

1. ESD Warning

Please note!

The life span of electronics can be affected by damage caused by electrostatic discharge. This can happen if a charged tool or person touches a component. Therefore it is very important that all tools and personnel are discharged by touching an earthed point before the printed circuit board or any of the components are touched. It is equally important to discharge the package with the new component before opening it.

A person walking on a carpet can be charged with up to fifteen thousand volt (15000V). Compare this with the fact that some sensitive components can be destroyed when discharged on a much lower level (about 100V). We kindly ask you to pay notice to this, as this is a vital point in order to ensure the life span of the product.

2. Tools

Torx T6 for removing the Display

Torx T15 for removing the Cover from PST30 ... PST72

Torx T20 for removing the Printed Circuit Board.
for removing the Cover from PST85...PST300 and PSTB370...PSTB1050

3. PCB information

For upgrade to **Torque Control** both LV board and HV board needs to be upgrade to following version:

LV board 1SFB636068D1011

HV board 1SFB636068D1013

4. Step by step

1. Before disconnecting the cables mark them.

2. Disconnect the cables from terminals 1L1, 3L2, and 5L3 (main voltage).

3. Disconnect all cables from the terminals 1 to 20, external keypad, "Analogue Out/PTC" sensor and the Fieldbus plug.

4. Remove the front cover (four screws).

5. Discharge the tools and yourself by touching earth (if you are not earthed).

6. If the cables from the thyristors not are marked, mark them with 1, 2 and 3. Disconnect the cables on the HV-Board from the thyristors and fans.

7. Remove the five screws.

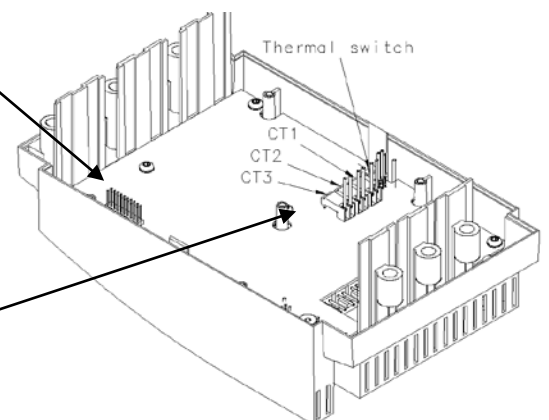
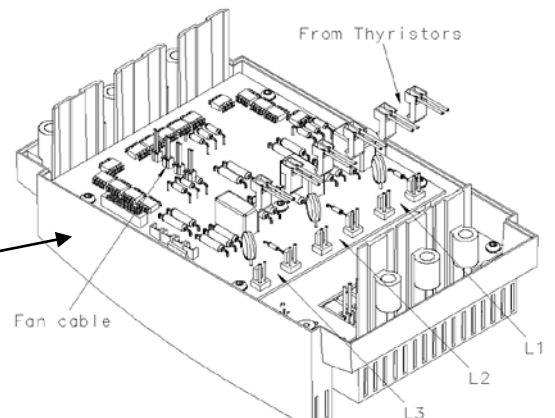
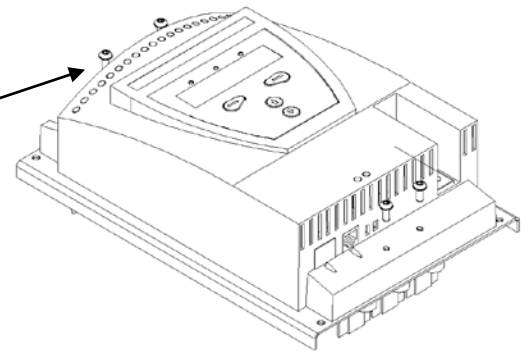
8. Remove the old HV-Board. **Don't lose the connector between HV-Board and LV-Board.**

If only the HV-Board will be changed go to step 21.

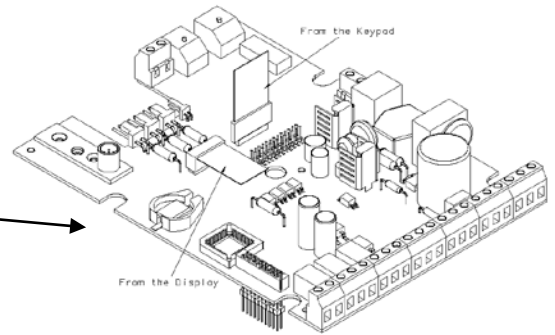
If the Softstarter shall be upgrade to Torque Control go to step 9.

9. If the cables from the current transformers not are marked, mark them with 1, 2 and 3. Disconnect the cables on the LV-Board from the thermal switch and current transformers.

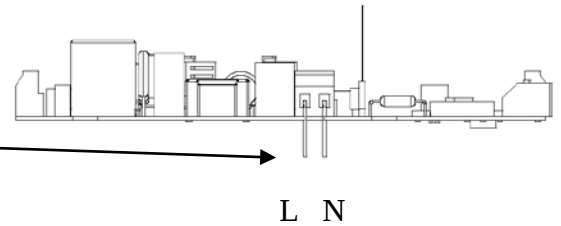
10. Remove the six screws.



11. Remove the old LV-Board and disconnect the cables from the Display and the Keypad.

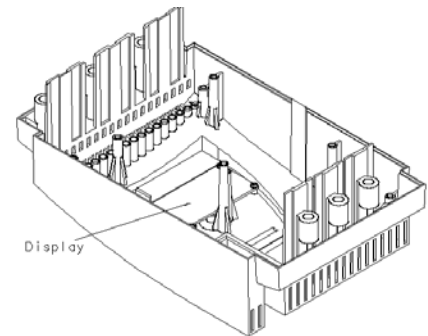


12. On PSTB unit remove the cables from the built in by-pass contactor after marking them. If only the LV-Board will be changed or upgrade to Torque Control go to step 19.



13. To change the Display

14. Remove the four screws and take away the old Display.

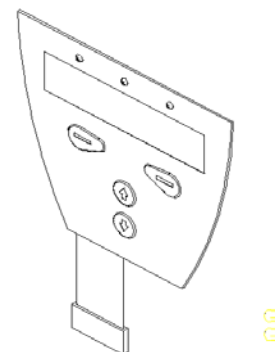


15. Mount the new Display. **Don't forget to remove the protective film.**
Go to step 19.

16. To change the Keypad.

17. Remove the Keypad from the Cover.

18. Clean the surface of the Cover with Etanol and mount the new Keypad. **Don't forget to remove the protective film.**



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- From the Keypad
- From the Display
- N L 33
30 31 32

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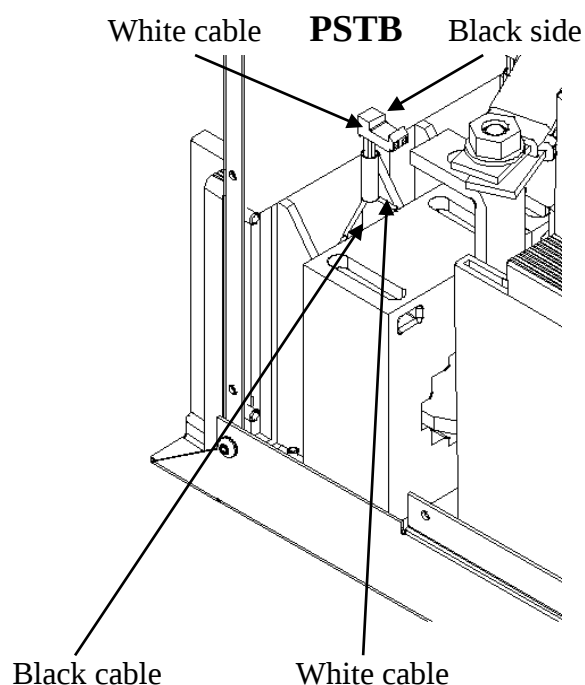
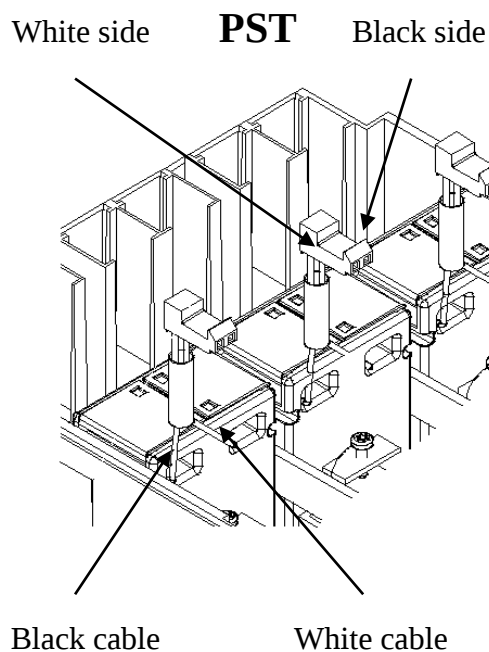
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25. For upgrade to Torque Control it is important to check the connection on the current transformer (see fig below).

26. If the two cables on each current transformer are **black** use a multimeter to detect the right connection. The resistance of the current transformer are between 0,2-6 ohm, depending of the PST(B) size.

27. Change the position of the cables on the current transformers to obtain correct position if necessary.



28. Mount the front cover (four screws).

29. Connect all cables to terminal 1 to 20, external keypad, "Analogue Out/PTC", Fieldbusplug and the cables to 1L1, 3L2 and 5L3 (main voltage).

