# **CAMaster HRC Fuse Holders**





#### Range: 30 (miniature), 30, 60, and 100 Amp 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 60269 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.

# **Fixing Torque and Cable Size**

	Fuse Fixing	Max Cable		
Ref	Tightening Torques	Size		
CM20CF	1.5N•m	#2		
CM30CF	1.5N•m	#2		
CM60CF	2.0N•m	2/0		
CM100CF	2.0N•m	2/0		

# **Catalog Numbers**

Amps	Mounting	<b>Edison Catalog Numbers</b>				
	Front/Back Front/Back Front/Back Front/Back Front/Back Front/Back Front/Back Front/Back Front/Back	CM20CF				
30	Front/2-pole	2xCM20CF + GLP				
30	Back	CM20CF + 2 off 20BS				
	Front/Back	CM20CF _ 1 off 20BS				
30	Front	CM30CF				
	Back	CM30CF + 2 off 30BS				
	Front/Back	CM30CF + 1 off 30BS				
	Front         CM20CF           Front/2-pole         2xCM20CF + GL           Back         CM20CF + 2 off           Front/Back         CM20CF _ 1 off           Front         CM30CF           Back         CM30CF + 2 off           Front/Back         CM30CF + 1 off           Front         CM60CF           Back         CM60CF + 2 off           Front/Back         CM60CF + 1 off           Front         CM100CF           Back         CM100CF           Front/Back         CM100CF + 2 off           Front/Back         CM100CF + 2 off	CM60CF				
60	Back	CM60CF + 2 of 60/100BS				
	Front/Back	CM60CF + 1 of 60/100BS				
	Back CM600 Front/Back CM600	CM100CF				
100*	Back	CM100CF + 2 of 60/100BS				
	Front/Back	CM100CF + 1 or 60/100BS				
Uses compact Edison fuses.						

#### **CAMaster Ratings**

Rating	Details	Reference	Fuse Accommodated				
30 Amp	For HRCI-CA Applications	CM20CF	CIF21				
30 Amp 60 Amp 100 Amp	For HRCII Applications	CM30CF CM60CF CM100CF	H07C K07C K07CR				

#### **Accessories for CAMaster Units**

			Fuse		
Rating	Details	Reference	Accommodated		
30 Amp		20BS	For CM20CF		
30 Amp	Back Stud	30BS	For CM30CF		
60/100 Amp		60/100BS	For CM60/100CF		
All	Ganging	GLP	For 3 Pole		
	Link Kit				
All	660V Neon	NI-660	-		
	Indicator				
30 Amp	Security	20LSC	For CM20CF		
30 Amp	Carrier	30LSC	For CM30CF		
60/100 Amp	with Clip.	60/100LSC	For CM60/100CF		
All	Clip Only	CMCS	For all sizes		
30 Amp	-	20CML	For CM20CF		
30 Amp	Solid Link	32CML	For CM30CF		
60/100 Amp		63/100 CML	For CM60/100CF		



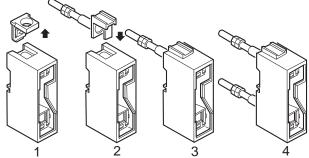


Figure 2. Unique Conversion Capability

#### **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

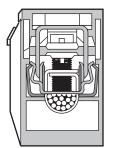


Figure 3. Unique Cable Termination

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.) 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

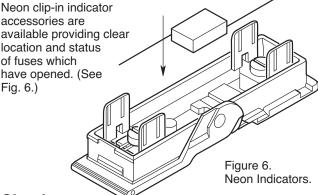
The unique design of the carriers allows ganging to be readily achieved by the use of standard accessories. This provides improved safety related to isolation and protection of 2-Pole and 3-Pole electrical circuits by ensuring that the correctly related poles are removed at the same time. (See Fig. 5.)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



### Circuit

#### Identification

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

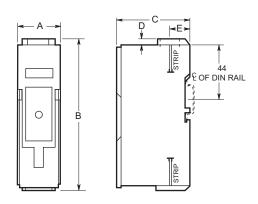
#### Strip Length Marking

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

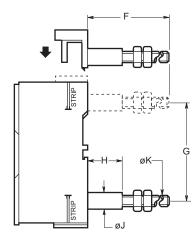
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# Dimensions - in (mm)

#### **Standard Front Connected Unit**



# Front/Back Stud and Double Back Stud Connected Units



Rating	Catalog		Dimensions - in (mm)									
Amps	Number	Category	Α	В	С	D	E	F	G	Н	٦	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)	0.47 (11.9)	M8

# Panel Drilling Plans, Viewed from Front of Panel

