Molded Case Switch — Circuit Disconnect

Maximum Frame Rating	2-Pole Catalog Number	2-Pole List Price $	3-Pole Catalog Number	3-Pole List Price $	Self-Protective Instantaneous Override ±20%®
100A	BQ2S060	60.00	BQ3S060	275.00	1000A
	BQ2S100	158.00	BQ3S100	275.00	1000A
125A	ED22S100A	226.00	ED23S100A	383.00	1000A
	ED42S100A	474.00	ED43S100A	582.00	1000A
	ED42S125A	908.00	ED43S125A	1171.00	1000A
	ED62S100A	547.00	ED63S100A	701.00	1000A
	—	—	ED63S125A	1338.00	1000A
	CED62S100A	2037.00	CED63S100A	2548.00	1000A
	CED62S125A	3075.00	CED63S125A	3656.00	1000A
225A	QJ22S225A	239.00	QJ23S225A	776.00	2000A
250	FXD62S250A	1271.00	FXD63S250A	1540.00	3200A
	HFXD62S250A	2213.00	HFXD63S250A	2681.00	3200A
	①	—	CFD63S250A	4946.00	3200A
400	JXD22S400A	1607.00	JXD23S400A	1982.00	6000
	JXD62S400A	2225.00	JXD63S400A	2706.00	6000
	HJXD62S400A	3704.00	HJXD63S400A	4564.00	6000
	①	—	CJD63S400A	5639.00	6000
600	LXD62S600A	3103.00	LXD63S600A	3892.00	8000
	HLXD62S600A	4082.00	HLXD63S600A	5208.00	8000
	①	—	CLD63S600A	9157.00	8000
800	LMXD62S800A	3602.00	LMXD63S800A	4473.00	10000
	MXD62S800A	3602.00	MXD63S800A	4473.00	10000
	①	—	CMD63S800A	10390.00	10000
1200	NXD62S120A	6808.00	NXD63S120A	7902.00	10000
	®	—	CND63S120A	14837.00	10000
1600	O	—	PXD63S160A	11678.00	10000
2000	•)	—	RXD63S200A	12937.00	10000
IMon Automatic Molded Case Switch					
2000	CD	—	TD63S2000	17013.00	—
2500	CD	—	TD63S2500	19153.00	—
3200	CD	—	TD63S3200	21079.00	—
4000-5000	See "SB" Type Insulated Case Breakers				

Ordering Information

Order by catalog number. Switches include frame and self protective (except TD) trip unit only. Order lugs separately from pages 108-110.

Lugs pages 108-110
Enclosures pages 34-46
Accessories pages 112-126

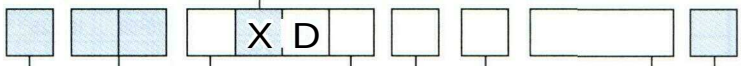
Built to order. Allow 2 weeks for production.

© For 2-pole application use outside poles of 3-pole circuit breaker.
© For additional lugs see pages 108-110.

i) Molded case switches up to R frame contain a self protecting instantaneous element, which may open circuit above their override set point.

Catalog Numbering System

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

Sentron Series Type/Interrupting Range
☐ — Omitted - Standard Rating
H — High 1C Rating
HH — Extra High 1C Rating
C — Highest 1C Rating and Current Limiting

Frame Identifier

E — Type ED	M — Type MD
F — Type FD	N — TypeND
J — TypeJD	P — Type PD
L — Type LD	R — Type RD
LM — TypeLMD	T — TypeTD

Maximum Voltage
2 — 240 Vac
4 — 480 Vac
6 — 600 Vac

Number of Poles
1
2
3
9 used to indicate the max. functions for an electronic trip circuit breaker (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)
TD Frame — 2000, 2500, 3200

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

NOTE:

☐ — Position omitted if not used.

Reference Guide

Thermal-Magnetic Trip Breakers

						General Purpose Breakers									
						ED2	ED4	ED6	HED4	HHED6	CED6	FD6A, FXD6A	HFD6, HFXD6	HHFD6, HHFXD6	CFD6
Page						74	74	74	75	75	75	76	77	77	77
Ratings	AC	Poles				1, 2, 3	1, 2, 3	1④, 2, 3	1, 2, 3	2, 3	2, 3	2, 3	2, 3	2, 3	2, 3
		Amperes, Continuous				15–100	15–125	15–125	15–125	15–125	15–125	70–250	70–250	70–250	70–250
		Volts 50/60HZ			1-Pole	120	277	347	277	—	—	—	—	—	—
					2-Pole 3-Pole	240	480	600	480	600	600	600	600	600	600
		Interrupt Rating Symmetrical RMS Amperes	UL		120V	10,000	—	—	—	—	—	—	—	—	—
					240V	10,000	65,000	65,000	100,000	100,000	200,000	65,000	100,000	200,000	200,000
					277V	—	22,000①	—	65,000②	—	—	—	—	—	—
					347V	—	—	30,000	—	—	—	—	—	—	—
					480V	—	18,000	25,000	42,000	65,000	200,000	35,000	65,000	100,000	200,000
					600V	—	—	18,000	—	25,000	100,000	18,000	25,000	25,000	100,000
			IEC 947-2 50/60HZ	220/240V	Icu	—		65,000	—	—	200,000②	65,000	100,000	200,000	—
					Ics	—	—	17,000	—	—	—	33,000	50,000	100,000	—
				380/415V	Icu	—		35,000	—	—	200,000②	35,000	65,000	100,000	—
					Ics	—	—	9,000	—	—	—	18,000	33,000	50,000	—
				500V	Icu	—	—	18,000	—	—	—	20,000	42,000	65,000	—
					Ics	—	—	5,000	—	—	—	10,000	21,000	33,000	—
	DC	2-Pole, 250V DC Interrupting Ratings				5,000	30,000	30,000	30,000	—	30,000	30,000	30,000	—	30,000
		3-Pole, 500V DC Interrupting Ratings③				—	—	18,000	—	—	50,000	18,000	25,000	—	50,000
Dimensions in inches		Height				6.34	6.34	6.34	6.34	6.58	9.26	9.50	9.50	11.00	14.12
		Width			1-Pole	1.00	1.00	1.00	1.00	—	—	—	—	—	—
					2-Pole	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50
					3-Pole	3.00	3.00	3.00	3.00	3.00	3.00	4.50	4.50	4.50	4.50
		Depth				4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overcurrent Devices		Thermal and Fixed Magnetic Trip				√	√	√	√	√	√	—	—	—	—
		Thermal and Adjustable Magnetic Trip				—	—	—	—	—	—	√	√	√	√
		Adjustable Magnetic Trip Only Motor Circuit Protector				—	—	√	—	—	√	√	—	—	√
		Molded Case Switch				√	√	√	—	—	√	√	—	—	√
Accessories & Modifications		Undervoltage Trip				√	√	√	√	√	√	√	√	√	√
		Shunt Trip				√	√	√	√	√	√	√	√	√	√
		Auxiliary Switch				√	√	√	√	√	√	√	√	√	√
		Alarm Switch				√	√	√	√	√	√	√	√	√	√
		Mechanical Interlock				—	—	—	—	—	—	√	√	√	√
		Rear Connection Studs				√	√	√	√	√	√	√	√	√	√
		Electric Motor Operator				√	√	√	√	√	√	√	√	√	√
		Plug-In Mounting Assembly				√	√	√	√	√	√	√	√	√	√
		Fungus Proofing (ref. page 106)				√	√	√	√	√	√	√	√	√	√
Individual Enclosures		Type 1 — Indoor Surface				√	√	√	√	√	√	√	√	√	√
		Type 1 — Indoor, Flush				√	√	√	√	√	√	—	√	—	√
		Type 3R — Outdoor-Rainproof				√	√	√	√	√	√	√	√	√	√
		Type 7 — Flammable Gas Atmosphere				√	√	√	√	√	—	√	√	√	—
		Type 9 — Combustion Dusttight				√	√	√	√	√	—	√	√	√	—
		Type 5, 12 — Lint, Fine Dust, Oils, Coolants				√	√	√	√	√	√	√	√	√	√
		Type 12K — Semi-Dusttight				√	√	√	√	√	√	√	√	√	√

For inches / millimeters conversion, see Application Data section.

① 1-pole only.
② 40–100A: 25,000 AIR at 277V AC.
③ For DC UPS system application.
④ Single pole ED6 (15–30A) 30kA, (35–100A) 18 kA. CSA Only.

Magnetic Trip Only — ETI Motor Circuit Protector

Breaker Type	Ampere Rating	Instantaneous Trip Range② Minimum③	Instantaneous Trip Range② Maximum③	Complete Circuit Breaker Without Lugs: Catalog Number 2-Pole	List Price $	Catalog Number 3-Pole	List Price $
ED6-A 600V AC 250V DC	1	2.6	9	—	—	ED63A001	646.00
	2	7	22	—	—	ED63A002	646.00
	3	10	35	—	—	ED63A003	646.00
	5	16	54	—	—	ED63A005	646.00
	10	30	100	—	—	ED63A010	646.00
	25	55	180	—	—	ED63A025	646.00
	30	80	270	—	—	ED63A030	646.00
	40	115	375	—	—	ED63A040	646.00
	50	180	600	—	—	ED63A050	776.00
	100	315	1000	—	—	ED63A100	825.00
	125	500	1250	—	—	ED63A125	1565.00
	SHIPPING:					3.8 lbs. each	
CED6-A 600V AC 250V DC	1	2.6	9	—	—	CED63A001	2203.00
	2	7	22	—	—	CED63A002	2203.00
	3	10	35	—	—	CED63A003	2203.00
	5	16	54	—	—	CED63A005	2203.00
	10	30	100	—	—	CED63A010	2203.00
	25	55	180	—	—	CED63A025	2203.00
	30	80	270	—	—	CED63A030	2203.00
	40	115	375	—	—	CED63A040	2203.00
	50	180	600	—	—	CED63A050	2633.00
	100	315	1000	—	—	CED63A100	2827.00
	125	500	1250	—	—	CED63A125	4239.00
	SHIPPING:					6 lbs. each	
FXD6① 600V AC 250V DC	150	400	800	FXD62L150	2341.00	FXD63L150	2703.00
	150	800	1500	FXD62A150	2341.00	FXD63A150	2703.00
	150	1100	2500	FXD62H150	2341.00	FXD63H150	2703.00
	250	1100	2500	FXD62A250	2341.00	FXD63A250	2703.00
	SHIPPING:			7 lbs. each		9 lbs. each	
CFD6① 600V AC 250V DC	150	400	800	CFD62L150	4503.00	CFD63L150	5223.00
	150	800	1500	CFD62A150	4503.00	CFD63A150	5223.00
	150	1100	2500	CFD62H150	4503.00	CFD63H150	5223.00
	250	1100	2500	CFD62A250	4503.00	CFD63A250	5223.00
	SHIPPING:			12 lbs. each		12 lbs. each	
JXD6(A)① 600V AC 250V DC	400	1250	2500	JXD62L400	2410.00	JXD63L400	2827.00
	400	2000	4000	JXD62H400	2410.00	JXD63H400	2827.00
	SHIPPING:			16 lbs. each		20 lbs. each	
CJD6① 600V AC 250V DC	400	1250	2500	CJD62L400	4876.00	CJD63L400	6067.00
	400	2000	4000	CJD62H400	4876.00	CJD63H400	6067.00
	SHIPPING:			29.5 lbs. each		31.5 lbs. each	
LXD6(A)① 600V AC 250V DC	600	2000	4000	LXD62L600	3617.00	LXD63L600	4128.00
	600	3000	6000	LXD62H600	3617.00	LXD63H600	4128.00
	SHIPPING:			16 lbs. each		20 lbs. each	
CLD6① 600V AC 250V DC	600	2000	4000	CLD62L600	7840.00	CLD63L600	9711.00
	600	3000	6000	CLD62H600	7840.00	CLD63H600	9711.00
	SHIPPING:			29.5 lbs. each		31.5 lbs. each	
LMXD6① 600V AC 250V DC	800	2800	6000	LMXD62L800	4627.00	LMXD63L800	5846.00
	800	3200	8000	LMXD62A800	4627.00	LMXD63A800	5846.00
	SHIPPING:			35 lbs. each		35 lbs. each	
MXD6① 600V AC 250V DC	800	3000	6000	MXD62L800	4627.00	MXD63L800	5846.00
	800	4000	8000	MXD62A800	4627.00	MXD63A800	5846.00
	800	5000	10000	MXD62H800	4627.00	MXD63H800	5846.00
	SHIPPING:			27 lbs. each		33 lbs. each	
CMD6① 600V AC 250V DC	800	3000	6000	CMD62L800	9032.00	CMD63L800	10986.00
	800	4000	8000	CMD62A800	9032.00	CMD63A800	10986.00
	800	5000	10000	CMD62H800	9032.00	CMD63H800	10986.00
	SHIPPING:			80 lbs. each		80 lbs. each	

Important Information

ETI interrupting ratings are determined through combination tests with properly sized overload relays and contactors.

Connectors included when ordering by circuit breaker catalog number for ED6 and CED6 ETI's. Order ETI circuit breaker and lugs (2 per pole) separately for the FXD6, CFD6, MD6, CMD6, JXD6, CJD6, LXD6 and CLD6 ETI's.

Lug Information pages 108–110
Enclosures pages 34–46
Accessories pages 112–126
Application data pages 136–140

①2-pole available in 3-pole width only.

② When applied on DC Circuits — Trip levels will increase approximately +15 to 20%.
③ Tolerance -20/+30%

Built to order. Allow 2 weeks for production.

Modifications

A variety of internal and external accessories, as well as modifications, are available to adapt Siemens circuit breakers to special installation requirements. UL listed internal accessories for 100 through 2000A circuit breakers are field-addable.

Internal accessories fine tune an electrical distribution system, allowing control of the circuit breakers to meet special application requirements. For example, emergency situations may dictate tripping critically placed circuit breakers quickly. Shunt trips accomplish this conveniently and efficiently. Or, when voltage drops are a concern, undervoltage trips automatically open the circuit breaker at a predetermined voltage level.

A wide range of external operating and mounting accessories is also available. For example, face, shallow, and back mounting plates are ideal for tailoring BQ circuit breakers to OEM applications. A complete line of operating handles and handle-blocking devices meet switchboard, enclosure and safety needs. Plug-in mounting assemblies, which simplify switchboard mounting of circuit breakers and permit breaker removal without disconnecting bus or cable connections, are available.

Modifications

50°C Ambient Calibration—Not UL listed and not available for solid state trip or 100% rated breakers.

For QP, BL Type Circuit Breakers
— Add suffix 'M' to catalog number
(Example: B120M) ..... No Charge

For BQ, QJ2, and ED Frame Circuit Breakers
— Replace 'B' in catalog number with 'M' ..... No Charge
(Example: BQ3M060, QJ23M200, ED63M060)

For FD, JD, LD, LMD, MD, ND, PD, and RD Frame Circuit Breakers
Non-Interchangeable Trip ..... No Charge
— Replace 'B' in catalog number with 'M'
(Example: FXD63M225, JXD63M400)
Interchangeable Trip (trip unit only) ..... No Charge
— Replace 'T' in catalog number with 'W'
(Example: FD63W200, JD63W400)

400 HZ Calibration

UL Listed (5KA IR)
For QP, BQ, BL, and QJ Type Circuit Breakers (200A max.) ..... Add 25% to list price
— Add suffix 'Y' to catalog number

Not UL Listed
For all other Circuit Breakers ..... Add 25% to list price
— Add suffix 'Y' to catalog number

Fungus Proofing — In accordance with MIL-T-152.

All BQD, CQD, ED, FD, JD, LD, LMD, MD, ND, PD, and RD, Frame Circuit Breakers are inherently fungus resistant and do not require special treatment.

Fungus proofing in accordance with MIL-T-152
For QP, BL, and BQ Type Circuit Breakers
— Order must be placed directly with the factory by the sales office .. Add $10.00 net per pole

For all other Circuit Breaker Types
— Order must be placed directly with the factory by the sales office .. Add $160.00 net per device

Certificate of Compliance ..... Add $210.00 net
Certificate of compliance testing must be performed on the actual device being shipped. The certificate cannot be provided after initial shipment. Order for devices with COC requirement must be placed directly with the factory by the sales office.

UL 489 Supplement SB Naval Use Breakers

Breakers tested to UL 489 Supplement SB are qualified for use on non combat and auxiliary naval vessels.

Siemens' molded case breakers from the ED frame through the 2000 Amp SB frame can be labeled "Naval" in compliance with Supplement SB.

Supplement SB testing comprises two sets of vibration tests. The first is to find mechanical resonances in the product and to subject the breaker to extreme testing at each resonant frequency. The second is a swept frequency test, in which the frequency of excitation is changed in intervals of 1Hz, and held at each frequency for five minutes. The excitation frequencies run from 4 to 33Hz, and the test is conducted in each of the three orthogonal axes of the breaker.

During these tests, the breaker must not trip from the closed position, nor may the contacts touch from the open position. Calibration and insulation resistance are also verified during the test.

For detailed information, refer to UL 489, Supplement SB.

Ordering Information

For "NAVAL" label, add **$75.** net per catalog number per order. Order must be placed directly with the factory by Siemens Sales Office.

Types	UL File
ED2, ED4, ED6, IIED4, HED6	E10848, Vol 4, Sec 11
CED6	E10848, Vol 4, Sec 13
FD6, FXD6, HFD6, HFXD6	E10848, Vol 4, Sec 17
CFD6	E10848, Vol 4, Sec 18
JXD2, JD6, JXD6, LXD6, LD6, HJD6, HJXD6, HLD6, HLXD6	E10848, Vol 4, Sec 8
HHJD6, HHJXD6, HHLD6, HHLXD6	E10848, Vol 4, Sec 20
CJD6, CLD6	E10848, Vol 4, Sec 14
MD6, MXD6, HMD6, HMXD6, CMD6, ND6, NXD6, HND6, HNXD6, CND6	E10848, Vol 4, Sec 15
PD6, PXD6, HPD6, HPXD6, CPD6, RD6, RXD6, HRD6, HRXD6	E10848, Vol 4, Sec 19
SBA400, SBS400, SBA800, SBS800, SBA1200, SBS1200, SBA1600, SBS1600, SBA2000, SBS2000	E9896, Vol 15, Sec 1