

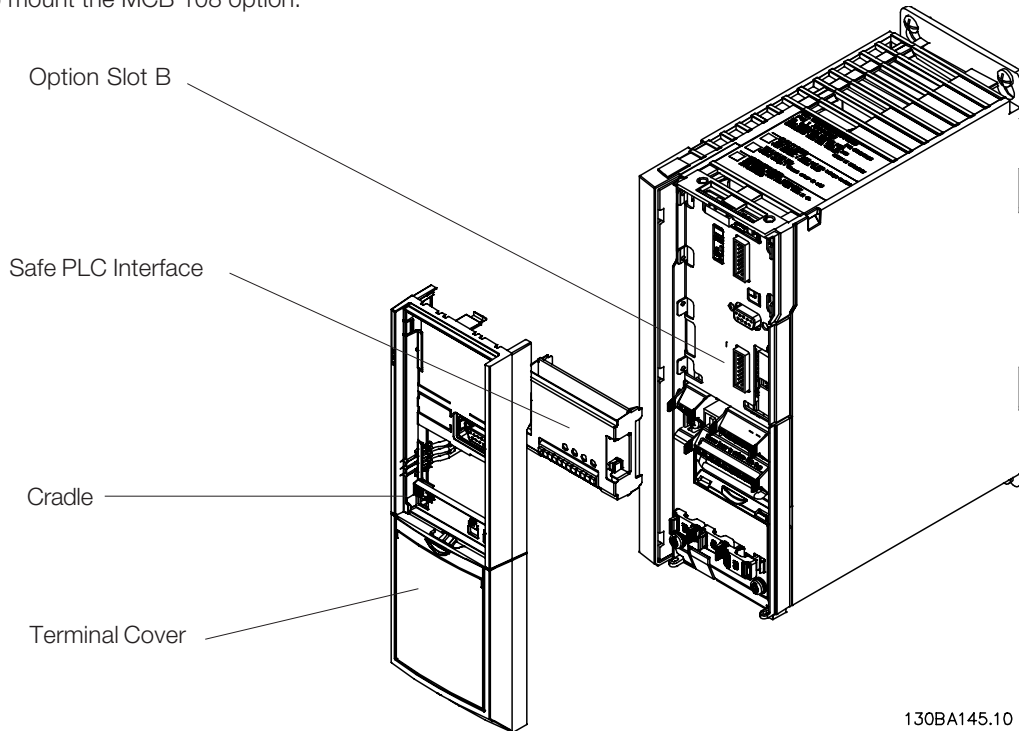
■ **Safe PLC Interface Option MCB 108**

The MCB108 option includes a galvanically isolated adjustable frequency drive and it can be fitted into option slot B.

Electrical Data:

Input voltage (DC).....	18 to 28 V DC
Typical current input (DC).....	60 mAmp
Max. current input (DC).....	110 mAmp DC
Max. current inrush (DC).....	500 mAmp DC
Output voltage (DC)	20 V DC@Vin = 24 V
Turn on delay	1 mSec
Turn off delay	3 mSec

How to mount the MCB 108 option:

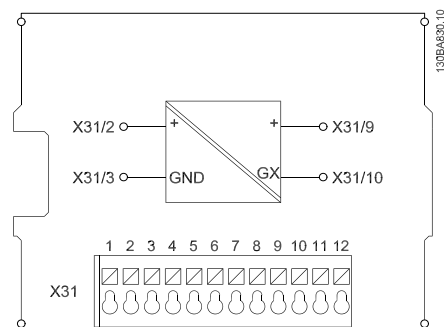


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The following precautions must be observed:

- The 3G3DV with MCB108 (including the connections between X31/9 and Terminal 37) must be placed inside an IP54 enclosure.
- Safe Stop activation (i.e, removal of 24 VDC voltage supply to terminal 37 by removing voltage to dual pole input of MCB108) does not provide electrical safety.
- The safety device connected to the dual pole input of MCB108 must itself fulfill the requirements of EN954-1 Cat. 3 for interrupting the voltage/current to MCB108. This is also valid for the connections between MCB108 and the safety device. You must read and follow the instructions for the safety device in order to connect it properly to MCB108.
- The power to the adjustable frequency drive must be disconnected.
- Remove the LCP, the terminal cover and the cradle from the 3G3DV.

- Fit the MCB108 option in slot B.
- Connect the control cables and fasten the cables using the cable strips enclosed.
- Do not mix different systems.
- Fit the extended cradle and terminal cover.
- Replace the LCP.
- Connect the input to the Safety PLC's Output.
- Remove the connection between terminal 13 and 37 of the 3G3DV.



■ Commissioning Test

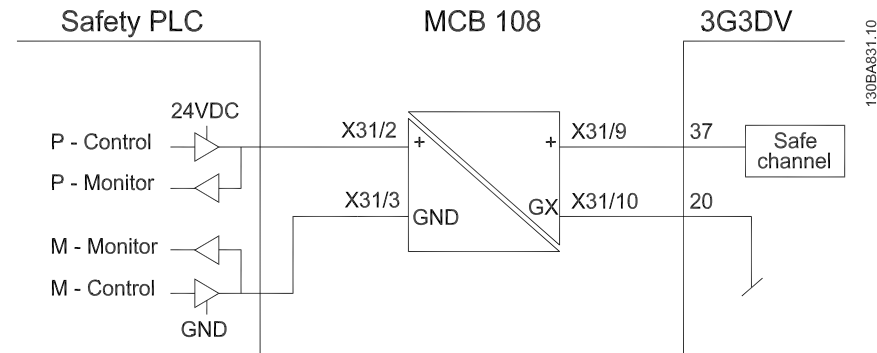
After installation and before first operation, perform a commissioning test of an installation or application equipped with 3G3DV Safe Stop with MCB 108. In addition, perform the test after each modification to the installation or application, of which the 3G3DV Safe Stop is a part.

A passed commissioning test is a necessary condition for fulfilling EN954-1 Cat. 3 for an application with 3G3DV Safe Stop and MCB 108.

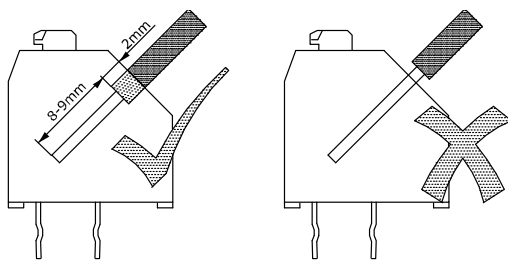
The commissioning test:

1. Remove the dual pole voltage supply to MCB 108 inputs using the safety device while the motor is driven by the 3G3DV (i.e., line power supply is not interrupted). The test step is passed if the motor reacts with a coast and the mechanical brake (if connected) is activated.
2. Send Reset signal (via Bus, Digital I/O or [Reset] key). The test step is passed if the motor remains in the Safe Stop state and the mechanical brake (if connected) remains activated.
3. Reapply dual pole voltage supply to MCB 108 inputs. The test step is passed if the motor remains in the coasted state and the mechanical brake (if connected) remains activated.
4. Send Reset signal (via Bus, Digital I/O or [Reset] key). The test step is passed if the motor becomes operational again.
5. The commissioning test is passed if all four test steps are passed.

Safety PLC Connection



Wire inserting in MCB 108



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Correct wire insertion



Do not combine liveparts and PELV systems.



Wires between X31/9 and Terminal 37 have to be short-circuit protected if not inside the cabinet.

