Molded Case Circuit Breakers Electrical Aftermarket Products and Services

March 2006 Aftermarket Solutions, Ref. No. [055]

Types PC, PCA, PCC, PCCA SELTRONIC™

Replacement Capabilities (Continued)

Types PC, PCA, PCC, PCCA 2000, 2500 and 3000 Ampere SELTRONIC with Solid-State Trip Units, 600 Vac, 50/60 Hz

Complete Breaker requires Frame, Rating Plug see **Page 3-48, Table 3-117** and Rear Connectors (connectors are included in 3000 ampere and all front connected frames.) Suitable for reverse feed applications.

Table 3-105. Breakers for Standard Applications

Shaded gray area denotes obsolete or discontinued products and services.

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Standard (Long Delay and Short Time	Frame O	nly					
Type PC 2000, 1000 to 2000 Amperes ◎ Type PCA 2000 ◎ Rear Connected Breakers 2	Poles ②	(Long Delay		and Adjustable Short Delay Time			
Rear Connected Breakers Rear Connected Breakers 2 PC22000F PC22000FM PCA22000F 3 PC32000F PC32000FM PCA32000F Front Connected Breakers Front Connected Breakers 2 PCF22000F PCF22000FM PCFA32000F 3 PCF32000F PCF32000FM PCFA32000F Type PC 2500, 1400 to 2500 Amperes ③ Rear Connected Breakers Rear Connected Breakers 2 PC22500F PC22500FM PCA22500F 3 PC32500F PC32500FM PCA32500F Front Connected Breakers Front Connected Breakers 2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ④ Type PCA 3000 ④		Catalog Number					
3 PC32000F PC32000FM PCA32000F Front Connected Breakers Front Connected Breakers 2 PCF22000F PCF22000FM PCFA22000F 3 PCF32000F PCF32000FM PCFA32000F Type PC 2500, 1400 to 2500 Amperes ◎ Rear Connected Breakers 2 PC22500F PC22500FM PCA22500F 3 PC32500F PC32500FM PCA32500F Front Connected Breakers Front Connected Breakers 2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ◎ Type PCA 3000 ◎							
Front Connected Breakers 2	2	PC22000F	PC22000FM	PCA22000F			
2 PCF22000F PCF22000FM PCFA22000F 3 PCF32000F PCF32000FM PCFA32000F Type PC 2500, 1400 to 2500 Amperes ③ Type PCA 2500 ④ Rear Connected Breakers 2 PC22500F PC22500FM PCA22500F 3 PC32500F PC32500FM PCA32500F Front Connected Breakers Front Connected Breakers 2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ④ Type PCA 3000 ④	3	PC32000F	PC32000FM	PCA32000F			
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Rear Connected Breakers Rear Connected Breakers 2 PC22500F PC22500FM PCA22500F 3 PC32500F PC32500FM PCA32500F Front Connected Breakers Front Connected Breakers 2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes [®] Type PCA 3000 [®]	3	PCF32000F	PCF32000FM	PCFA32000F			
3 PC32500F PC32500FM PCA32500F Front Connected Breakers Front Connected Breakers 2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ◎ Type PCA 3000 ◎							
Front Connected Breakers 2	2	PC22500F	PC22500FM	PCA22500F			
2 PCF22500F PCF22500FM PCFA22500F 3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ® Type PCA 3000 ®	3	PC32500F	PC32500FM	PCA32500F			
3 PCF32500F PCF32500FM PCFA32500F Type PC 3000, 1600 to 3000 Amperes ^③ Type PCA 3000 ^③	Front Connected Breakers Front Connected Breakers						
Type PC 3000, 1600 to 3000 Amperes ◎ Type PCA 3000 ◎	2	PCF22500F	PCF22500FM	PCFA22500F			
	3	PCF32500F	PCF32500FM	PCFA32500F			
2 PC23000F PC23000FM PCA23000F	Type PC 3000, 1600 to 3000 Amperes [®] Type PCA 3000 [®]						
	2	PC23000F	PC23000FM	PCA23000F			
3 PC33000F PC33000FM PCA33000F	3	PC33000F	PC33000FM	PCA33000F			

- ① These frames are obsolete. For replacement solutions see the cross-reference on Pages 3-97 3-118.
- ② 2-pole breakers are supplied in 3-pole frames with current carrying parts omitted from center pole.
- 3 UL recognized component.
- 4 UL listed for standard applications.

Table 3-106. Breakers for Standard Application at 100% Rating

Frame O	nly						
Poles ®	Standard (Long Delay and Short Time)	Short Time Only ^②	Long Delay, Short Time Trip, and Adjustable Short Delay Time (.08 – .30 seconds)				
	Catalog Number						
Type PCC 2000, 1000 to 2000 Amperes ® — Rear Connected Breakers							
2	PCC22000F	PCC22000FM	PCCA22000F				
3	PCC32000F	PCC32000FM	PCCA32000F				
Front Connected Breakers Front Connected Breakers							
2	PCCF22000F	PCCF22000FM	PCCFA22000F				
3	PCCF32000F	PCCF32000FM	PCCFA32000F				
Type PCC 2500, 1400 to 2500 Amperes ® — Rear Connected Breakers							
2	PCC22500F	PCC22500FM	PCCA22500F				
3	PCC32500F	PCC32500FM	PCCA32500F				
Front Coni	nected Breakers						
2	PCCF22500F	PCCF22500FM	PCCFA22500F				
3	PCCF32500F	PCCF32500FM	PCCFA32500F				
Type PC 3000, 1600 to 3000 Amperes ®							
2	PCC23000F	PCC23000FM	PCCA23000F				
3	PCC33000F	PCC33000FM	PCCA33000F				
			(D 007 0440				

- These frames are obsolete. For replacement solutions see the cross-reference on Pages 3-97 3-118.
- © 2-pole breakers are supplied in 3-pole frames with current carrying parts omitted from center pole.
- ① UL recognized component.
- These breakers are UL listed for application at 100% of rating per NEC exceptions when used in a properly ventilated and listed enclosure.



PC: 600 Vac

Accessories and Modifications

Drawout Mounting Breakers, 3-Pole Only

Breaker frame and complete drawout frame with safety tripping interlock.

Order by description. Secondary contacts supplied as required at no extra charge. Order required rating plug separately. Refer to **Page 3-63**.

Note: Includes breakers without adjustable short delay time.

Rating Plugs

Select from Page 3-48, Table 3-117.

Stationary Portion of Drawout Frame Only for Future Breaker Installations, 3-Pole Only. Refer to **Page 3-63**.

Special Type PCC Breakers for SCR Power Supplies

These drawout mounting breakers are designed with a 2 to 4 times magnetic trip adjustment and special time delay trip characteristics to provide maximum protection and coordination with SCR power supplies on offshore drilling rigs. Suitable for application at 100% of rating.

Order by description. Secondary contacts supplied as required. Order standard rating plugs separately.

Availability: PCC2000, PCC2500 Drawout-Mounting breakers.

Type PC and PCC meet requirements of Class 25a as defined in Federal Spec. W-C-375b.

For CSA, see Page 3-36.

Table 3-107. UL Listed Interrupting Capacity rms Symmetrical Amperes (Standard and Ground Fault Breakers)

Breaker	ac Volts			
	240	480	600	
PC, PCC	125,000	100,000	100,000	

Note: Interrupting capacities shown do not apply to molded case switches.

Additional Accessories and Modifications
Refer to Pages 3-52 – 3-63.

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Cross-Reference — Replacement Breaker and Mining Breaker Replacement

Replacement Capabilities (Continued)

Notes for Replacement Breaker and Mining Breaker Replacement Tables (Pages 3-98 – 3-118)

- Many of the suggested Series C replacements are electrical replacements only, and may have different dimensions, mountings, handle forces and throw (which would require a handle mechanism change). The MARK 75 replacement would have the same dimensions, mountings, handle forces and throw. Only 3-pole MARK 75 available.
- Replacement breaker frames, trips, plugs and some of the terminals and attachments are not interchangeable with the Series C. Obsoleted Frames and Trips, etc., may require a complete breaker change.
- Replacing with a Higher IC MARK 75 or Series C breaker does not increase the IC rating of the assembly (panelboard, switchboard, etc.).

- Saf-T-Vue is no longer available on the replacement breaker line. Eaton Canada does make the Series C with Saf-T-Vue and may be sourced through our Canadian Distribution Center (Phone: 905-631-4318).
- Suggested replacements also apply to breakers that had suffixes such as "L," line and load terminals, "V" 50C calibration and "W" without terminals.
- The HFB 2-pole breaker is on a 3-pole frame. The Series C replacement is a true 2-pole.
- Continuous amperes and/or trip range may be a little different on the replacement Series C.
- 8. Replacement breaker MARK 75 breakers with interchangeable trip units are to be supplied as frame, trip, terminals, and attachment as separate items (except when accessories must be factory installed). No single-phase, ambient compensated, Saf-T-Vue, reverse feed, or SELTRONIC magnetic only, are available on replacement breakers.

- JA, DA, KA, HKA, LB, LBB and HLB breakers when replaced with a Series C breaker "K" frame, when bussed on the line side such as a panelboard, requires a TAD3 spacer kit.
- 10. Contact the local Eaton Satellite for complete panelboard replacement or new interior replacement. Use Panelboard Replacement Breakers where possible. MARK 75 and 3-pole only replacements are available. Contact the Breaker Service Center at 1-877-275-7782 for reconditioned breaker solutions.

Note: If accessories are to be factory installed, contact the factory for pricing.