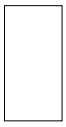
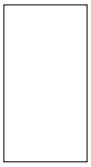
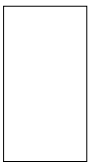
MOLDED CASE CIRCUIT BREAKER REPLACEMENT GUIDE

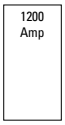
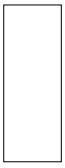
Series C Industrial Circuit Breakers

	Maximum Amperes	800A	800A	1200A	1600A/2000A/2500A❶
CURRENT DESIGN	Series C Circuit Breakers are Cutler-Hammer's most current offering and, as such, are a logical first choice when upgrading or retrofitting equipment.	**MD, MDS** 	**ND, HND, NDC** 	**ND, HND, NDC** 	**RD** 
	All circuit breakers listed in a column are ELECTRICALLY INTERCHANGEABLE.				
	Dimensions – Inches Per 3-pole Breaker				
		W 8¼ H 16 D 4 1/16	W 8¼ H 16 D 5½	W 8¼ H 16 D 5½	W 15½ H 16 D 9¾

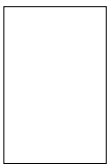
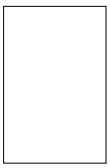
Replacement Circuit Breakers

REPLACEMENT	These new, UL labeled circuit breakers continue to be manufactured and are primarily applied to achieve exact physical and electrical replacement of previously installed Cutler-Hammer/Westinghouse circuit breakers of the same style number and rating.	**MA, HMA and MC**  W 8¼ H 16 D 4 1/16	**MA, HMA and MC, MCC SELTRONIC**  W 8¼ H 16 D 4 1/16	**NC, HNC and NB, HNB**  W 8¼ H 16 D 5½	**PC, PCC**  W 12 1/16 H 22⅛ D 9 1/16	**PB**  W 12 1/16 H 22⅛ D 9 1/16

Out-of-Production Westinghouse Circuit Breakers

OUT OF PRODUCTION	**These circuit breakers are no longer manufactured.** * Indicates the last date of manufacture. As an option, any of these circuit breakers can be reconditioned at the original factory by Cutler-Hammer. For details, see **page 8**, or contact your local Cutler-Hammer Field Sales Office.	**LM, HLM and M**  *1967 W 8¼ H 22 D 5½	**LM, HLM and M**  *1967 W 8¼ H 22 D 5½	**MA, HMA**  1200 Amp *1968 W 8¼ H 16 D 5½ **LM, HLM**  *1967 W 8¼ H 22 D 5½ SPCB 1200A, SCB 1200A *1986 Consult Cutler-Hammer W 8¼ H 16 D 5½	**PA**  *1968 W 12 H 22 D 9 1/16 SPCB 2000-3000A, SCB 2000-3000A *1986 Consult Cutler-Hammer W 12 1/16 H 22⅛ D 9 1/16

Out-of-Production Cutler-Hammer Circuit Breakers Last Manufactured by Cutler-Hammer in 1994

OUT OF PRODUCTION		**MS, MH**  W 8¼ H 16 D 4 1/16	**NS, NH**  W 8¼ H 16 D 5½	No Equivalent Cutler-Hammer Brand Frame Size Existed	No Equivalent Cutler-Hammer Brand Frame Size Existed

❶ RD Breaker replaces PC, PCC and PB Breakers for 2000A and 2500A only.

MOLDED CASE CIRCUIT BREAKERS
Replacement Circuit Breakers

REPLACEMENT CAPABILITIES, *Continued*

Type NC, NCA, MARK 75® Type HNC, HNCA SELTRONIC™ with Solid State Trip Units, 600 Volts AC

50/60 Hz Complete Breaker Requires Frame, Rating Plug, and Terminals

Frame Only			
Poles ❶	Standard (Long Delay and Short Time)	Short Time Only❷	Long Delay, Short Time and Adjustable Short Delay Time (.08-.28 Seconds)
	Catalog Numbers		
Types NC and NCA (800 to 1200 Amperes)			
2 3	NC21200F NC31200F	NC21200FM NC31200FM	NCA21200F NCA31200F
Mark 75 Types HNC and HNCA (800 to 1200 Amperes)			
2 3	HNC21200F HNC31200F	HNC21200FM HNC31200FM	HNCA21200F HNCA31200F
Type NC 1200 Molded Case Switch: Refer to Page 55			

NC, 600 Volts AC

Type NCG, NCGA, and MARK 75® Type HNCG, HNCGA SELTRONIC™ with Built-in Ground Fault Protection

Complete Breaker Requires Frame, Rating Plug and Terminals – Extra Current Transformer Included for Neutral❸❹ See **page 58** for Optional Remote Ground Fault Trip Indicator

Frame Only			Ground Fault Characteristics	
Poles	Standard (Long Delay, Short Time and Ground Fault Trip)	Long Delay, Short Time, Adjustable Short Delay Time, and Ground Fault Trip	Pick-up Setting Amps	Time Setting
	Catalog Numbers			
Types NCG and NCGA (800 to 1200 Amperes)❺				
3	NCG31200F	NCGA31200F	120-1200	3.5-30 Cy
Mark 75 Types HNCG and HNCGA (800 to 1200 Amperes)❺				
3	HNCG31200F	HNCGA31200F	120-1200	3.5-30 Cy

Accessories and Modifications

Field Mountable Attachments❻❼❽❾

Description	Style Number
Provision to trip flux transfer shunt trip from external source:	
32 to 120 Volts DC to 60 Hz❿	1372D39G13
240 to 600 Volts AC, 50/60 Hz⓫	1372D39G23
Provision to trip flux transfer shunt trip from external source, plus a 1A-1B Auxiliary Switch:	
32 to 120 Volts DC to 60 Hz❿	1372D39G16
240 to 600 Volts AC, 50/60 Hz⓫	1372D39G26
Provision to trip flux transfer shunt trip from external 24-volt DC source	1371D94G05
1A-1B Auxiliary Switch	1371D39G03

Additional Accessories and Modifications
Refer to **pages 58-68**.

Rating Plugs
Select from **page 53**.

For CSA, see page 41.

Type NC SELTRONIC™ breakers meet requirements for Class 21a, and MARK 75®. Type HNC meet Class 23a as defined by Federal Spec. W-C-375b.

Terminals⓬
Two Terminals Required per Pole

Max. Amps	Catalog Number	No. of Cables, Wire Range, Type
Al/Cu Pressure Terminals		
1000	TA1000NB1⓭	(3) 3/0-400MCM
1200 (Std.)	TA1200NB1⓭	(4) 4/0-500MCM
1200	TA1201NB1⓭	(3) 500-750MCM
Optional Copper Pressure Terminals		
1000	T1000NB1	(3) 3/0-500MCM
1200	T1200NB1	(4) 3/0-400MCM

UL Listed Interrupting Capacity, RMS Symmetrical Amperes⓮

Breaker	AC Volts		
	240	480	600
NC, NCG	42000	30000	22000
HNC, HNCG	65000	50000	25000

❶ 2-pole breakers are supplied in 3-pole frames with current-carrying parts omitted from center pole.
❷ UL Inc. recognized component.
❸ Available without extra CT for neutral. Order by description as similar to above except without neutral CT or external CT Terminal connections at same price. Note the standard ground fault unit above can also be used without the neutral CT.
❹ Order two of the desired terminals for each pole of the breaker and two for the neutral CT.
❺ For applications other than standard residual scheme, see Application Data 29-160.
❻ For other possible combinations, refer to factory.
❼ Molded case switches do not use standard SELTRONIC™ attachments and should be ordered by description.
❽ Does not void listing of UL listed breakers.
❾ Only one of the attachments may be mounted per breaker.
❿ Rated 48 volts minimum for ground fault applications requiring tripping at 55% of voltage.
⓫ Not for ground fault applications.
⓬ Also used on breakers with ground fault and on separately mounted neutral current transformers.
⓭ Type Al/Cu pressure terminal.
⓮ Interrupting capacities shown do not apply to molded case switches.