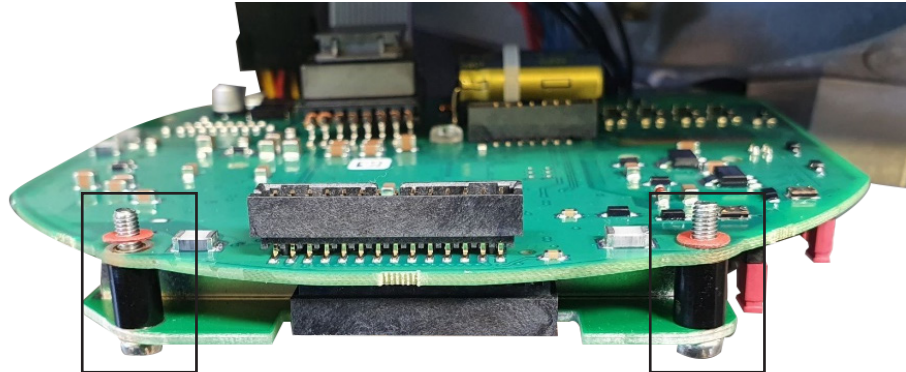
4. Insert plastic screw M3x15 in provided hole and add plastic distance on it, after connect the relay board with the logic board on suitable connector. Add plastic nut on plastic screw to fix the board.

Figure 7.



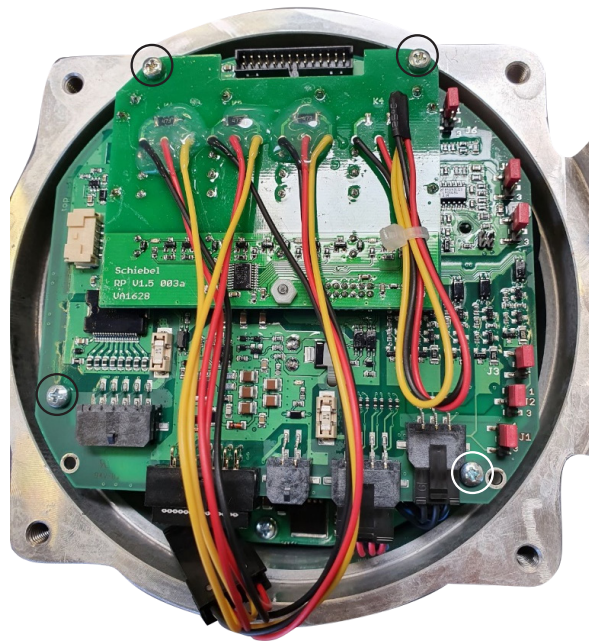
- Put two plastic distances 8 mm between logic and relay board, insert the M3x16 steel screws through the estimated holes in logic board, plastic distances and relay board and secure the screws with the red lock plates.

Figure 8.



- Install die logic + relay board back to the control (two small screws for original installation will remain). Take care of possible damage of cables or other parts.

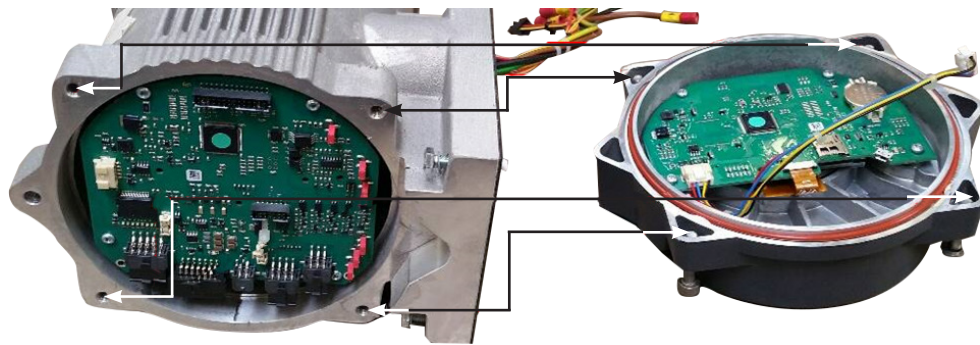
Figure 9.



7. Connect cable between display cover and logic board. Perform a Firmware update now, before installing display cover on the unit. This update is important for the following programming steps (use FW version display 1507, logic 219 or higher). For a detailed description on how to perform a firmware update, please refer to separate manual.

During display cover installation, pay attention to the O-ring which must sit correctly between cover and housing and fix it with the 4 hexagon socket screws.

Figure 10.



Section 4: Programming

For programming, request download of SMARTTOOL2 software through your Sales Representative.

After the successful installation and registration, connect with the actuator. Use the Wizard and choose function "Uninstall Extension Kit" and press "Apply" (see Figure 11). Then, select item 4 from the list to uninstall "Standard Bin. Outputs: 8x Standard Binary Outputs" (see Figure 12).

Figure 11.

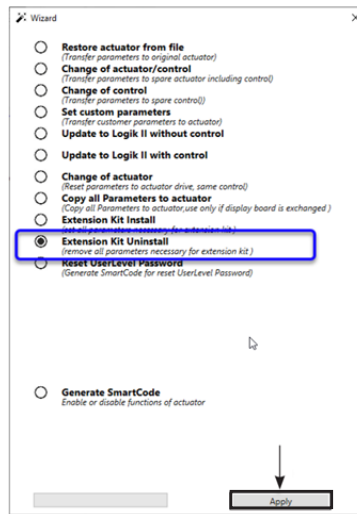
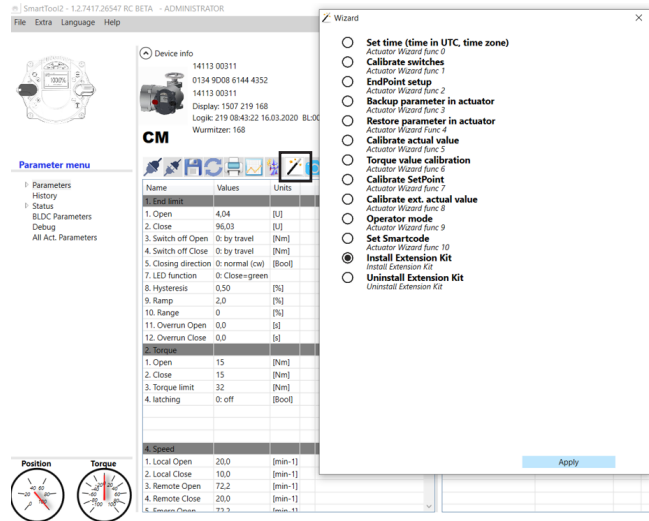


Figure 12.

Name	Apply
0 HW Relay Kits	
0 RP3E6A : 6x Relay Outputs , 3x Inputs	Apply
1 RP4AF : 4x Relay Outputs	Apply
2 RP6A : 6x Relay Outputs	Apply
3 Standard Bin.Input : 5x Standard Binary Inputs	Apply
4 Standard Bin.Outputs : 8x Standard Binary Outputs	Apply
1 HW Bus Kits	
0 ModbusRTU : ModbusRTU Interface	Apply
1 ModbusTCP : ModbusTCP Interface	Apply
2 Profibus : Profibus Interface	Apply
3 Profinet : Profinet Interface	Apply
4 Fieldbus Foundation : FF Interface	Apply
5 Hart : Hard Interface	Apply
6 Modbus2 : Modbus2 interface	Apply
7 Profibus DP V1 : Profibus DP V1 interface	Apply
8 Profibus DP RedCom : Profibus DP RedCom interface	Apply
9 Modbus2 Repeater : Modbus2 with Repeater interface	Apply
10 EtherNet IP : EtherNet IP interface	Apply
2 Other Kits	
0 Failsafe Handwheel unit : Hand Wheel operating kit for Failsafe	Apply

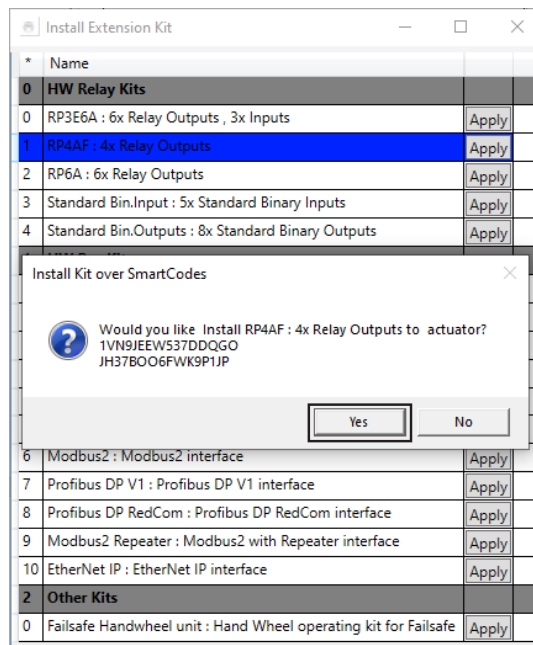
After the successful uninstallation of the extension kit, use the Wizard and choose function "Install Extension Kit" and press "Apply".

Figure 13.



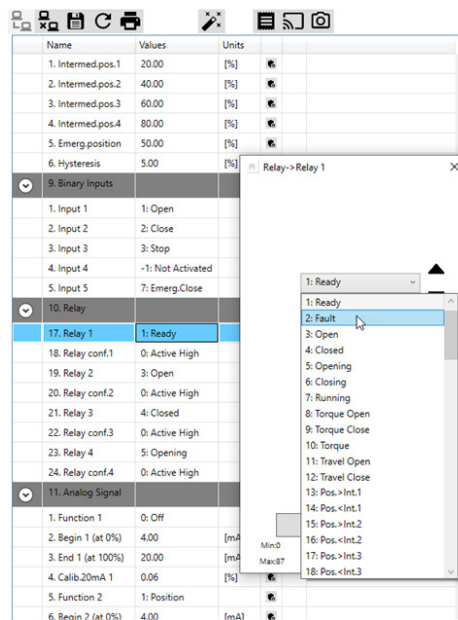
At the line "RP4AF: 4x Relay Outputs" press "Apply" and confirm the installation by pressing "Yes".

Figure 14.



After installation press the "Refresh Button". In parameter group "10. Relay" you can define the functionality of the different relays from P10.17 to P10.24.

Figure 15.



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