Application Note – LCM Capacitor Insulation Kit

1 Overview

A capacitor located in the rear of the LCM IPFC may pose a safety hazard to service personnel if the capacitor is not given time to discharge after disconnection from mains voltage.

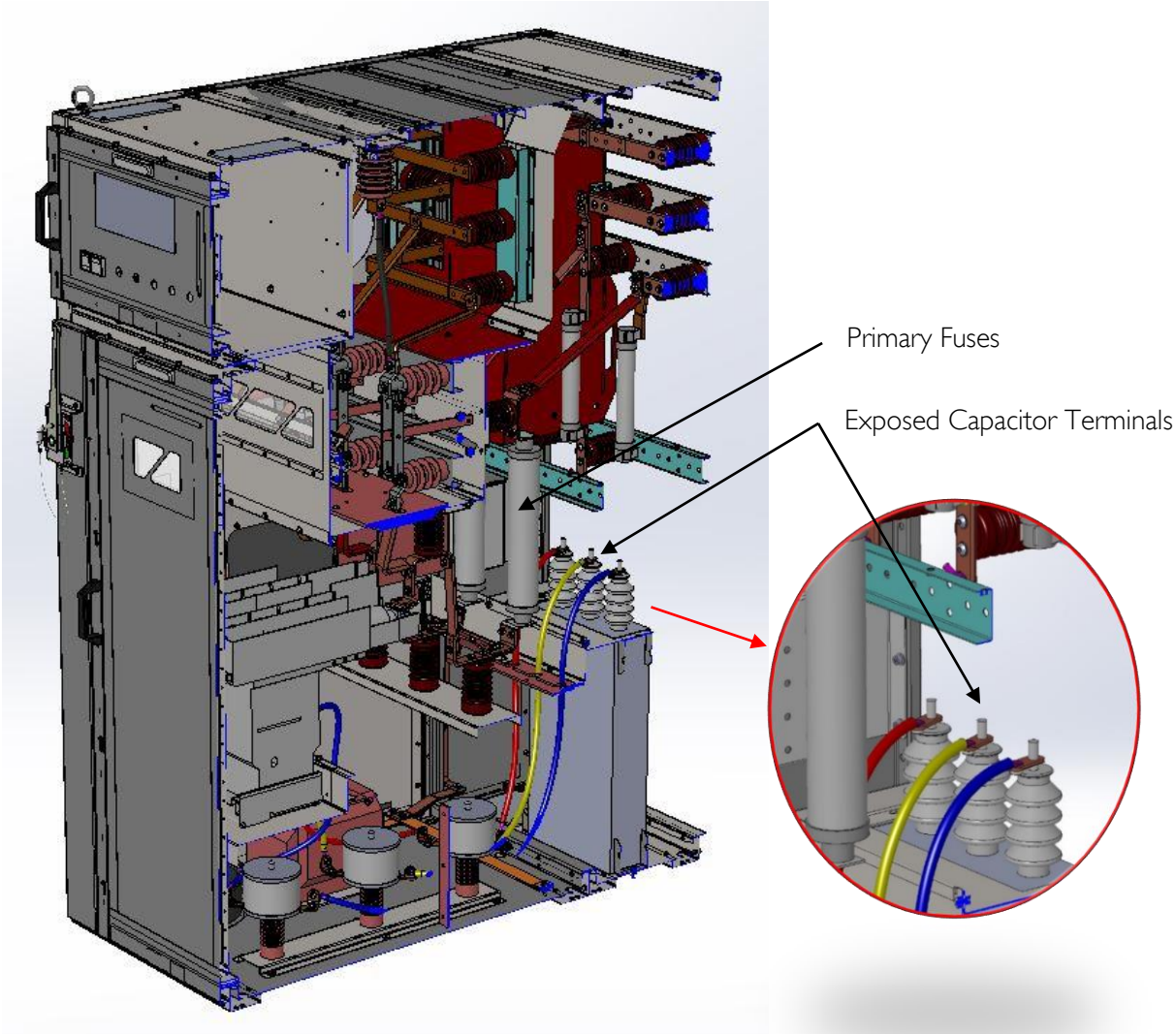
2 Details

The capacitor located in the rear of the LCM IPFC has exposed terminals which could be touched by a service technician when replacing fuses. This could result in an electric shock (from residual voltage stored within the capacitor) if insufficient time has been allowed since disconnection from the network. Under IEC 60871-1, the voltage must drop below 75 V within 10 minutes of disconnecting.

To reduce the risk of electric shock, insulator shrouds should be fitted to the capacitor terminals and extra warning labels should be applied to the panel covers (front and rear) and capacitor frame.

The insulator shrounds and warning labels are supplied as a kit: 995-17921-00.

Capacitor Location



3 Installation

Part Identification

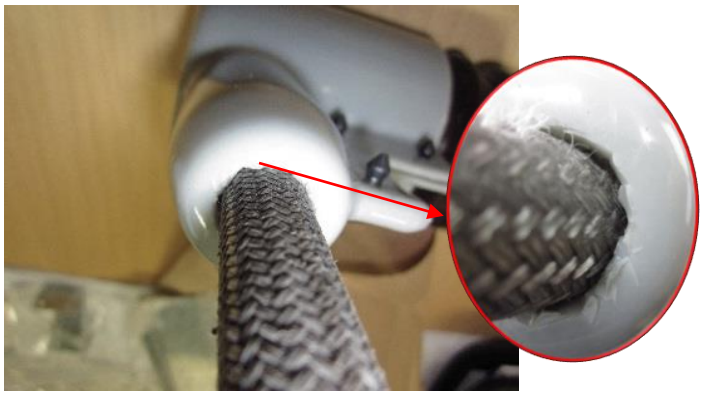
634-17660-00A Insulator Shroud Capacitor Terminal x3

635-11572-00A Label Stored Energy Hazard x3

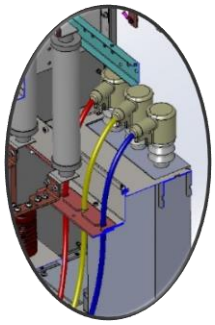
Installation Procedure

1. Isolate supply and disconnect capacitor cables
   Follow all safety guidelines regarding isolation of the panel from the supply. Disconnect cables from all three capacitor terminals.
   Caution: Allow sufficient time for stored residual voltage to dissipate from the capacitor.

2. Cut cable penetration in insulator shroud end
   Use a craft knife or similar tool to cut a cable hole in the blank end of the insulator shroud. The hole should be large enough to allow the lug to pass through, while still maintaining a close fit on the cable.

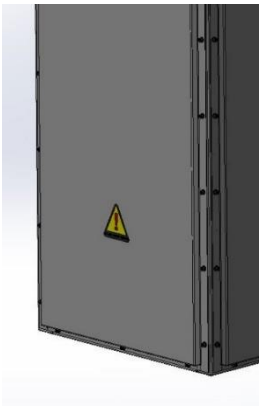


3. Apply insulator shroud to capacitor terminals (3 places)
   Thread the cable through the insulator shroud as shown. Reconnect the cables to the capacitor terminals and slide the insulator shroud over the terminals, ensuring full coverage.

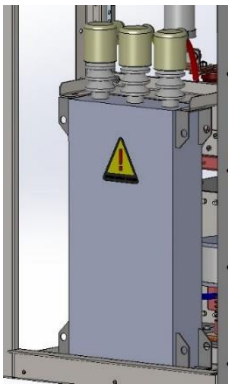


4. Apply hazard label to bottom of panel front door, bottom of rear cover and capacitor frame (3 places)

Bottom of front door



Bottom of rear cover



Capacitor frame