

8837-Ax – Product Fix:

Release date: 2008-12-02

Affected model: 8837-Ax – IGBT Chopper / Inverter

Symptoms: Random overcurrents and overheats may be detected by the module 8837-Ax when pulse signals, from the 9029-00 (Chopper/Inverter Control Unit) or the 9030-30 (Thyristor Firing Unit), are applied to the switching control inputs of this module.

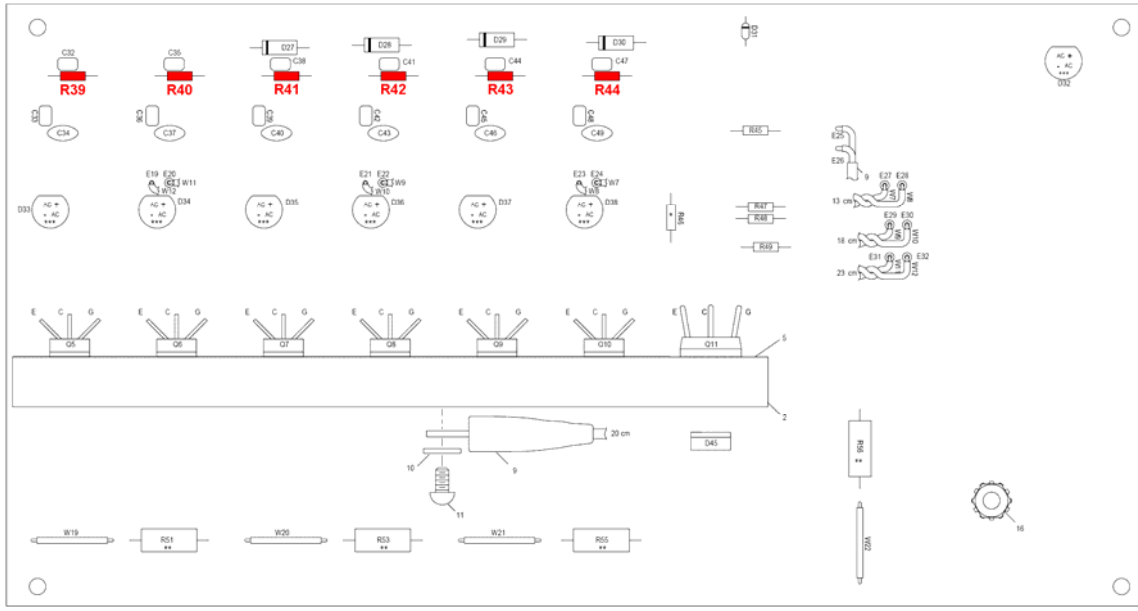
Causes: The propagation delay time, at the opening of the IGBTs, is a little bit longer than the dead time (2 μ S) causing a momentary short circuit on the DC bus of the 8837-Ax.

Note: *Although momentary short circuits may happen on the DC bus, be advised that this problem cannot damage the circuit of the 8837-Ax.*

How to fix: To fix the problem, six resistors (R39, R40, R41, R42, R43 and R44) must be replaced on the printed circuit board. To know the new values of these resistors and their locations on the printed circuit board, refer to the table and figure below.

Identification	Current resistor value	New resistor value
R39	1 k Ω ¼ W 5%	510 Ω ¼ W 5%
R40		
R41		
R42		
R43		
R44		

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Important: The resistors are located on the same side than the IGBTs as shown in the above figure. This means that they cannot be reached as long as the printed circuit board is not removed from the module's housing.

To avoid any damages to the printed circuit board, it must be removed from the module's housing according to the following instructions:

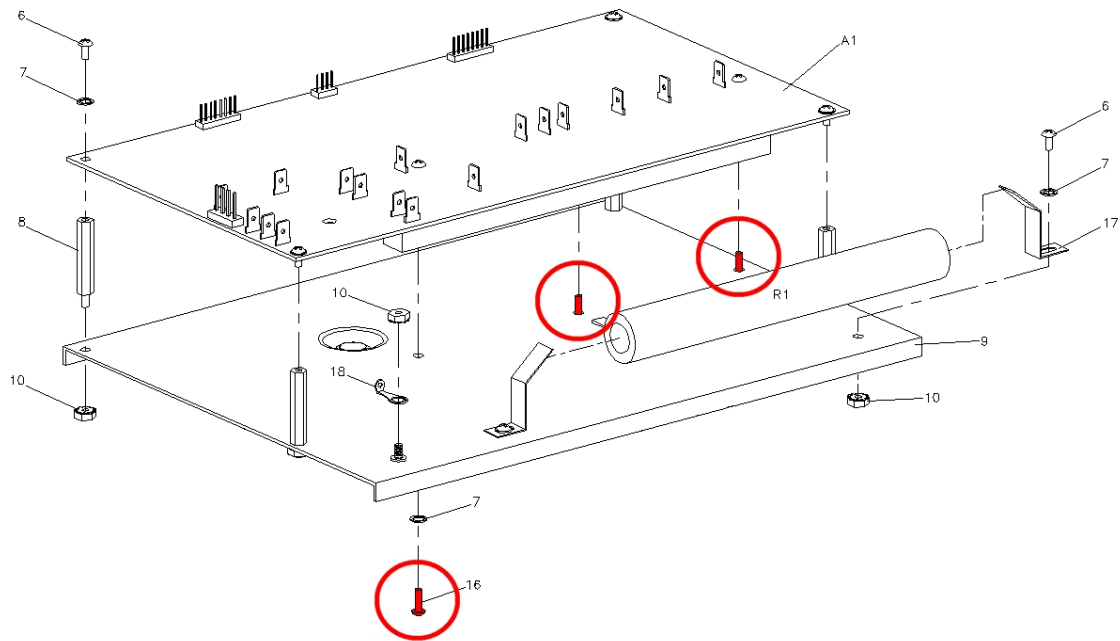
Disconnect all wires and harnesses from the printed circuit board;

Remove the two nuts located beneath the module's housing and lift up the base plate on which the printed circuit board is secured;

Note: On some earlier versions of the 8837-Ax, the base plate may have been secured to the housing using two screws.

Once the base plate has been lifted up, remove the three screws identified on the figure below;

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Finally, remove the screws located at each corner of the printed circuit board.

Note: In case you encounter difficulties while performing this modification, do not hesitate to contact us by Email at: services@labvolt.com.