General Service Bulletin

RTAC, CVHE/F/G, CVGF & CDHF/G

Cutler Hammer N Frame (800, 1200 Amp) Molded Case Switches

Order Number: **CTV-SVB03A-EN** DATE: August, 2002

Introduction

The purpose of this bulletin is to advise customers of a problem associated with Cutler-Hammer N Frame Molded Case Switches, 800 and 1200 amp versions, that were manufactured between 11-1-01 and 5-14-02.These switches have an internal protective function that will trip the molded case switch, (disconnect), if the temperature of the printed circuit board reaches a certain limit. Units made during this time frame were programmed with a set point that was too low, therefore leading to possible nuisance tripping of the molded case switches.

NOTICE: Warnings and Cautions appear at appropriate sections throughout this literature. Read these carefully.

⚠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

CAUTION: Indicates a situation that may result in equipment or property - damage - only accidents.

Discussion

Cutler-Hammer N Frame Molded Case Switches, 800 and 1200 amp versions, that were installed in RTAC, CVHE/F/G, CVGF and CDHF/G unit panels from November 2001 (U01L*****/L01L*****) through May 2002 (U02E*****/ L02E*****) are affected. These switches have an internal protective function that will trip the molded case switch (disconnect), if the temperature of the printed circuit board reaches a certain limit.(This serves to protect the circuit board if the temperature goes above the threshold of what it can handle.) This limit is established by a set point that is programmed into the unit during manufacturing. Units made during the referenced time frame were programmed with a set point that was too low, leading to possible nuisance tripping of the molded case switches.

This type of Molded Case Switch has an electronic 'plug in" module that includes a temperature sensing function, which is programmable. The above mentioned Molded Case Switches have been incorrectly programmed to trip at a lower than required temperature setting. There is no safety issue and the module can be re-programmed.

Units Affected

RTAC and RTAC, CVHE/F/G, CVGF and CDHF/G units built between November 2001 (U01L*****/L01L*****) through May 2002 (U02E*****/ L02E*****) may be affected by this bulletin.

Repair Procedure

Obtain programming tool from Eaton per the parts ordering sheet. Read the complete procedure prior to re-programming.

⚠ WARNING

Hazardous Voltage!

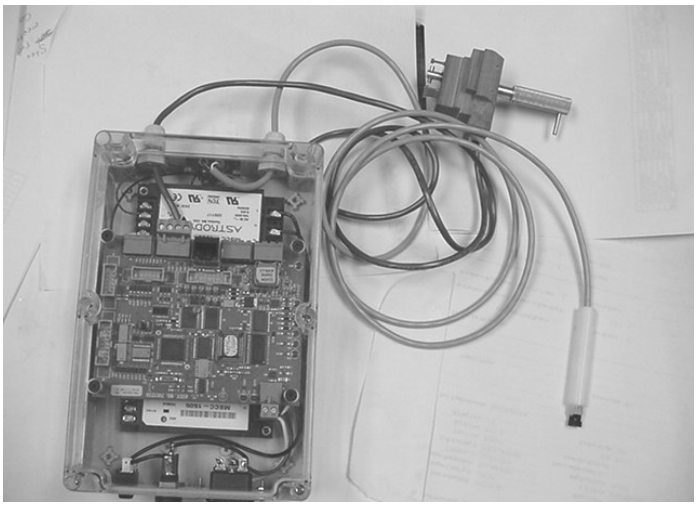
Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout / tagout procedures to ensure the power can not be inadvertently energized. Failure to disconnect power before servicing could result in death or serious injury.

Setup / Hookup

The kit that is used to change the temperature byte in the switch consists of a clear connector box and a black programmer.

The clear connector box connects to the switch through the rating plug opening and the telephone plug jack in the switch. This unit also has a black power cord that is not shown in Figure 1.

Figure 1: Clear Box



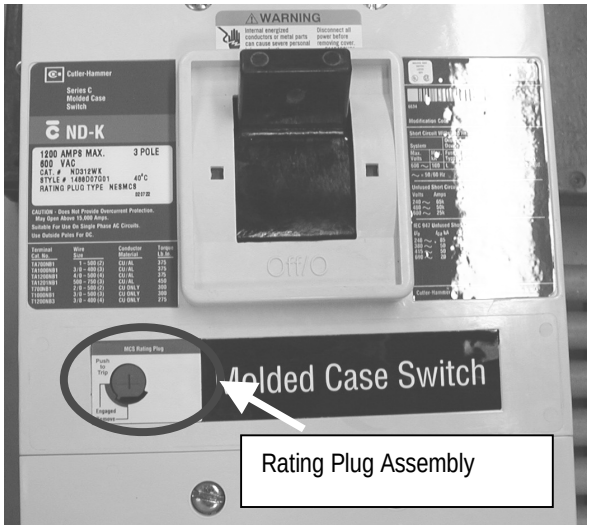
Below is a picture of the black portable programmer that connects to the clear box by a connection from the coiled black plug-in connector that is shown. The plug-in connector attaches on the top of the clear connector box cover.

Figure 2: Black Portable Programer

The molded case switch has a rating plug module on the left side of the switch and a telephone jack on the right side of the switch under the upper right hand corner of the Molded Case Switch nameplate.

1. **Turn off the power**, press push to trip button and turn the rating plug indicator to the bottom to disengage the rating plug module.

Figure 3: Rating Plug



2. Carefully pry up on the rating plug to remove as shown in Figure 4.

Figure 4: Prying the rating plug

3. Carefully remove the rating plug assembly module.

Figure 5: Removing Rating Plug

4. With the rating plug module removed the PC board is revealed. The Green board must be 70C1132, if not do not use the programmer.

Note: The identification of the PC board may be obscured by a paper tag with the number 70C1084 on it. The number that will identify the correct board is silk-screened on the PC board just above the rating plug. If it is covered by a paper label, remove the label and read the 70C1132 silk-screened on the board.

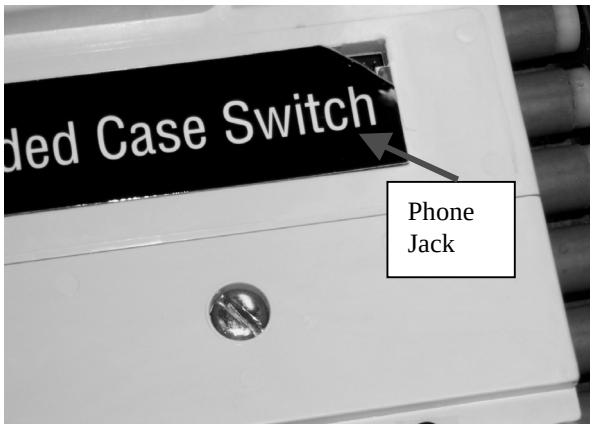
Figure 6: PC Board

5. Replace it with the large square plug-in from the clear box. It is installed in the hole as shown on the left and the handle is rotated clockwise.

Figure 7: Plug in from Clear Box

6. Peel back the upper right hand corner of the label as shown in the next picture to reveal a telephone jack. Install the small connector from the clear box into the phone jack.

Figure 8: Telephone Jack



7. Install the white plug in the telephone jack.

Figure 9: Plug/Telephone Jack

8. Now the unit is ready to be reprogrammed. Follow the steps listed in the instructions to reprogram the unit. After reprogramming is complete, reverse these steps to return the disconnect to its operational state.

Figure 10: Programming

9. Plug into 120 VAC (220 for international units - adapter included in the kit) power source.
10. Turn Clear Box Power Switch on.
11. Turn Field Programmer box on.
12. Follow Instructions on Field Programmer.

Field Programmer Instructions

Important! Only use the view function keys section of the black portable programmer.

1. Press the View Functions "UP" key.
2. Press the View Functions "RIGHT" key.
3. The value displayed is the Current Temperature Byte. It should be 6D.
4. Press the View Functions "UP" key.
5. Press the View Functions "RIGHT" key.
6. The value displayed is the Correct Temperature Byte. It should be 5E.
7. Press the "SAVE" key.
8. Press the View Functions "UP" key.
9. Press the "SELECT" key.
10. Wait approximately 15 seconds for the product to be updated. Note: The green LED in the clear covered box will change state when function is completed. It will go from on solid or on blinking or off to on when the programming is completed.
11. Press the View Functions "UP" key.
12. Press the View Functions "RIGHT" key.
13. The value displayed is the Current Temperature Byte. It should be 5E.

Parts Ordering Information

Use the this page to order the programing tool. This tool can not be ordered through the local parts centers. Please note there are a limited number of tools and they will be sent out on a first come first serve basis, however Eaton will try to accommodate your "date needed" as listed below.

To order the tool complete **all** information below and fax it to Eaton-Pueblo.

Fax to:

(719)948-9364 - Domestic and LAR units

61-8-94449117 - Europe and APR units

Ship to Address: _____

_____

_____

Contact Name: _____

Phone Number: _____

Date Needed on Site: _____

Days needed: _____

Units to be reprogrammed (Serial Number):

_____

_____

_____

_____

_____

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There will be a $2000 charge assessed if the tool is not returned in good condition. In addition to the charge labor claims will not be paid until the tool is returned. The tool must also be returned in good condition to avoid charges.

Product Changes

All units built after May 31, 2002 have the proper setting programed in the Molded Case Switches.

Questions

Contact the Product Technical Service department in Pueblo, Colorado with questions regarding this Service Bulletin.

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www.trane.com

For more information contact your local district office or e-mail us at comfort@trane.com

Literature Order Number	CTV-SVB03A-EN
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Supersedes	New
Stocking Location	Electronic Only