

Molded Case Circuit Breakers

FD 250A Frame Sentron Series

Selection

Type FXD6-A^{①⑦}

Blue Label

Non-Interchangeable Trip (Assembled Circuit Breaker – Without Lugs)		
Continuous Current Rating @ 40°C	2-Pole ^②	3-Pole
	Catalogue Number	Catalogue Number
70	FXD62B070	FXD63B070
80	FXD62B080	FXD63B080
90	FXD62B090	FXD63B090
100	FXD62B100	FXD63B100
110	FXD62B110	FXD63B110
125	FXD62B125	FXD63B125
150	FXD62B150	FXD63B150
175	FXD62B175	FXD63B175
200	FXD62B200	FXD63B200
225	FXD62B225	FXD63B225
250	FXD62B250	FXD63B250

Type FD6-A^②

Blue Label

Interchangeable Trip			
Continuous Current Rating @ 40°C	Complete Breaker Unassembled with Lugs	Frame Only	Trip Unit Only
	Catalogue Number	Catalogue Number	Catalogue Number

2-Pole 600V AC, 250V DC^②

70	FD62B070	FD62F250	FD62T070
80	FD62B080		FD62T080
90	FD62B090		FD62T090
100	FD62B100		FD62T100
110	FD62B110		FD62T110
125	FD62B125		FD62T125
150	FD62B150		FD62T150
175	FD62B175		FD62T175
200	FD62B200		FD62T200
225	FD62B225		FD62T225
250	FD62B250		FD62T250

3-Pole 600V AC, 500V DC^③

70	FD63B070	FD63F250	FD63T070
80	FD63B080		FD63T080
90	FD63B090		FD63T090
100	FD63B100		FD63T100
110	FD63B110		FD63T110
125	FD63B125		FD63T125
150	FD63B150		FD63T150
175	FD63B175		FD63T175
200	FD63B200		FD63T200
225	FD63B225		FD63T225
250	FD63B250		FD63T250

Interrupting Ratings

Breaker Type	RMS Symmetrical Amperes (KA)									
	CSA / UL 489 AIR (File E10848)					IEC 947-2				
	Volts AC (50/60Hz)			Volts DC		Volts AC (50/60Hz)				
	240	480	600	250	500 ^④	220/240	380/415	500		
						Icu	Ics	Icu	Ics	Icu
FXD6-A, FD6-A	65	35	22	30 (2-P)	18 (3-P)	65	33	35	9	20
HFXD6 ^⑤ , HFD6 ^⑤	100	65	25	30 (2-P)	25 (3-P)	100	50	65	33	42
HHFD6 ^⑤ , HHFXD6 ^⑤	200	100	25	—	—	200	100	100	50	65
CFD6	200	200	100	50 (2-P)	50 (3-P)	—	—	—	—	—

Instantaneous Adjustment Trip Range

Breaker Ampere Rating	Nominal Instantaneous Values							
	Low ^⑦	2	3	4	5	6	7	High ^⑦
70-90	600	640	690	730	770	810	850	900
100-110	700	770	840	920	990	1060	1140	1200
125-150	800	900	1000	1100	1200	1300	1400	1500
175-200	900	1060	1210	1370	1520	1780	1930	2000
225-250	1100	1300	1500	1700	1900	2100	2300	2500

Note: FD frame qualified to UL489 supplement SB "NAVAL"
See page 5-67 for additional information.

Ordering Information

Complete Breaker Unassembled with Lugs

Prices of FD6, HFD6, and HHFD6 breakers includes frame, trip and both line and load lugs (TA1FD350A). When ordered by these catalogue numbers, the customer will receive the frame, trip, and lugs separately packaged. For applications requiring different lugs, order individual items as needed.

Complete Breaker Assembled without Lugs

Prices of FXD6, HFXD6, HHFXD6, and CFD6 includes frame with non-interchangeable trip unit installed only. Order required lugs separately. For line and load lugs (TA1FD350A) installed, add suffix "L" to catalogue number (add 2 times list price of lugs for each pole).

50°C Applications see page 5-67.

400 Hz Applications see page 5-67.

Lugs For 75°C Wire^⑥

Catalogue Number	Wire Range
TA1FD350A	#6—350 kcmil Cu
TC1FD350	#4—350 kcmil Al
Compression Lug	
CCF250	350 kcmil Cu/Al

①Type FXD6-A circuit breakers are UL Listed for reverse fed applications.

②2-pole units are 3-pole width.

③When wired as shown on page 5-2, this circuit breaker is CSA Certified / UL listed and rated for use on 500V DC ungrounded UPS systems only.

④See **Note: A**, page 5-64.

⑤HFD6 and HHFD6 type circuit breakers meet the UL criteria for "current limiting" at 240 and 480V AC.

⑥HACR rated.

⑦+/- 20% Tolerance.

Modifications page 5-67
Accessories page 5-68

Molded Case Circuit Breakers

FD 250A Frame Sentron Series

Selection/Dimensions

Type HFD6^③, Type HFXD6^{③④⑤⑥}

Black Label

Interchangeable Trip			
Continuous Current Rating @ 40°C	Complete Breaker Unassembled with Lugs	Frame Only	Trip Unit Only
	Catalogue Number	Catalogue Number	Catalogue Number

2-Pole 600V AC, 250V DC (3 Pole Width)

70	HFD62B070	HFD62F250	FD62T070
80	HFD62B080		FD62T080
90	HFD62B090		FD62T090
100	HFD62B100		FD62T100
110	HFD62B110		FD62T110
125	HFD62B125		FD62T125
150	HFD62B150		FD62T150
175	HFD62B175		FD62T175
200	HFD62B200		FD62T200
225	HFD62B225		FD62T225
250	HFD62B250		FD62T250

3-Pole 600V AC, 500V DC^①

70	HFD63B070	HFD63F250	FD63T070
80	HFD63B080		FD63T080
90	HFD63B090		FD63T090
100	HFD63B100		FD63T100
110	HFD63B110		FD63T110
125	HFD63B125		FD63T125
150	HFD63B150		FD63T150
175	HFD63B175		FD63T175
200	HFD63B200		FD63T200
225	HFD63B225		FD63T225
250	HFD63B250		FD63T250

Type HHFD^④, HHFXD6^{②③④⑥}

3-Pole 600V AC, Extra High Interrupting

70	HHFD63B070	HHFD63F250	FD63T070
80	HHFD63B080		FD63T080
90	HHFD63B090		FD63T090
100	HHFD63B100		FD63T100
110	HHFD63B110		FD63T110
125	HHFD63B125		FD63T125
150	HHFD63B150		FD63T150
175	HHFD63B175		FD63T175
200	HHFD63B200		FD63T200
225	HHFD63B225		FD63T225
250	HHFD63B250		FD63T250

Type CFD6^{③⑥}

Fuseless Current Limiting

Red Label

Non-Interchangeable Trip (Assembled Circuit Breaker Without Lugs)		
Continuous Current Rating @ 40°C	3-Pole	
	600V AC/500V DC	
	Catalogue Number	
70	CFD63B070	
80	CFD63B080	
90	CFD63B090	
100	CFD63B100	
110	CFD63B110	
125	CFD63B125	
150	CFD63B150	
175	CFD63B175	
200	CFD63B200	
225	CFD63B225	
250	CFD63B250	

① When wired as shown on page 5-2, this circuit breaker is CSA Certified / UL listed and rated for use on 500V DC ungrounded UPS systems.

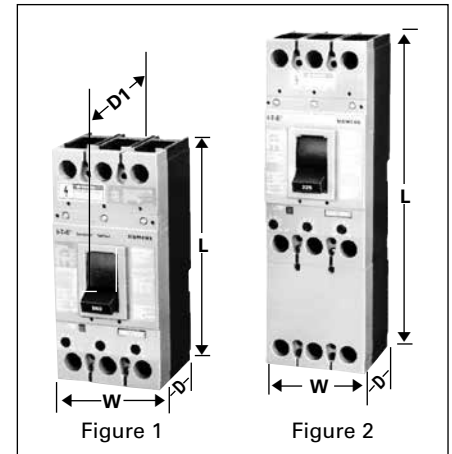
② For non-interchangeable trip 3-pole HFD6 type circuit breaker, change prefix identifier from HFD6 to HFXD6. Price equals frame and trip prices combined, e.g. price of HFXD63B250 equals price of HFD63F250 plus price of FD63T250. Order lugs separately.

③ Type HFXD6, HHFXD6, CFD6 are UL Listed for reverse feed applications.

④ Type HFXD6, HFD6, HHFD6, HHFXD6 meet the CSA Certified / UL criteria for "Current Limiting" at 240 VAC and 480V AC.

⑤ FXD6, ETI, CFD6, ETI — See page 5-50 for ordering information.

⑥ HACR rated.



Dimensions (in inches)

Breaker Type	W	L	D	D1 (to handle)
Figure 1 FXD6-A, FD6-A, HFD6, HFXD6, HHFD6, FD6-ETI ^⑤	4.50	9.50	4	5.25
Figure 2 CFD6, CFD6-ETI ^⑤	4.50	14.25	4	5.25

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.)
FD6-A, HFD6, HHFD6, FXD6-A Assembled Circuit Breaker (less connectors)		
2	1	8.6
3	1	10
FD6-A, HFD6, HHFD6 Frame Only		
2	1	7.5
3	1	8.7
FD6 Trip Unit Only		
2	1	1.1
3	1	1.3
CFD6 Assembled Circuit Breaker (less terminals)		
2	1	31
3	1	34

Molded Case Circuit Breakers

Internal Accessories

Selection

Accessories:
FD 250A Frame



Shunt Trip Combinations

Control Voltage		1 Shunt Trip
AC	DC	Catalogue Number
24	—	S17FD60
120	—	S01FD60
240	—	S03FD60
277	—	S15FD60
480	—	S04FD60
600	—	S06FD60
—	12	S16FD60
—	24	S07FD60
—	48	S09FD60
—	125	S11FD60
—	250	S13FD60

Undervoltage Trip Combinations

Control Voltage		1 Undervoltage Trip	1 Undervoltage Trip and 1 Auxiliary Switch
AC	DC	Catalogue Number	Catalogue Number
120	—	U01FD60	W01FD64
208	—	U02FD60	W02FD64
240	—	U03FD60	W03FD64
277	—	U16FD60	W16FD64
480	—	U06FD60	W06FD64
600	—	U08FD60	W08FD64
—	24	U13FD60	W13FD64
—	48	U14FD60	W14FD64
—	125	U10FD60	W10FD64
—	250	U12FD60	W12FD64

Auxiliary Switch Combinations

Voltage		1 Auxiliary Switch	2 Auxiliary Switches
AC	DC	Catalogue Number	Catalogue Number
240	—	A01FD62	A02FD62
480	—	A01FD64	A02FD64
—	12	A01FDLV	Gold Plated Contacts - for PLC use

Alarm Switch Combinations

Maximum Voltage		1 Alarm Switch	1 Alarm Switch and 1 Auxiliary Switch
AC	DC	Catalogue Number	Catalogue Number
480	250	B00FD64	C01FD64

①Auxiliary switch application is for 480V AC maximum.

Note: Old F-frame accessories cannot be used in new Sentron line. Likewise, new FD-frame accessories cannot be used on old F-frame circuit breakers.