

Molded Case Circuit Breakers

SELECTION

QJ 225A Frame

Type QJ2

Continuous Current Rating @ 40°C	2-Pole		3-Pole	
	240V AC		240V AC	
	Catalog Number	List Price \$	Catalog Number	List Price \$
60	QJ22B060	328.00	QJ23B060	867.00
70	QJ22B070	328.00	QJ23B070	867.00
80	QJ22B080	328.00	QJ23B080	867.00
90	QJ22B090	328.00	QJ23B090	867.00
100	QJ22B100	328.00	QJ23B100	867.00
110	QJ22B110	328.00	QJ23B110	867.00
125	QJ22B125	328.00	QJ23B125	867.00
150	QJ22B150	328.00	QJ23B150	867.00
175	QJ22B175	328.00	QJ23B175	867.00
200	QJ22B200	328.00	QJ23B200	867.00
225	QJ22B225	328.00	QJ23B225	867.00

Ordering Information

Load side TA1Q300 lugs are mounted and included when circuit breaker is ordered. For line and load lugs (TA1Q300) installed at no additional charge, add suffix "L" to catalog number.

50°C Calibration - See page 111.
400HZ - See page 111.

Shipping Weights

QJ2, QJH2, QJ2H, HQJ2H		
Number of Poles	Number per Carton	Shipping Weight (lbs.)
2	10	30
3	10	41

Type QJH2

60	QJH22B060	791.00	QJH23B060	1212.00
70	QJH22B070	791.00	QJH23B070	1212.00
80	QJH22B080	791.00	QJH23B080	1212.00
90	QJH22B090	791.00	QJH23B090	1212.00
100	QJH22B100	791.00	QJH23B100	1212.00
110	QJH22B110	791.00	QJH23B110	1212.00
125	QJH22B125	791.00	QJH23B125	1212.00
150	QJH22B150	791.00	QJH23B150	1212.00
175	QJH22B175	791.00	QJH23B175	1212.00
200	QJH22B200	791.00	QJH23B200	1212.00
225	QJH22B225	791.00	QJH23B225	1212.00

Lugs For 75°C Wire^①

Catalog Number	Lug Body	Lug Wire Range
TA1Q300	Al	(1) #6—300 kcmil Cu (1) #4—300 kcmil Al
TC1Q250	Cu	(1) #6—250 kcmil Cu

Enclosures (Neutral Included)

Type	Catalog Number	List Price \$
1	EB3225(S)(F)	142.00
3R (2-pole)	WB2225	263.00
3R (3-pole)	WB3225	288.00

UL 489 Interrupting Ratings

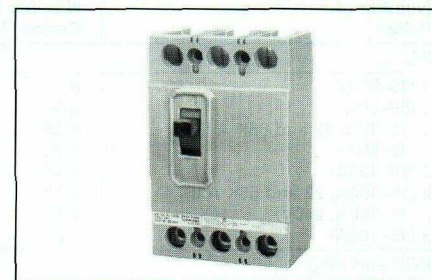
Breaker Type	AIR @ 240V AC
QJ2	10,000
QJH2	22,000
QJ2H	42,000
HQJ2H	100,000

Type QJ2H

60	QJ22B060H	984.00	QJ23B060H	1538.00
70	QJ22B070H	984.00	QJ23B070H	1538.00
80	QJ22B080H	984.00	QJ23B080H	1538.00
90	QJ22B090H	984.00	QJ23B090H	1538.00
100	QJ22B100H	984.00	QJ23B100H	1538.00
110	QJ22B110H	984.00	QJ23B110H	1538.00
125	QJ22B125H	984.00	QJ23B125H	1538.00
150	QJ22B150H	984.00	QJ23B150H	1538.00
175	QJ22B175H	984.00	QJ23B175H	1538.00
200	QJ22B200H	984.00	QJ23B200H	1538.00
225	QJ22B225H	984.00	QJ23B225H	1538.00

Type HQJ2H

100	—	—	HQJ23B100H	1751.00
110	—	—	HQJ23B110H	1751.00
125	—	—	HQJ23B125H	1751.00
150	—	—	HQJ23B150H	1751.00
175	—	—	HQJ23B175H	1751.00
200	—	—	HQJ23B200H	1751.00
225	—	—	HQJ23B225H	1751.00



QJ2

Internal Accessories (Factory installed only)

Add suffix to catalog number and add to list price.

Control Voltage		Shunt Trip		Auxiliary Switches				Shunt Trip and 1A and 1B Auxiliary Switch	
AC	DC	Suffix	List Adder \$	1A and 1B		2A and 2B		Suffix	List Adder \$
120/240		00S01	254.00	A01	208.00	A02	417.00	01S01	462.00
	24	00S07	254.00	A01	208.00	A02	417.00	01S07	462.00
	48	00S09	254.00	A01	208.00	A02	417.00	01S09	462.00
	125	00S11	254.00	A01	208.00	A02	417.00	01S11	462.00

① See Note: A page 108.

Enclosures pages 34–46
Accessories pages 108–126

Built to order. Allow 2 weeks for production.

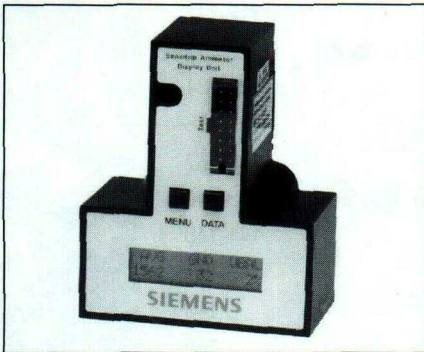
What's New?

With this Speedfax, Siemens Energy & Automation is proud to announce several new products. These new concepts serve the OEM and power distribution markets.

CE Marking

A wide range of Sentron® thermal magnetic circuit breakers has been fully tested for compliance with the European community's Low Voltage Directive, and carry the CE mark, indicating their compliance with that directive. These are noted in the Speedfax with the stylized CE in watermark behind the catalog numbers. Declarations of conformity are available for these products. A point of misunderstanding lies in the area of handle operators. A handle operator alone, such as that for the Max-flex, since there is no applicable European Directive, may not carry the CE mark. The mark is affixed to the finished equipment that incorporates the handle, but not to this component device.

Sensitrip Ammeter Display Unit



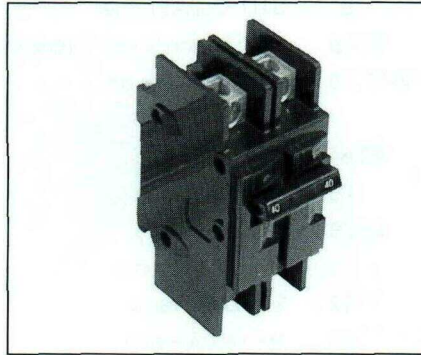
The Ammeter display for the Sensitrip® electronic trip family of breakers brings a new level of diagnostic capability even to non-interconnected breakers. Having an internal clock calendar, it can record the date and time of each trip event that occurs. Other products rely on being connected in a full network to time stamp events. This exclusive patented Siemens device provides current metering and breaker-trip diagnostic information without expensive networks.

PLC Level Auxiliary Switches

A new family of gold flashed auxiliary switches for the FD through ND breakers allows sensing at very low voltage and currents for interface directly to programmable logic controllers and other electronic devices. Standard contacts, built to switch 120 Volts and higher currents can be unreliable when the

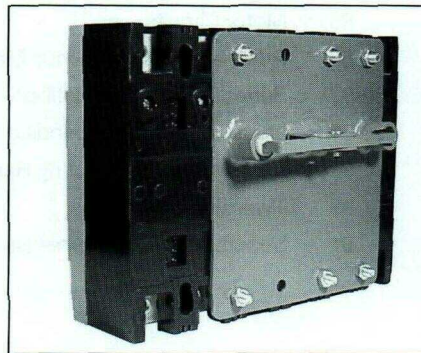
sensing current is in the milliamp range, and the sensing voltage is 12 Volts or lower. These very reliable low level switches overcome that limitation. Standard switch contacts should, of course, continue to be used in standard current and voltage applications

DIN Rail mounted 120/240 V Breaker



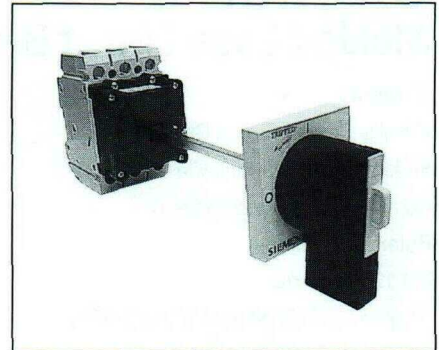
The Siemens BQ breakers are now available in 1- and 2-pole construction, from 15 to 60 Amps in lug in – lug out DIN rail mounted configuration. These breakers, rated 120/240 Volts, are ideal for applications in control panels and HVAC, and with their available finger safe terminal shields can qualify as service disconnects.

QJ Walking Beam Interlock



Answering the growing need for 120/240 and 240 Volt standby power systems, Siemens introduces the walking beam interlock for the QJ family of 240 Volt circuit breakers. Useful in the cell tower and other commercial applications, the QJ walking beam allows interlocking two 2 pole breakers mounted using only 4 pole widths, or two 3 pole breakers using 6 pole widths. Please consult the factory for availability.

Rotary Handle Operators for CQD



Both fixed and variable depth handle operators are available for the CQD breaker. These make the CQD a particularly attractive product for use in control panels and similar configurations

Potter & Brumfield Discontinued

With SE&A's divestiture of Siemens Electromechanical Components, we have ceased offering the Potter & Brumfield line of supplementary Protectors.

Enhanced SB ICCB



There have been several functional enhancements to the SB Systems Breaker since the last issue of the Speedfax. These include:

- Improved reliability, including regular monthly breaker endurance testing to 8,000 operations, a new Electronic Motor Operator tested to 12,000 operations, and improved secondary disconnects
- Extended 2 Year Standard Warranty

Molded Case Circuit Breakers

REFERENCE

Federal Specification Classification

W-C-375B/GEN

Class	Interrupting Rating		Poles	Range of Current Trip [®]	Breaker Type (All Circuit Breakers Meet or Exceed the Indicated Class Level)
	Symmetrical Amperes ^①	Volts AC 60HZ			
10a ^②	5,000	120/240	1 or 2	15-100	QP, BQ, QT, BL
10b	5,000	240	2 or 3	15-100	QP, BQ, BQD, CQD, BL
11a	7,500	120	1	15-100	QP, BQ, BQD, CQD, BL
11b	7,500	240	2 or 3	15-100	QP, BQ, BQD, CQD, BL
12a ^②	10,000	120/240	1 or 2	15-100	QP, BQ, QT, ED2, BL
12b	10,000	240	2 or 3	15-225	QP, BQ, QJ2, ED2, BQD, CQD, BL
12c	10,000	277	1	15-100	BQD, CQD
13a	14,000	277	1	15-100	ED4, BQD, CQD
13b	14,000	277/480	1, 2, or 3	15-100	ED4, BQD, CQD
14a	22,000	120/240	1 or 2	15-100	QPH, BQH, BLH
14b	22,000	240	2 or 3	70-400	QJH2, QJ2-H, BQH, BQD, CQD, BLH
15a	65,000	120/240	1 or 2	15-100	HQP, HBQ, ED4, HED4
15b	65,000	240	2 or 3	15-225	ED6, ED4, FXD6, FD6, HED4, BQD, CQD, HQJ2H
16a	100,000	480	2 or 3	15-225	CFD6, CED6
16b	100,000	600	2 or 3	15-600	CED6, CFD6, CJD6, SCJD6, CLD6, SCLD6
17a	200,000	600	2 or 3	70-2000	—
18a	18,000 14,000 14,000	240 480 600	2 or 3	15-125	ED6, HED6, HHED6
19a	22,000 18,000 14,000	240 480 600	2 or 3	70-225	FXD6, FD6, CFD6, HFD6
20a	25,000 22,000 22,000	240 480 600	2 or 3	70-225	FXD6-A, FD6-A, CFD6, HFD6
21a	42,000 30,000 22,000	240 480 600	2 or 3	70-800	HFD6, CFD6, JXD6(A), JD6(A), SJD6(A), HJD(A), HJXD6(A), HHJD6, SHJD6(A), CJD6, SCJD6, LXD6(A), LD6(A), SLD6(A), HLD6(A), HLXD6(A), HHL6, SLD6(A), SHLD6(A), CLD6, SCLD6, LMD6, LMXD6, HLM6, HLMXD6, MD6, MXD6, SMD6, HMD6, HMXD6, SHMD6, CMD6, SCMD6
22a	65,000 25,000 18,000	240 480 600	2 or 3	15-125	CED6, ED6, HED6, HHED6, FXD6-A, FD6-A
23a	65,000 35,000 25,000	240 480 600	2 or 3	70-1200	HHED6, FXD6-A, FD6-A, HFD6, HHFD6, CFD6, JD6(A), JXD6(A), SJD6(A), HJD6(A), HJXD6(A), SHJD6(A), HHJD6, HHJXD6, CJD6, SCJD6, LXD6(A), LD6(A), SLD6(A), HLD6(A), HLXD6(A), SHLD6(A), HHL6, HHLXD6, CLD6, SCLD6, LMD6, LMXD6, HLM6, HLMXD6, MD6, MXD6, SMD6, HMD6, HMXD6, SHMD6, CMD6, SCMD6, ND6, NXD6, SND6, HND6, HNXD6, SHND6, CND6, SCND6
24a	65,000 50,000 42,000	240 480 600	2 or 3	1200-2000	PD6, PXD6, HPD6, HPXD6, CPD6 RD6, RXD6, HRD6, HRXD6, SPD6, SHPD6
25a	125,000 80,000 60,000	240 480 600	2 or 3	600-4000	HHL6, CLD6, CMD6, CND6 SCLD6, SCMD6, SCND6, CPD6

Applicable Standards

UL489 — Molded Case Circuit Breakers and Circuit Breaker Enclosures.

UL486A — Wire Connectors and Solderless Lugs for use with copper wire

UL486B — Wire Connectors and Solderless Lugs for use with aluminum wire

UL943 — Ground Fault Interrupters (for personnel protectors)

UL1087 — Molded Case Switches

UL50 — Cabinets and Boxes

UL869 — Service Equipment

NEMA AB-1 — Molded Case Circuit Breakers and Molded Case Switches

CSA-C22.2 No. 5, C22.2 No. 14

Note:

(A) Molded case circuit breakers are designed and tested in accordance to applicable portions of UL489 and meet application requirements of the National Electric Code. Unless marked otherwise, circuit breakers are 80% duty rated.
(B) Molded case circuit breakers are to be connected with 60 or

75°C wire for circuit breakers having a rated ampacity of 125 amperes or less. Circuit breakers having a rated ampacity greater than 125 amperes shall only be cabled with 75°C cable unless otherwise indicated on the circuit breaker label. Exceptions to this rule are outlined in the article 110-14 C(1)(2) of the 1996 National Electric Code.

① Interrupting ratings are not limited to the values or groups of values listed. However, the values listed are minimum values for the class specified.
② Single-unit or duplex construction must be specified.
③ Use minimum frame size for ampere rating.

Molded Case Circuit Breakers

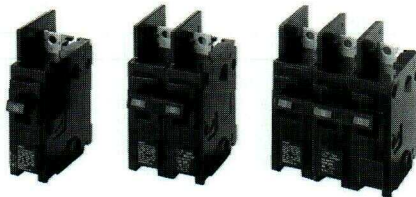
SELECTION / APPLICATION

Reference Guide

Thermal-Magnetic Trip Breakers

				General Purpose Breakers							
				BQ	BQH	HBQ	QJ2	QJH2	QJ2-H	HQJ2-H	CQD
Page				70	70	70	72	72	72	72	73
Ratings	AC	Poles		1, 2, 3	1, 2, 3	1, 2, 3	2, 3	2, 3	2, 3	3	1, 2, 3
		Amperes, Continuous	1-Pole	15–70	15–70	15–50	—	—	—	—	15–100
			2-Pole	15–125	15–100	15–70	60–225	60–225	60–225	—	15–100
			3-Pole	15–100	15–100	15–100				100–225	15–100
		Volts (60 Hertz)	1-Pole	120/240	120/240	120/240	—	—	—	—	277
			2-Pole				240	240	240	—	480/277
			3-Pole	240	240	240				240	
		UL Interrupting Rating — Symmetrical RMS Amperes	120V	10,000	22,000	65,000	—	—	—	—	65,000
			240V	10,000	22,000	65,000	10,000	22,000	42,000	100,000	65,000
			480/277V	—	—	—	—	—	—	—	14,000
			600/347V	—	—	—	—	—	—	—	10,000 [®]
	DC	Volts — 2-Pole		—	—	—	—	—	—	—	250
		Interrupting Rating — DC Amperes		—	—	—	—	—	—	—	14,000
Dimensions in inches		Height	15–50A	3.75	3.75	4.00	—	—	—	—	4.50
			55–125A	4.00	4.00	4.00	—	—	—	—	4.50
			60–225A	—	—	—	7.00	7.00	7.00	7.00	—
		Width	1-Pole	1.00	1.00	1.00	—	—	—	—	1.00
			2-Pole	2.00	2.00	2.00	3.00	3.00	3.00	—	2.00
			3-Pole	3.00	3.00	3.00	4.50	4.50	4.50	4.50	3.00
Depth		2.37	2.37	2.37	2.34	2.34	2.53	2.53	2.87		
Overcurrent Devices		Thermal and Fixed Magnetic Trip		✓	✓	✓	✓	✓	✓	✓	✓
		Molded Case Switch		✓	—	—	✓	—	—	—	—
Accessories & Modifications		Undervoltage Trip		—	—	—	—	—	—	—	✓
		Shunt Trip		✓	✓	✓	✓ ^①	✓ ^①	✓ ^①	✓ ^①	✓
		Auxiliary Switch		✓	✓	✓	✓ ^①	✓ ^①	✓ ^①	✓ ^①	✓
		Alarm Switch		—	—	—	✓	✓	—	—	✓
		Mechanical Interlock		—	—	—	✓	✓	✓	✓	—
		Fungus Proofing (ref. page 106)		✓	✓	✓	✓	✓	✓	✓	✓
Individual Enclosures		Type 1 — Indoor Surface		✓	✓	✓	✓	✓	✓	—	
		Type 1 — Indoor, Flush		✓	✓	✓	✓	✓	✓	—	
		Type 3R — Outdoor-Rainproof		✓	✓	✓	✓	✓	✓	—	

CIRCUIT BREAKERS



BQ, BQH, HBQ



QJ2, QJH2, QJ2-H



CQD

For inches / millimeters conversion, see Application Data section.

① 3-pole breakers only (factory installed only).

② Type CQD6—CSA only.

Lug Information

SELECTION

Aluminum Body Lugs for Copper or Aluminum Wire

For Use With Type(s)	Circuit Breaker Ampere Rating	Cables Per Lug	Lug Wire Range	Catalog Number	List Price \$
QJ2, QJH2 QJ2H, HQJ2H	60-225	1	#6 AWG-300 kcmil (Cu) #4 AWG-300 kcmil (Al)	TA1Q300	—
All 2, 3 pole ED2, ED4, ED6, ED6 ETI, HED4, HHED6	15-25	1	#14-#10 AWG (Cu) #12-#10 AWG (Al)	SA1E025	—
	30-100	1	#10-#1/0 (Cu or Al)	LN1E100	—
	110-125	1	#3-3/0-3 (Cu) #1-2/0-1 (Al)	TA1E6125	—
CED6 All 1 pole ED, HED	30-60	1	#10-4 (Cu or Al)	LD1E060 (Load Side)	—
	70-100	1	#4-#1/0 (Cu or Al)	LD1E100 (Load Side)	—
FXD6-A, FD6-A, HFD6, CFD6 HHFD6	70-250	1	#6 AWG-350 kcmil (Cu) #4 AWG-350 kcmil (Al)	TA1FD350A	17.40
SJD6(A), SHJD6(A) SCJD6	65-200	1-2	#4 AWG-310 kcmil (Cu or Al)	TA2J630	17.40
JXD2(A), JXD6(A), JD6(A), SJD6(A), HJD6(A), HHJXD6, HHJD6, SHJD6(A), CJD6, SCJD6	200-400	1-2	3/0-500 kcmil (Cu) 4/0-500 kcmil (Al)	TA2J6500	24.50
LXD6(A), LD6(A), SLD6(A), HLD6(A), HHLXD6, HHL6, SHLD6(A), CLD6, SCLD6	250-600	1-2	3/0-500 kcmil (Cu) 4/0-500 kcmil (Al)	TA2J6500	24.50
LMD6 ^① , LMXD6 ^② , HLM6 ^① , HLMXD6 ^② , MD6, MXD6, SMD6, HMD6, HMXD6, SHMD6, CMD6, SCMD6	500-600	1-2	250-500 kcmil (Cu or Al)	TA2K500	56.00
	700-800	1-3	1/0-500 kcmil (Cu or Al) 500-750 kcmil (Cu or Al)	TA3K500 TA2N8750 ^③	76.00
ND6, NXD6, SND6, HND6, HNXD6, SHND6, CND6, SCND6	800-1200	1-4	250-500 kcmil (Cu or Al)	2TA4P8500 ^{②③} 3TA4P8500 ^④	457.00 661.00
			250-500 kcmil (Cu or Al)	2TA4N8500 ^③ 3TA4N8500 ^④	461.00 668.00
PD6, HPD6, CPD6 PXD6, HPXD6, SPD6, SHPD6	1200-1600	1-5	300-600 kcmil (Cu or Al)	TA5P600	250.00
PD6, PXD6, HPD6, HPXD6, SPD6, SHPD6, RD6, RXD6, HRD6, HRXD6, STD	1200-2000	1-6	300-600 kcmil (Cu or Al)	TA6R600	265.00

①Use TA2K500 or TA3K500 only.
②Used for 100% rated MD/ND frame breakers.

③Contains 2 connectors plus 1 NDTs end barrier.
④Contains 3 connectors plus 1 NDTs end barrier.