

# eVD4 – RBX615

## Troubleshooting manual

### Objective

The objective of this manual is to provide with an instant solution to the problems that you might face while using RBX615. Whenever you cope with an issue, go through this troubleshooting manual to find out the way to fix it. However, if you cannot find the solution among the ones listed below, please do not hesitate to contact the eVD4 support team: [eVD4.support@it.abb.com](mailto:eVD4.support@it.abb.com)

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**1. I have just powered on the eVD4, I see only the red trip LED on the HMI lit on. What can I do?**

It's just a LED to be switched off. You only need to press the Clear button on the HMI, select "Indication and LEDs" (right arrow), move down with the arrow until you see "Clear" and press the Enter button.

If the LED turns on again, it means that a protection function is operating. In this case please refer to point 2.

**2. I have just powered on the eVD4, I see the Trip LED on the HMI lit on, as other red LEDs in the vertical HMI column. I cannot close the circuit breaker, what can I do?**

If the Trip LED is on while also the other LEDs are red, it means that a protection operated. To check this, it is sufficient to press the LED page key and look if in the first page these indications appear:

- "EMERGENCY TRIP": it indicates that input 8 is not supplied: it is sufficient to supply it in order to disable the "Emergency opening" command (please refer to the "Quick starting guide" for further explanations).
- "LOCKOUT": it indicates when the circuit breaker is in a lockout status because a protection operated before. In this case, please follow this procedure to remove the temporary lockout status: press the Clear button, then select "TRPPTRC" (right arrow), press Enter and then press the bottom arrow till "Clear" appears. Press Enter again and the circuit breaker will be unlocked and ready to operate.

To switch off the LEDs that might still be on, please follow the instruction at point 1 and repeat the same procedure selecting also "LEDs" from the menu Clear.

**3. Where can I see the meaning of the HMI LEDs?**

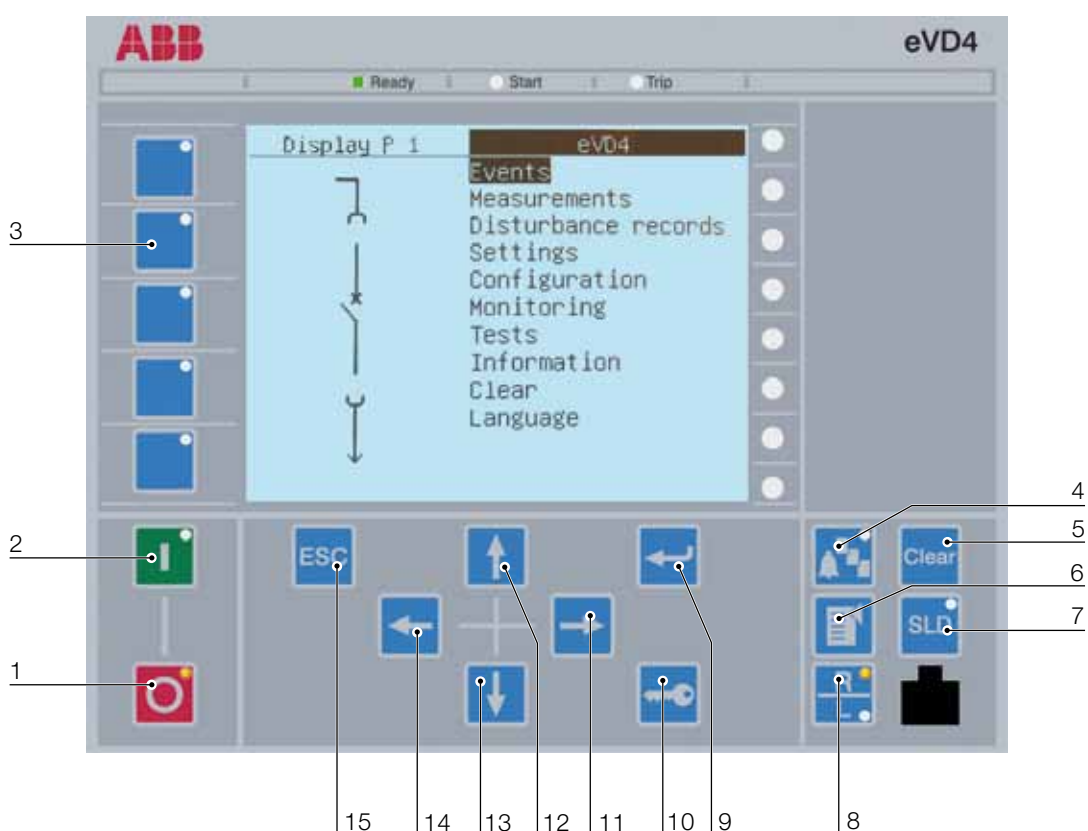
Press the LED page key and select the page by pushing again the same button.

There are 3 LED pages with 8 indicators each. The page number is shown on the left side bar of the display.

**4. I am not able to operate the CB from the HMI, how can I do?**

You just need to check the following:

- Verify that the remote/local pushbutton is in the local position (LED indication on the L side of the button). Please refer to point 5 for further support.
- Ensure that the Single Line Diagram is highlighted (top bar in the left side of the HMI display highlighted in black), otherwise press the SLD pushbutton. Please refer to point 6 for further support.
- If you have the withdrawable version of the eVD4, please make sure that the truck is in the correct position. You can check it by looking at the Single Line Diagram symbols. You should see the right one of the picture beside. Please refer to point 7 for further support.
- Ensure that the CB symbol in the SLD is selected, otherwise use the up and down arrows to select it.
- Please verify that the protection's logics allow to close the breaker, checking the "ENA\_CLOSE" status. Press the Menu button, select "Monitoring" (right arrow), then "I/O



- 1 Opening
- 2 Closing
- 3 Function/Application keys
- 4 LED page key
- 5 Delete
- 6 Menu
- 7 Single-line diagram
- 8 Local/Remote
- 9 Enter
- 10 Password
- 11 Right
- 12 Up
- 13 Down
- 14 Left
- 15 Escape

Status” (right arrow), then “Control” (right arrow), then “WCBXCBR” (right arrow) (or “FCBXCBR” for fixed version), then “Input” (right arrow) and finally you are able to see if the “ENA\_CLOSE” value is “True”. If it is “False” please verify that all the necessary binary inputs are supplied (refer to the Quick starting guide) and that no protections operated before (refer to point 2).

- If the -RLE2 has been activated in order to enable truck movement, it is necessary to wait one minute to let the -RLE2 to go back in the locking position and then it is possible to operate the CB.
- Check if the spring is charged by checking the flag.

Now you are able to use the open and close pushbuttons to open and close the CB.



#### 5. I push the remote/local push button but there is no change in the status. What can I do?

There may be two possible way to make it work:

- First try to keep the R/L button pushed for more than two seconds. This way it should switch from R to L or viceversa.
- In case you are operating on the Single Line Diagram (the LED on the SLD button is lit), the R/L push button is not active. Press the SLD button to turn it off: now you are able to operate with the R/L push button.



#### 6. I push the SLD button but it does not switch. I am not able to operate on the Single Line Diagram, what can I do?

If you are inside a menu, you are not allowed to have access to the Single Line Diagram and so the SLD pushbutton is disabled. Please go back to the main menu (Menu button) and you will be able to operate the SLD button.

#### 7. After withdrawing the CB, I see in the SLD a wrong position of the truck, what can I do? (only for withdrawable version)

Most probably you have not racked out the truck completely. In this way the position sensors are not able to detect it in the correct position and this will not allow you to operate the CB. Please be sure that the truck has been racked out till the final position.

#### 8. I am not able to close the CB from remote when it is withdrawn, why? (only for withdrawable version)

This is a pre-configuration logic interlock. When the truck is racked out you can just operate the CB from local, so via the HMI.

#### 9. I am not able to rack in (rack out) the eVD4, what can I do? (only for withdrawable version)

You just need to check the following:

- The CB has to be open. Otherwise you are not allowed to rack in/out for safety reason.

- If you have the -RLE2, it must be activated to allow truck movement. Please refer to point 10 for further support.
- If you have the motorized truck, the motor has to be activated. Please refer to point 11 for further support.

#### 10. How to activate the -RLE2? (only for withdrawable version)

Select the Single Line Diagram by pushing the SLD button, then move with the arrows to the truck symbol and press the green closing button.

#### 11. How to activate the truck motor? (only for withdrawable version with motorized truck)

Select the Single Line Diagram by pushing the SLD button, then move with the arrows to the truck symbol and press the green closing button to rack in; otherwise push the red opening button to rack out.

#### 12. I cannot operate the -RLE1, why?

If you are acting from local, the -RLE1 is automatically activated with the closing command. No need for a dedicated command.

#### 13. How can I modify the setting of a protection function (e.g. start value)?

To modify the setting of a protection function, please follow this procedure. Press the Menu button, then “Settings” (right arrow), again “Settings” (right arrow), press the Enter button to choose the Settings Group (4 groups are available) and finally select the protection you want to edit.

For example, if you would like to change the start value of the PHIPTOC1 protection, select “Start Value” (right arrow), then press the Enter button and use the arrows (up and down) to edit it. To save the changes press the Menu button and select “Yes”.

#### 14. How can I disable a protection function?

Press the Menu button, then “Settings” (right arrow), again “Settings” (right arrow), press the Enter button to choose the Settings Group (4 groups are available) and finally select the protection you want to disable. For example select “Voltage protection” (right arrow), then “PHPTOV1” (right arrow), then “Operation” (Enter button), press the bottom arrow until you see “Off” and press the Enter button.

To save the changes press the Menu button and select “Yes”.

#### 15. Can I add a protection function that is not included in the RBX615 license level?

The protection functions you can use are the ones available in your license level. In the catalogue you can find the list of the available functions per each license level.

#### 16. I have a problem not listed here, what can I do?

For any support you may need, please do not hesitate to write to the dedicated mailbox (evd4.support@it.abb.com): the eVD4 support team will be glad to answer your request.

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