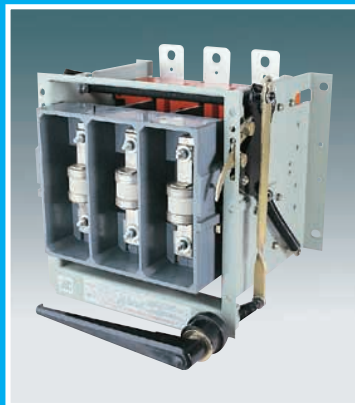
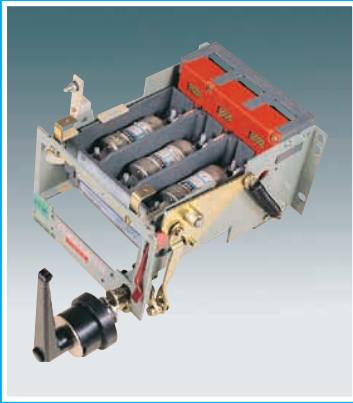




CMM Fuse Switch Units





'CMM' Fuse Switch Units

CMM fuse switch units from **GE Power Controls** belong to a robust class of units that provide large clearance and creepage distances, despite having a smaller foot-print. This is achieved by a unique cassette design for housing the fuse-links in a withdrawable fuse carrier. In fact the horizontal mounting of fuse-links in the frame size 1 significantly reduces the panel area, and overall compactness gives the switchboard builder drastic saving in panel size. Withdrawable fuse carrier also ensures TOTAL SAFETY, besides quick and easy replacement of the fuse-links. For reducing the down time the option of using a replaceable carrier is also available. Thus flexibility, combined with high performance and positive switching are the hallmarks of its unique and proven design.

CMM units are available in a wide range of ratings of 125A, 200A, 250A and 315A in one frame size. 400A, 630A and 800A in another frame size, with a rated operational voltage of 415V AC and 250V DC. Fixed & withdrawable versions are available.

Features

- All units are designed to comply with IS 4064 - 1978. (Utilisation category AC23)
- Unique front-drive mechanism driving fuse carriage directly.
- Quick-make/Quick-break mechanism, with double break/pole.
- Fully-withdrawable, moving contact carriage to facilitate quick-fuselink replacement and positive isolation.
- Front-drive incorporates safety door interlock facility.

Self-aligning, spring-loaded silver-plated caliper contacts.
 Fibre reinforced plastic moulds ensure high temperature and arc withstand capabilities.
 Positive break feature ensuring switch can be opened in the event of spring failure.
 Facility for fixing optional extras like auxiliary switch and figure-type locks.

The Contact System

The CMM switch has a unique fixed-contact system comprising a set of fixed terminals in which self-aligning, floating spring loaded caliper contacts are mounted. While one end of the caliper is secured firmly on the fixed contact, the other end is open to receive the moving blade, thus ensuring a self-aligning feature. This enables the switch to withstand high through-fault currents.

The Moving-Blade and Fuse Replacement

The moving contact carriage housing the blades are fully withdrawable to enable quick fuse replacement and inspection of contacts without use of tools. For this purpose, the red cam lever is to be raised against the spring pressure until the carriage is free. The carriage can now be withdrawn. For re-insertion, the carriage is pushed until the drive engages.

Caution: The switch should not be operated without the carriage in position.

Front-drive arrangement

A front-drive kit is supplied along with each unit for fixing the handle assembly. The handle assembly can be fitted to the door by fastening the cowl with two M4 screws (see Fig.5) A door interlock comes along with the front-drive kit to ensure that the door cannot be opened when the switch is in 'ON' condition. This interlock can be 'Defeated' by turning the slotted-bush about 30° anticlockwise.



	Frame Size I				Frame Size II		
	CMM125	CMM200	CMM250	CMM315	CMM400	CMM630	CMM800
Nominal rating in Amps. 415V 50Hz	125	200	250	315	400	630	800
Rating with solid copper links	200	315	400	400	630	800	1000
Fused short-circuit current	50kA	80kA	80kA	80kA	80kA	80kA	80kA
Rated short-time current for 1 sec.	2.5kA	5kA	5kA	10kA	20kA	25kA	25kA
Overload make/break for AC motor at 457V and 0.37 PF	make: 1000A break: 750A	1600A 1200A	2000A 1500A	2000A 1500A	3200A 2400A	5040A 3780A	6400A 4800A
Overload make/break capacity for inductive circuits at 275 t/c 0.15 sec.	500A	800A	800A	800A	1600A	2400A	2400A
Terminal sizes	5 X 35	5 X 35	5 X 35	5 X 35	6.35 X 51	6.35X51	8 X 51
Maximum size of links in mm.	6.35 x 5	6.35 x 25	6.35 x 25	6.35 x 25	6.35 x 51	6.35 x 51	6.35 x 51
Recommended HBC	TC/TF	TC/TF	TC/TF	TC/TF	TTS	TTM/TLM	TTM/TLM
Fuselinks	TSDC TSF	TSDC TF	TSDC TSF TSK	TSDC TSF TSK	TSMS	TST/TSL	TST/TSL



Drilling Details

CMM units are mounted using slots provided on the rear of the flanges.

Door drilling details are shown by Ø

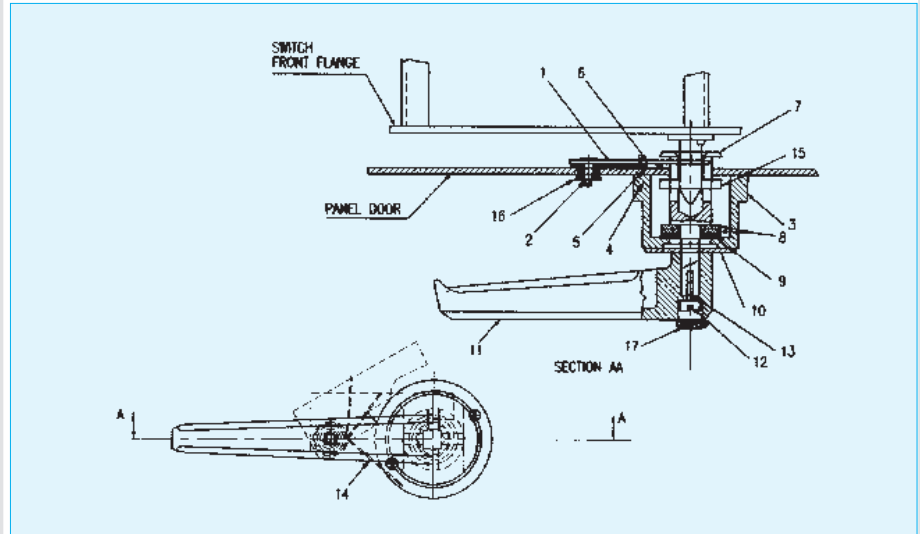
Mounting details of the units are shown by Ø

Caution:

Ensure mechanism shaft engages fully with the coupler for satisfactory operation

Fig 5

CMM 400/630/800



- | | |
|----------------------|------------------------------------|
| 1 Interlock assembly | 10 Washer |
| 2 Circlip | 11 Handle |
| 3 Cowl | 12 Cheese head screw |
| 4 Flat washer | 13 Spring washer |
| 5 Spring washer | 14 Interlock spring |
| 6 Cheese head screw | 15 Spiral Dowel Pin (4.8 x 3.21 g) |
| 7 Coupler | 16 Interlock bush |
| 8 Rubber washer | 17 Plug button |

Note: Interlock defeat position and Dowel pin in 'ON' position shown in chain dotted lines.



GE Power Controls