

# CAMaster HRC Fuse Holders

## 30, 60, and 100 Amps; 600Vac

CM\_CF



Catalog Symbol: CM\_CF  
CAMaster HRC Fuse Holders  
30, 60, and 100 Amps  
Agency Approvals: CSA C22.2 NO. 39  
IEC 269 and BS88

- Range: 30 (miniature), 30, 60, and 100 Amps at 600Vac
- A range of fully shrouded HRC fuse holders having an advanced design.
- They incorporate a high level of innovation, with enhanced performance characteristics and comply with the requirements of: CSA C22.2 No. 39 as well as IEC 269 and BS88 standards.

### Unique Cam Action

- The fuse carriers are fitted with a cam for ease of removal from the fuse bases allowing significantly improved contact pressure between fuse carrier and fuse base contacts, with a corresponding enhanced electrical performance level.
- This design overcomes a major problem of all existing dead front style fuse holders manufactured worldwide, which have to compromise between difficulties of fuse carrier removal from base and contact pressure achieved.

### Lockable Safety Carriers

- A range of lockable safety carriers for the CAMaster fuse holder (Cat ref: LSC), are available.
- This distinct feature ensures isolation can be achieved allowing maintenance to be carried out in safety.

### Mounting Torque and Cable Size

Ref	Fuse Mounting Tightening Torques	Max Cable Size
CM20CF	1.5N·m 1.11 lb-ft	#2
CM30CF	1.5N·m 1.11 lb-ft	#2
CM60CF	2.0N·m 1.48 lb-ft	2/0
CM100CF	2.0N·m 1.48 lb-ft	2/0

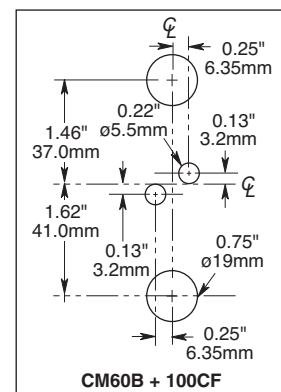
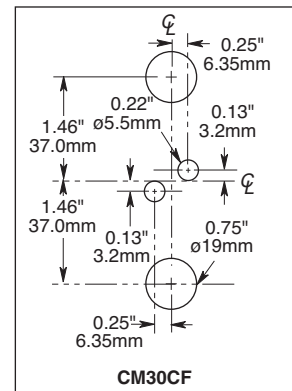
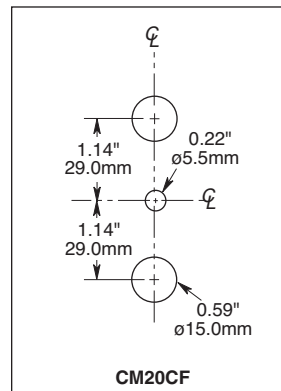
### CAMaster Ratings

Rating	Details	Reference	Fuse Accommodated
30 Amp	For HRCI-CA Applications	CM20CF	---C1F21
30 Amp 60 Amp 100 Amp	For HRCII Applications	CM30CF CM60CF CM100CF	---H07C ---KO7C ---K07CR

### Accessories for CAMaster Units

Rating	Details	Reference	Fuse Accommodated
30 Amp		20BS	For CM20CF
30 Amp	Back Stud	30BS	For CM30CF
60/100 Amp		60/100BS	For CM60/100CF
All	Ganging Link Kit	GLP	For 3-Pole
All	660V Neon Indicator	NI-660	—
All	600V Neon Indicator	NI-600	—
30 Amp	Security	20LSC	For CM20CF
30 Amp	Carrier with Clip.	30LSC	For CM30CF
60/100 Amp		60/100LSC	For CM60/100CF
All	Clip Only	20CML	For all sizes

### Panel Drilling Plans, Viewed from Front of Panel



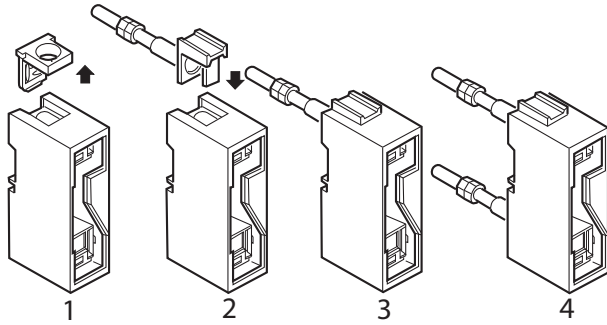


Figure 2. Unique Conversion Capability

### Unique Conversion Capability

The standard fuse holders can be readily converted from front connection to front/back stud and double-back stud connection types at the point of use. This is achieved with a unique back stud accessory and the use of a screwdriver. See conversion sequence in Fig. 2. Steps 1, 2 and 3 show removal of ferrule end and insertion of back stud accessory to give the front/back stud connection type. This sequence repeated at the opposite end gives the double-back stud connection type shown in step 4.

### Unique Cable Termination

The fuse holder's unique cable terminations are designed for user convenience and to ensure long-term reliability. They incorporate stainless steel saddles and hardened termination screws, maintaining permanent cable clamping to profiled contact plates. The main electrical contact path between the cable and fuse link tag is shown highlighted. This permits the use of high tightening torques without damage to cables or threads and provides resistance to high cable pull out forces. (See Fig. 3.)

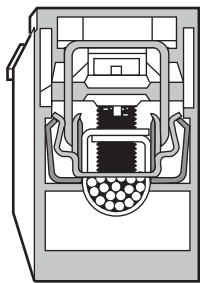


Figure 3. Unique Cable Termination

The fuse holders are supplied with the hardened termination screws backed out ready for cable insertion, saving installation time.

### Hinged Captive Screws

The fuse fixing screws to fuse carrier are held in captive hinges providing ease of fixing and preventing loss during installation. (See Fig. 4.)

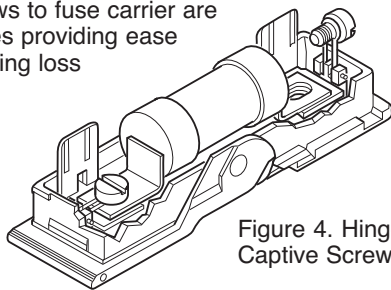


Figure 4. Hinged Captive Screws

### Two/Three Pole Ganging

The unique design of the carriers allows ganging to be readily achieved by the use of standard accessories. This provides improved safety related to isolation and protection of 2-Pole and 3-Pole electrical circuits by ensuring that the correctly related poles are removed at the same time. (See Fig. 5.)

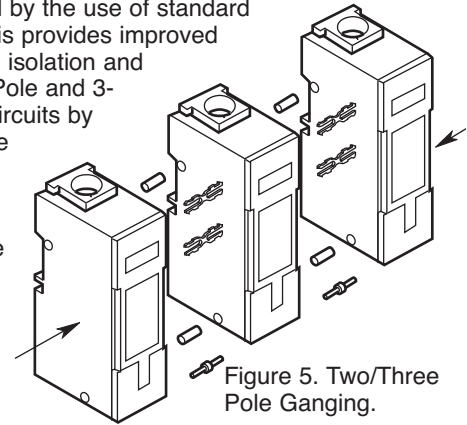


Figure 5. Two/Three Pole Ganging.

### Dual Mounting Capability

The design as standard provides both bolted panel and DIN rail mounting features. The DIN rail mounting facility for each of the various dimensioned ratings is so designed as to give equal height and depth above the DIN rail.

### Hinged Internal Shields

Non-removable full shrouding of live parts within the fuse base is provided by the use of hinged shields. The positive captive nature of these ensures that they cannot be omitted during installation and are so designed that insertion of the fuse carrier can only be made with them correctly positioned.

### Neon Indicator

Neon clip-in indicator accessories are available providing clear location and status of fuses which have opened. (See Fig. 6.)

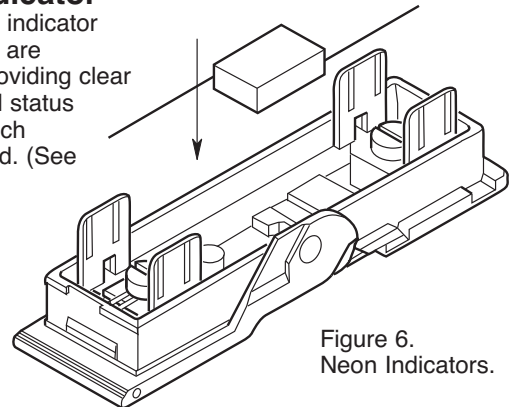


Figure 6. Neon Indicators.

### Circuit Identification

The fuse carrier has a marking label for ease of circuit identification.

### Strip Length Marking

The length of cable insulation that should be stripped off is shown on the side of the fuse base.

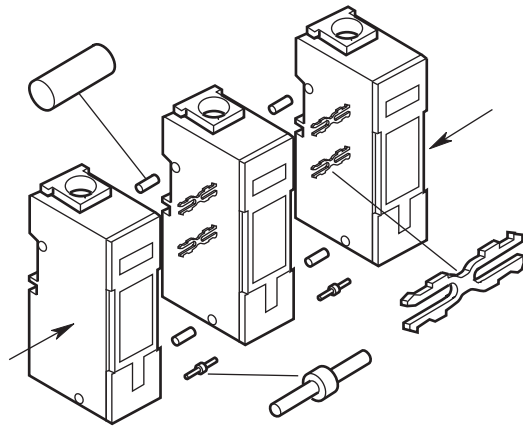


Figure 4. Two- and Three-Pole Ganging.

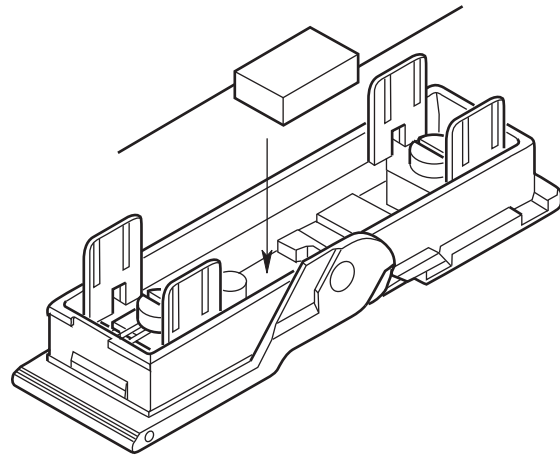
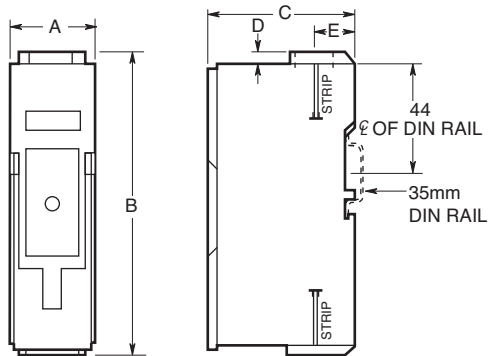


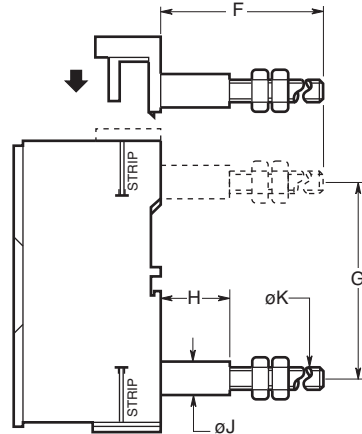
Figure 5. Neon Indicators.

**Dimensions - in (mm)**

**Standard Front Connected Unit**



**Front/Back Stud and Double Back Stud Connected Units**



Rating Amps	Catalog Number	Category	Dimensions - in (mm)									
			A	B	C	D	E	F	G	H	J	K
30	CM20CF	HRCI-CA	1.0 (25.4)	3.69 (93.7)	2.36 (60)	0.13 (3.2)	0.64 (17.5)	2.60 (66)	2.29 (58)	1.13 (28.6)	0.47 (11.9)	M6
30	CM30CF	HRCII-C	1.25 (31.8)	4.63 (117.5)	2.36 (60)	0.13 (3.2)	0.69 (17.5)	2.60 (66)	2.92 (74)	1.13 (28.6)	0.47 (11.9)	M6
60	CM60CF	HRCII-C	1.40 (35.6)	4.93 (125)	2.36 (60)	0.19 (4.75)	0.65 (16.4)	3.41 (86.5)	3.14 (79.8)	1.13 (28.6)	0.47 (11.9)	M8
100	CM100CF	HRCII-MISC	1.40 (35.6)	4.93 (125)	2.36 (60)	0.19 (4.75)	0.65 (16.4)	3.41 (86.5)	3.14 (79.8)	1.13 (28.6)	.47 (11.9)	M8

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