

If used on 250A frame and above means non-interchangeable trip breaker with factory assembled frame and trip. Solid state trip and current limiting (S or C in first character) are non-interchangeable only, and the "X" is omitted.

Trip Unit Type

- ☐ — Omitted — Thermal-Magnetic
- S — Sensitrip® Electronic Trip

Sentron Series Type/Interrupting Range

- ☐ — Omitted — Standard Rating
- H — High IC Rating
- HH — Extra High IC Rating
- C — Highest IC Rating and Current Limiting

Frame Identifier

- E — Type ED
- F — Type FD
- J — Type JD
- L — Type LD
- LM — Type LMD
- M — Type MD
- N — Type ND
- P — Type PD
- R — Type RD

Maximum Voltage

- 2 — 240 Vac
- 4 — 480 Vac
- 6 — 600 Vac

Number of Poles

- 1
- 2
- 3
- A — used to indicate advanced electronic trip unit with maintenance mode capability (always 3 poles)
- B — used to indicate basic electronic trip unit (always 3 poles)

(Specific Application Type)

- B — Standard 40°C Breaker
- M — Calibrated for 50°C Application
- F — Frame Only
- T — 40°C Trip Unit Only
- W — 50°C Trip Unit Only
- S — Molded Case Switch
- L — Low Instantaneous Range ETI Breaker
- A — Standard Range ETI Breaker
- H — High Instantaneous Range ETI Breaker

Maximum Continuous Current Rating

- ED Frame — 015, 020, 025, 030, 035, 040, 045, 050, 060, 070, 080, 090, 100, 110, 125
- FD Frame — 070, 080, 090, 100, 110, 125, 150, 175, 200, 225, 250
- JD Frame — 200, 225, 250, 300, 350, 400
- LD Frame — 250, 300, 350, 400, 450, 500, 600
- LMD Frame — 500, 600, 700, 800
- MD Frame — 500, 600, 700, 800
- ND Frame — 900, 100 (1000A), 120 (1200A)
- PD Frame — 120 (1200A), 140 (1400A), 160 (1600A)
- RD Frame — 160 (1600A), 180 (1800A), 200 (2000A)

Suffix

- L — where applicable indicates a breaker shipped with line/loads lugs installed
- A — used with a switch to show automatic self protection
- Y — 400 Hertz
- H — 100% rated
- P — Load side lugs only
- NAV — Navel Ratings

NOTE:

- ☐ — Position omitted if not used.

Type FXD6-A^{①⑥}

Blue Label

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

Type FD6-A^⑥

Blue Label

Interchangeable Trip			
Continuous Current Rating @ 40°C	Complete Breaker Unassembled w/Lugs	Frame Only	Trip Unit Only
	Catalog Number	Catalog Number	Catalog 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)									
	UL 489 AIR (File E10848)					IEC 947-2 ^⑦				
	Volts AC (50/60Hz)					Volts AC (50/60Hz)				
	Volts DC					Volts AC (50/60Hz)				
	240	480	600	250	500 ^⑧	220/240	380/415	500		
FXD6-A, FD6-A	65	35	22	30 (2-P)	18 (3-P)	65	33	35	18	—
HFXD6, HFD6	100	65	25	30 (2-P)	25 (3-P)	100	50	65	33	—
HHFD6, HHFXD6	200	100	25	—	—	—	—	—	—	—
CFD6	200	200	100	30 (2-P)	50 (3-P)	—	—	—	—	—

Instantaneous Adjustment Trip Range

Breaker Ampere Rating	Nominal Instantaneous Values							
	±20% Tolerance Low	2	3	4	5	6	7	±20% Tolerance High
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 17/120 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 catalog 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 catalog number (add 2 times list price of lugs for each pole).

50°C Applications see page 17/120.

400 Hz Applications see page 17/120.

Lugs For 75°C Wire^⑤

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

Enclosures

Type	Catalog Number
1	F6N1S(F)
3R	F6N3R
4-4X	FD6SS4
7-9	EC2
12	F6N12
Neutral ^④	N250

Modifications page 17/120
For accessories, please refer to pages 17/84 and 17/124 to 17/129

■ Built to order. Allow 2–3 weeks for delivery.

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

② 2-pole units are 3-pole width.

③ When the power is connected in a "zig-zag" through the breaker, this circuit breaker is UL listed and rated for use on 500V DC ungrounded UPS system.

④ Order neutral as separate item.

⑤ See Note: A, page 17/117.

⑥ HACR rated.

⑦ Only applicable to interchangeable trip unit types: FXD6A, HFXD6A.

Breaker Mounted at a Distance From Motor Starter

ET thermal-magnetic circuit breakers conform to the National Electrical Code table 430-52 requirements for motor branch and feeder circuit protection when properly applied in conjunction with motor-running overcurrent protective devices. The recommended

circuit-breaker ratings in Table 2 provide adequate time delay for starting the majority of three phase induction motors.

To determine the ampere ratings of the ET breaker to protect a motor feeder, add the rating of the ET breaker used to protect the largest motor branch circuit in the group to the full-load currents of the remaining motors in the group.

Interrupt Ratings

For normal commercial purposes, available fault current can conveniently be obtained in the Interrupting Selector Tables.

Table 2 (When Breaker is Mounted at a Distance From Motor Starter)

3-Phase Induction Type Motors (EQ and ET circuit breakers (thermal-magnetic trip) for branch breaker use with alternating-current combination motor starters).

Motor Horse-power Rating	200 and 208V Motors			230V Motors			460V Motors			575V Motors		
	240V Circuit Breaker Data ^①			240V Circuit Breaker Data ^①			480V Circuit Breaker Data ^①			600V Circuit Breaker Data ^①		
	Breaker Type	Catalog Number	Ampere Rating	Breaker Type	Catalog Number	Ampere Rating	Breaker Type	Catalog Number	Ampere Rating	Breaker Type	Catalog Number	Ampere Rating
½	BQ ^②	BQ3B015	15	BQ ^②	BQ3B015	15	ED4	ED43B015	15	ED6	ED63B015	15
¾		BQ3B015	15		BQ3B015	15		ED43B015	15		ED63B015	15
1		BQ3B015	15		BQ3B015	15		ED43B015	15		ED63B015	15
1½		BQ3B015	15		BQ3B015	15		ED43B015	15		ED63B015	15
2		BQ3B020	20		BQ3B015	15		ED43B015	15		ED63B015	15
3		BQ3B030	30		BQ3B020	20		ED43B015	15		ED63B015	15
5	BQ ^②	BQ3B040	40	BQ ^②	BQ3B030	30	ED4	ED43B015	15	ED6	ED63B015	15
7½		BQ3B060	60		BQ3B050	50		ED43B030	30		ED63B020	20
10		BQ3B070	70		BQ3B070	70		ED43B030	30		ED63B030	30
15		BQ3B100	100		BQ3B090	90		ED43B040	40		ED63B035	35
20					BQ3B100	100		ED43B050	50		ED63B050	50
25	FXD6	FXD63B125	125	FXD6	FXD63B125	125	FXD6	FXD63B090	90	FXD6	FXD63B060	60
30		FXD63B150	150		FXD63B150	150		FXD63B100	100		FXD63B070	70
40		FXD63B175	175		FXD63B175	175		FXD63B125	125		FXD63B090	90
50		FXD63B200	200		FXD63B200	200		FXD63B150	150		FXD63B100	100
		FXD63B225	225									
60	JXD2	JXD23B300	300	—	—	—	FXD6, FD6	FXD63B150	150	FXD6	FXD63B100	100
75	JXD2	JXD23B400	400	JXD2	JXD23B350	350	FXD6, FD6	FXD63B200	200	FXD6, FD6	FXD63B125	125
100	JXD2	JXD23B400	400	JXD2	JXD23B400	400	FD6 ^③ JD6 ^③	FD63B250 JD63B250	250 250	FXD6, FD6	FD63B175	175
125	LD6 ^③ or LMD6	LD63B600 LMD63B600	600	LD6 ^③ or LMD6	LD63B500 or LMD63B500	500	JD6 ^③	JD63B300	300	FXD6, FD6 OR JD6 ^③	FXD63B200 JD63B200	200 200
150	LD6 ^③ or LMD6	LD63B600 or LMD63B600	600	LMD6	LD63B600 or LMD63B600	600	JD6 ^③	JD63B300	300	FXD6 or JD6 ^③	FXD63B225 JD63B225	225 225
200	LMD6	LMD63B800	800	LMD6	LMD63B800	800	JD6 ^③ JD6 ^③ LD6 ^③ or LMD6	JD63B350 JD63B400 LD63B600 or LMD63B600	350 400 600	JD6 ^③ JD6 ^③ JD6 ^③	JD63B300 JD63B400 JD63B400	300 400 400
250	—	—	—	—	—	—	—	—	—	—	—	—
300	—	—	—	—	—	—	—	—	—	—	—	—
350	—	—	—	—	—	—	LMD6	LMD63B700	700	LD6 ^③ or LMD6	LD63B500 or LMD63B500	500
400	—	—	—	—	—	—	LMD6	LMD63B800	800	LD6 ^③ or LMD6	LD63B600 or LMD63B600	600
500	—	—	—	—	—	—	—	—	—	LMD6	LMD63B800	800

①The selection of breakers for this table is in accordance with Article 430, 2005 National Electric Code. Recommended circuit breakers are for full voltage starting, special consideration is necessary for reduced voltage starting.

②For panelboard applications, substitute the BL breaker for the BQ, ED2 circuit breakers may also be used.

③For non-interchangeable trip applications, substitute the FXD6 for the FD6, the JXD6 for the JD6, or the LXD6 for the LD6.

Molded Case Circuit Breakers

Adjustable Installments Magnetic Trip Settings

Application

Breaker Type	Maximum Continuous Amperes	Nominal AC Adjustable Trip Range								ETI Motor Circuit Protector Catalog Number	Thermal Magnetic Catalog Number	
		Low	2	3	4	5	6	7	High		3-Pole	2-Pole
ED6	1	2.6	4.5	6	7.5	—	—	—	9	ED63A001	—	—
	2	7	11	15	19	—	—	—	22	ED63A002	—	—
	3	10	17	23	30	—	—	—	35	ED63A003	—	—
	5	16	26	36	46	—	—	—	54	ED63A005	—	—
	10	30	50	70	85	—	—	—	100	ED63A010	—	—
	25	55	90	125	155	—	—	—	180	ED63A025	—	—
	30	80	135	185	235	—	—	—	270	ED63A030	—	—
	40	115	185	255	325	—	—	—	375	ED63A040	—	—
	50	180	300	410	520	—	—	—	600	ED63A050	—	—
	100	315	540	740	890	—	—	—	1000	ED63A100	—	—
	125	500	720	920	1100	—	—	—	1250	ED63A125	—	—
CED6	1	2.6	4.5	6	7.5	—	—	—	9	CED63A001■	—	—
	2	7	11	15	19	—	—	—	22	CED63A002■	—	—
	3	10	17	23	30	—	—	—	35	CED63A003■	—	—
	5	16	26	36	46	—	—	—	54	CED63A005■	—	—
	10	30	50	70	85	—	—	—	100	CED63A010■	—	—
	25	55	90	125	155	—	—	—	180	CED63A025■	—	—
	30	80	135	185	235	—	—	—	270	CED63A030■	—	—
	40	115	185	255	325	—	—	—	375	CED63A040■	—	—
	50	180	300	410	520	—	—	—	600	CED63A050	—	—
	100	315	540	740	890	—	—	—	1000	CED63A100	—	—
	125	500	720	920	1100	—	—	—	1250	CED63A125	—	—
FXD6-A	70	600	640	690	730	770	810	850	900	—	FXD62B070	FXD63B070
	80	600	640	690	730	770	810	850	900	—	FXD62B080	FXD63B080
	90	600	640	690	730	770	810	850	900	—	FXD62B090	FXD63B090
	100	700	770	840	920	990	1060	1140	1200	—	FXD62B100	FXD63B100
	110	700	770	840	920	990	1060	1140	1200	—	FXD62B110	FXD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	FXD62B125	FXD63B125
	150	400	460	520	580	640	700	760	820	FXD63L150	—	—
	150	800	900	1000	1100	1200	1300	1400	1500	FXD63A150	FXD62B150	FXD63B150
	150	1100	1300	1500	1700	1900	2100	2300	2500	FXD63H150	—	—
	175	900	1060	1210	1370	1520	1780	1930	2000	—	FXD62B175	FXD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	FXD62B200	FXD63B200
FD6-A	70	600	640	690	730	770	810	850	900	—	FD62B070	FD63B070
	80	600	640	690	730	770	810	850	900	—	FD62B080	FD63B080
	90	600	640	690	730	770	810	850	900	—	FD62B090	FD63B090
	100	700	770	840	920	990	1060	1140	1200	—	FD62B100	FD63B100
	110	700	770	840	920	990	1060	1140	1200	—	FD62B110	FD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	FD62B125	FD63B125
	150	800	900	1000	1100	1200	1300	1400	1500	—	FD62B150	FD63B150
	175	900	1060	1210	1370	1520	1780	1930	2000	—	FD62B175	FD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	FD62B200	FD63B200
	225	1100	1300	1500	1700	1900	2100	2300	2500	—	FD62B225	FD63B225
	250	1100	1300	1500	1700	1900	2100	2300	2500	—	FD62B250	FD63B250
HFD6	70	600	640	690	730	770	810	850	900	—	HFD62B070	HFD63B070
	80	600	640	690	730	770	810	850	900	—	HFD62B080	HFD63B080
	90	600	640	690	730	770	810	850	900	—	HFD62B090	HFD63B090
	100	700	770	840	920	990	1060	1140	1200	—	HFD62B100	HFD63B100
	110	700	770	840	920	990	1060	1140	1200	—	HFD62B110	HFD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	HFD62B125	HFD63B125
	150	800	900	1000	1100	1200	1300	1400	1500	—	HFD62B150	HFD63B150
	175	900	1060	1210	1370	1520	1780	1930	2000	—	HFD62B175	HFD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	HFD62B200	HFD63B200
	225	1100	1300	1500	1700	1900	2100	2300	2500	—	HFD62B225	HFD63B225
	250	1100	1300	1500	1700	1900	2100	2300	2500	—	HFD62B250	HFD63B250
HHFD6	70	600	640	690	730	770	810	850	900	—	HHFD63B070	HHFD63B070
	80	600	640	690	730	770	810	850	900	—	HHFD63B080	HHFD63B080
	90	600	640	690	730	770	810	850	900	—	HHFD63B090	HHFD63B090
	100	700	770	840	920	990	1060	1140	1200	—	HHFD63B100	HHFD63B100
	110	700	770	840	920	990	1060	1140	1200	—	HHFD63B110	HHFD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	HHFD63B125	HHFD63B125
	150	800	900	1000	1100	1200	1300	1400	1500	—	HHFD63B150	HHFD63B150
	175	900	1060	1210	1370	1520	1780	1930	2000	—	HHFD63B175	HHFD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	HHFD63B200	HHFD63B200
	225	1100	1300	1500	1700	1900	2100	2300	2500	—	HHFD63B225	HHFD63B225
	250	1100	1300	1500	1700	1900	2100	2300	2500	—	HHFD63B250	HHFD63B250
CFD6	70	600	640	690	730	770	810	850	900	—	CFD62B070	CFD63B070
	80	600	640	690	730	770	810	850	900	—	CFD62B080	CFD63B080
	90	600	640	690	730	770	810	850	900	—	CFD62B090	CFD63B090
	100	700	770	840	920	990	1060	1140	1200	—	CFD62B100	CFD63B100
	110	700	770	840	920	990	1060	1140	1200	—	CFD62B110	CFD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	CFD62B125	CFD63B125
	150	400	460	520	580	640	700	760	820	CFD63L150	—	—
	150	800	900	1000	1100	1200	1300	1400	1500	CFD63A150	CFD62B150	CFD63B150
	150	1100	1300	1500	1700	1900	2100	2300	2500	CFD63H150	—	—
	175	900	1060	1210	1370	1520	1780	1930	2000	—	CFD62B175	CFD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	CFD62B200	CFD63B200
CFD6	70	600	640	690	730	770	810	850	900	—	CFD62B070	CFD63B070
	80	600	640	690	730	770	810	850	900	—	CFD62B080	CFD63B080
	90	600	640	690	730	770	810	850	900	—	CFD62B090	CFD63B090
CFD6	100	700	770	840	920	990	1060	1140	1200	—	CFD62B100	CFD63B100
	110	700	770	840	920	990	1060	1140	1200	—	CFD62B110	CFD63B110
	125	800	900	1000	1100	1200	1300	1400	1500	—	CFD62B125	CFD63B125
	150	400	460	520	580	640	700	760	820	CFD63L150	—	—
	150	800	900	1000	1100	1200	1300	1400	1500	CFD63A150	CFD62B150	CFD63B150
	150	1100	1300	1500	1700	1900	2100	2300	2500	CFD63H150	—	—
	175	900	1060	1210	1370	1520	1780	1930	2000	—	CFD62B175	CFD63B175
	200	900	1060	1210	1370	1520	1780	1930	2000	—	CFD62B200	CFD63B200
	225	1100	1300	1500	1700	1900	2100	2300	2500	—	CFD62B225	CFD63B225
	250	1100	1300	1500	1700	1900	2100	2300	2500	CFD63A250	CFD62B250	CFD63B250