



Commercial and Industrial Circuit Breakers for OEM Applications

QUALITY AND

INNOVATION

FOR GLOBAL

SOLUTIONS



SQUARE D
GROUPE SCHNEIDER

One World One Source

The world is opening up to OEMs. And with these new opportunities, come new demands. That's particularly true with circuit breakers where diverse domestic and international standards and regulations combine with a widening variety of applications that require specific styles and configurations. The result: keeping pace with the needs of your customers — and trying to build a more profitable domestic and export business — becomes a critical, and complex, challenge.



Now there's one source, one solution, for all your circuit breaker needs — Groupe Schneider. As part of the Groupe Schneider family, Square D and Merlin Gerin combine to offer a truly global solution — the broadest array of circuit breakers in the industry. In fact, together the two brands offer the best of two worlds — a complete and cost-effective line of Square D brand circuit breakers, plus the feature-rich benefits of the Merlin Gerin brand line. Both our Square D and Merlin Gerin circuit breakers are available as dual compliant UL IEC, allowing for efficient standardization.

Now you can reduce the number of vendors you must deal with, as well as the number of parts needed to build your own electrical systems.

We're the world's leading supplier of miniature, molded case and insulated circuit breakers. We offer the widest range of products available, with frame sizes, accessories and features that meet every application demand. And we back those lines with the industry's most comprehensive distribution network and unparalleled technical support. That's why more people around the globe trust Groupe Schneider and our Square D and Merlin Gerin brands for circuit protection more than any other manufacturer.

We've built a 90-year reputation for quality and innovation by applying leading-edge technology to our circuit breakers. It's a dedication that sets new standards for circuit protection with superior levels of flexibility, repeatability and reliability.

The complete Groupe Schneider circuit breaker product portfolio has been created to meet the widest possible range of applications. We offer Square D and Merlin Gerin options in three major categories:

- **Molded Case Circuit Breakers** — includes the COMPACT® line from Merlin Gerin, which features optimized and high-performance ranges for customized global OEM applications, and the Square D line, which offers a full range of cost-effective circuit protection solutions. Combined, these two lines form the industry's broadest circuit breaker offering.
- **Insulated Case Circuit Breakers** — includes the MASTERPACT® line from both Square D and Merlin Gerin for high-performance industrial and OEM applications.

- **Miniature Circuit Breakers** — includes the QO® and QOU lines from Square D and the MULTI 9® line from Merlin Gerin, which provide great flexibility in custom applications.



Miniature Circuit Breakers

The miniature circuit breakers available from both Square D and Merlin Gerin offer an array of advantages for a growing list of applications: from circuit protection for computers and medical equipment to telecommunications and HVAC industry installations to transformers and emergency power supplies.

Both lines share these distinct advantages:

- Compact size
- Ease of installation
- Better protection
- System flexibility
- Elimination of nuisance tripping.

Square D Miniature Circuit Breakers — 10 to 125A

Square D miniature circuit breakers are built with a glass-reinforced insulating material that provides high dielectric strength. Current carrying components are isolated from the handle, which indicates whether the circuit breaker is Off, On, or tripped.

These circuit breakers:

- Have common tripping of all poles
- Have a VISI-TRIP® indicator
- Can be flush, surface, or DIN rail mounted
- Are fully tested, UL 489 listed, and CSA certified for reverse connection without restrictive line/load markings
- Have a CE declaration of conformity which is available upon request.

Ratings

Square D miniature circuit breakers meet or exceed the parameters of the electrical systems on which they are used. They are available in the following voltages:

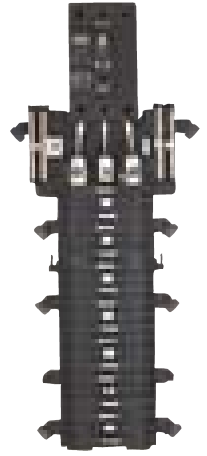
- 120/240Vac
- 240Vac
- 48Vdc
- 60Vdc
- 277Vac (available as UL 1077 recognized supplementary protector only).

Tripping System

The Square D miniature circuit breakers have a factory pre-set thermal and magnetic trip element in each pole. Multi-pole breakers have a single handle with a common internal trip.

Mounting Provisions

QO miniature circuit breakers are available as plug-on or bolt-on for installation in either our load centers or our load center interiors. Each Square D QOU miniature circuit breaker may be DIN



To accommodate your design, Square D offers a variety of QO interior-only choices.

rail mounted and is also supplied with mounting brackets for both line- and load-side support.

Accessories

Factory and field-installed accessories include:

- Shunt trip
- Reversible lugs (rear or front access are standard up to 60A)
- Auxiliary switch
- Alarm switch
- Handle accessories
- Finger safe covers
- Jumper bar accessories
- Cover plates
- Rainproof covers.



QO Miniature



QOV Miniature

Merlin Gerin Miniature Circuit Breakers — 0.5 to 125A

The MULTI 9 miniature circuit breaker line from Merlin Gerin is a modular system of circuit breakers, accessories, and installation equipment that makes up the most complete product offering in its class. These miniature circuit breakers are used as supplementary protectors to provide overcurrent protection in applications where branch circuit protection is either already provided or not required.

Available in more than 130 countries around the world through a network of more than 5,000 distributors, MULTI 9 complies with the standards of:

- UL 1077
Supplementary
Protectors
- CSA C22.2
No. 235-M89
- IEC 947-2,
VDE 0660
- IEC 898
- CE Marking.

MULTI 9 supplementary protectors are rated 0.5 to 80A at 480 Y/277 Vac and come with current-limiting capabilities. In fact, their design provides current limitation with far greater protection than conventional models.

Time Current Curves

MULTI 9 models are available with a variety of trip characteristics that offer greater flexibility, an important component in meeting custom application system demands:

- B curve — instantaneous magnetic trip between 3.2 and 4.8 times ampere rating for computers, electronics and generators
- C curve — instantaneous magnetic trip between 7 and 10 times ampere rating for general purpose applications

- D curve — instantaneous magnetic trip between 10 and 14 times ampere rating for motors, transformers and similar applications.

Accessories

UL and CSA approved, field-installed electrical auxiliaries include:

- Shunt trip with auxiliary switch
- Auxiliary switch
- Alarm switch
- Undervoltage release.

Other IEC-rated products complement the UL line up to 125A and up to 40kA at 415Vac. They include:

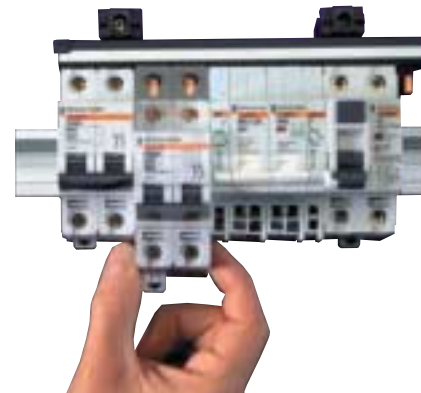
- Ground fault relays
- Comb busbars
- Motor operators (C60)
- Rotary operating handles
- Padlocking options
- Surge arresters
- Enclosures.



MULTI 9 Miniature Circuit Breakers



Easily Accessorized



Flexible Installation



IEC Accessories



Space Saving Enclosures

Molded Case Circuit Breakers



Thermal-Magnetic



High Interrupting



Current Limiting



Micrologic

Square D Molded Case Circuit Breakers

The Square D line of molded case circuit breakers begins with thermal-magnetic devices in a complete range of interrupting ratings, including standard, high, extra-high and current limiting ratings. The line also includes an equally wide variety of voltage ratings from 120 to 600 Vac and ampere ratings from 15A through 2500A.

In addition, Square D offers a family of current limiting circuit breakers that features extra protection against high-fault currents, plus a line of electronic trip circuit breakers that provides maximum flexibility in system coordination and protection.

An Array of Functions

Included in the innovative, reliability-enhancing functions found in every Square D molded case circuit breaker are features such as:

- Lugs pre-selected and installed
- Push-to-Trip — lets you easily check all functions, without the need for expensive test equipment
- Permanent Trip — for greater reliability and longer service life
- Trip-Free Mechanism — to trip the circuit breaker even if the handle is in the locked or “On” position
- Trip Indication — the operating handle snaps back to the center position when the circuit breaker is tripped
- UL Listed and CSA certified for reverse connection without restrictive line/markings.

Easy To Install

Square D molded case circuit breakers have built-in design benefits for easy installation — and significant time and cost savings:

- Unit mount or I-LINE® construction
- Single magnetic adjustment in frame sizes above 100A
- UL Listed for mounting in any position
- UL Listed optional terminations
- Wide range of NEMA 1, 3R, 4, 5, 7, 9, and 12 enclosures.

Maximum Versatility

In addition to being UL Listed, CSA and IEC certified, and CE marked, Square D molded case circuit breakers meet NEMA Standard AB1-1993, Federal Specification W-C-375B/GEN and other international standards.

Merlin Gerin Molded Case Circuit Breakers — 15 to 2500A

The innovative COMPACT line from Merlin Gerin has been designed for customization by distributors and OEMs — the same 15A-600A accessories for all frame sizes for reduced inventory costs. No other competitor offers this level of performance on such a small frame.

That's just part of the reason why the COMPACT line is already Europe's leading family of molded case circuit breakers. Now, they're earning a reputation for excellence in electrical installations around the globe.

Tropicalized for climates anywhere in the world, COMPACT circuit breakers can be used in switchboards found in virtually any country. They also comply with a full range of international standards, including:

- UL 489
- CSA C22-2 No.5
- IEC 947-2
- British BS 4752
- German VDE 660
- French NFC 63120
- CE Marking.

A Complete System

The COMPACT system also includes a number of components that can be field installed on each circuit breaker for maximum adaptation in a variety of configurations. That means COMPACT circuit breakers can provide solutions immediately — with a minimum of parts.

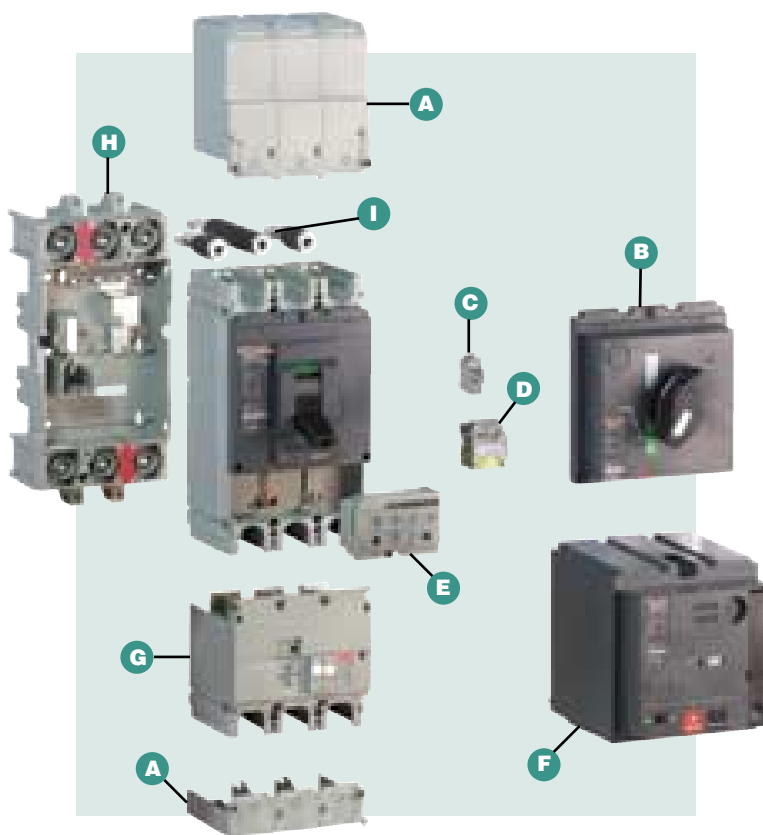
Among the available accessories are:

- A single auxiliary switch
- Busbar or rear connections
- Fixed, plug-in or drawout mounting
- Rotary operating handles
- Cable operating handles
- Electrical operators.

A New Concept

One of the newest COMPACT lines, NS 15 to 600A models, offers a new concept in current interruption — dual-break rotating contacts. This unique dual-break rotating technique provides exceptional current limitation and outstanding endurance for repetitive, short-circuit interruption.

COMPACT NS circuit breakers are dual rated UL 489 and IEC 947-2 featuring $I_{cs} = I_{cu}$ ratings.



More solutions with fewer catalog numbers:

A. Terminal Shield
B. Direct Rotary Handle
C. Auxiliary Switch

D. Shunt Trip
E. Trip Unit
F. Motor Operator

G. Ground Fault Module (IEC)
H. Plug-in Base
I. Rear Connectors



Insulated Case Circuit Breakers

MASTERPACT Insulated Case Circuit Breakers — 250 to 6300A

The MASTERPACT line — both Square D and Merlin Gerin brands — is the perfect answer for OEMs with domestic or dual-compliant needs in meeting international export requirements. Where other manufacturers' circuit breakers have different platforms across their product lines, MASTERPACT offers identical accessories for a global solution.



MASTERPACT installed in a switchboard.

MASTERPACT is the best selling power circuit breaker in the world. It's no wonder. We've taken all the latest technologies and turned them into a new circuit breaker that's a perfect solution anywhere in the world. In fact, we've redefined the characteristics of traditional air circuit breakers.

Standard Features

- Drawout or fixed-mounted circuit breaker
- High short-time rating
- Field-installable accessories
- Two-step stored energy closing mechanism
- Arc chamber removable for contact inspection.

The MASTERPACT breaker incorporates all the advantages of modular construction in a polyester enclosure. And it complies with all international standards:

- UL 489, including 4-pole through 3000A
- UL 1066
- ANSI C37.13
- UL 1008
- IEC 947-2
- CE Marking.



Draw-out MASTERPACT

Simplified Design and Installation

The MASTERPACT breaker's modularity provides a common architecture, rather than a model-by-model approach. That means it uses common accessories, a single door cutout for the entire line, and a single size fits 250A to 3,000A.

A Zero Safety Perimeter

We've reduced the necessary distance above the circuit breaker to zero, thanks to an arc chute cover in both the fixed and drawout versions. This makes MASTERPACT breakers ideal for retrofit applications into existing switchboards.

Minimal Maintenance

MASTERPACT circuit breakers are designed for 10,000 operations without maintenance up to 3000A. Although no servicing is required, the life of the circuit breaker can be inspected with a simple visual inspection of the contact wear indicator. To keep maintenance at a minimum, we've

included these design features:

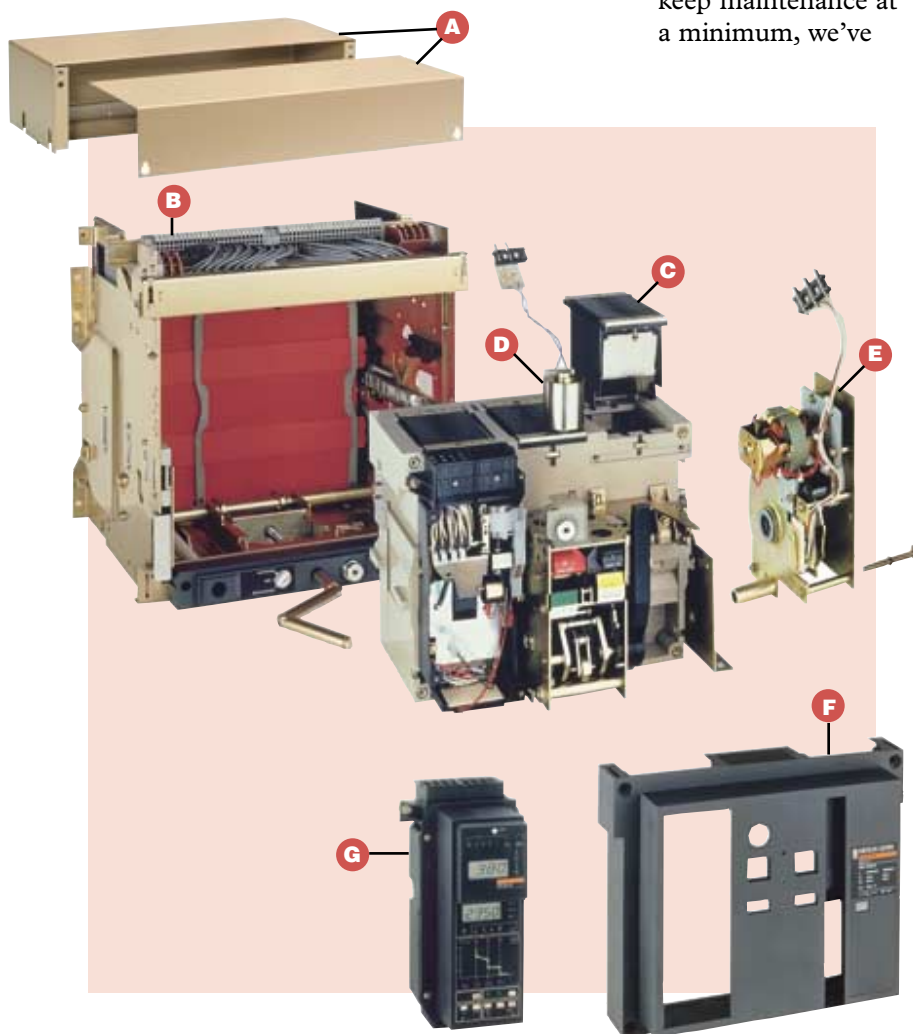
- Fewer parts
- Heavy duty mechanism and contact design
- High temperature withstanding materials.

Simple Operation

- Segregated compartments confine main contacts and interrupting effects
- Accessory compartments are separated from the power circuits
- Suitable for isolation as defined by IEC 947-2 standards
- Disconnection through the door.

MASTERPACT Mastery

The MASTERPACT breaker's unique design makes it ideal for use in high reliability applications including critical power installations such as data centers, cruise and naval ships where stringent requirements are the norm. MASTERPACT breakers have been designed and built to withstand shock, vibration, and high temperatures. Additionally, a communications module is now available via the Modbus/Jbus protocol.



The MASTERPACT is easily adapted by either the factory or the customer. Components include:

- | | |
|---|-------------------------------------|
| A. Arc Chute Cover | E. Field Installable Motor Operator |
| B. Draw-out Cradle | F. Front Cover |
| C. Arc Chute | G. Electronic Control Unit |
| D. Field Installable Undervoltage Release | |

Square D Circuit Breaker Selection Information



QO CIRCUIT BREAKERS



EDB CIRCUIT BREAKERS



Breaker Type	Plug-on	QO ☆			QO-H		QO-VH			QH			QOT	QO-GFI		QO-VHGF								
	Bolt-on	QOB			QOB-H					QOB-VH		QHB			QOB-GFI	QOB-VHGF		EDB		EGB		EJB		
	Unit Mount	QOU ●				QOU-H																		
Number of Poles		1	2	3	2	2	1	2	3	1	2,3	1,2	3	1	1	2	1	1	2,3	1	2,3	1	2,3	
Current Range		10-70	10-125	10-100	15-100	15-30	15-30	15-125	15-100	15-30	15-150	15-30	15-30	15-30	15-30	15-60	15-30	15-70	15-125	15-70	15-125	15-70	15-70	
Interrupting Ratings																								
UL/CSA Rating (kA RMS) (50/60 Hz AC) Δ	120 Vac	10	10	10	10	10	22	22	22	22	22	65	65	10	10	10	22	25	25	65	65	100	100	
	120/240 Vac	10	10	10	10	10	22	22	22	22	22	65	65	10	...	10	...	18	25	35	65	65	100	
	240 Vac	...	...	10	10	10	...	...	22	...	22	...	65	...	...	...	...	18	25	35	65	65	100	
	277 Vac	5★	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	18	35	35	65	65	
	480Y/277 Vac	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	...	35	...	65	
DC Ratings	48 Vdc	5★	5★	5★	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	60 Vdc	5●	5●	5●	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
IEC 947-2 ☆ ▼ (50/60 Hz AC)	IEC (Ultimate Rating)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Special Ratings																								
Fed. Specs W-C-375B/GEN		✓	...	...	...	...	✓	...	...	...	...	✓	...	✓	✓	...	...	✓	✓	✓	✓	✓	✓	
Other Standard		HACR † NOM			HACR †		HACR †					...	...	...	NOM		...	HACR, NOM						
Accessories and Modifications																								
Shunt Trip		✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	...	...	...	✓■	✓■	✓■	✓■	✓■	✓■	
Undervoltage Trip		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Auxiliary Switches		✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	
Alarm Switch		✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	
Handle Operators		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Handle Padlock Attachment		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Trip System Type																								
Thermal Magnetic		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Molded Case Switch		✓	✓	✓	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Dimensions (1P Unit Mount)	Height IN (mm)	3.5 (89)																5.66 (144)						
	Width IN (mm)	0.75 (18)																0.98 (25)						
	Depth IN (mm)	2.92 (74)																4.05 (103)						

- ☆ QO IEC family pending, plug-on only, contact your local field office for availability
- ▼ For applications requiring CE Marking, a declaration of conformity is available upon request
- Factory installed option only
- QOU UL Listed for 60 VDC per pole 80 - 100 amp, 1- and 2-Pole, and 60 - 100 amp, 3-Pole
- † HACR on QO, QOB, QOU 1- and 2-Pole - 15 - 70 amps, 3-Pole - 15 - 60 amps, QOB-VH 1-, 2-, and 3-Pole 15-30 amp
- ‡ Factory installed accessories are not available on QOB-VH 2-Pole 150 amp and 3-Pole 110 - 150 amp
- Δ GFI Products are rated 60Hz only
- ★ QYU Supplemental Protectors only
- ★ 1 and 2-Pole, 10-70A and 3-Pole 10-60A only

		100A FRAME										225A FRAME			250A FRAME						
		  GJL																			
Breaker Type	FA (240V)	FA		FH	FH	FH	FC	FI	FY	GJL	Q2	Q2-H	Q2H	KD	KG	KA	KH	KC	KI		
Number of Poles	1, 2, 3	1	2, 3	1	1	2, 3	2, 3	2, 3	1	3	2, 3	2, 3	2	2, 3	2, 3	2, 3	2, 3	2, 3	2, 3		
Current Range	15-100	15-100	15-100	15-30	35-100	15-100	15-100	20-100	15-30	15-100	100-225	100-225	100-225	100-250	100-250	70-250	70-250	70-250	110-250		
Interrupting Ratings																					
UL/CSA/NOM Rating (kA RMS) (50/60 hz AC)	240Vac	10	18	25	65	25	65	100	200	14	100	10★	22	42	25	65	42	65	100	200	
	480Y/277Vac	...	18	18	65	25	25	65	200	14	65	...	...	...	...	...	25	35	65	200	
	480Vac	...	...	18	...	...	25	65	200	...	65	...	...	...	...	...	25	35	65	200	
	600Y/347Vac	...	...	14	...	...	18	...	100	...	18	...	...	...	...	...	22	25	...	100	
	600Vac	...	...	14	...	...	18	...	100	...	...	...	...	...	...	...	22	25	...	100	
DC Ratings	250Vdc	5	10	10	...	...	10	...	...	...	...	...	...	...	...	10	10	...	...		
	500Vdc◆	...	...	...	...	...	20	...	...	...	...	...	...	...	...	...	20	...	...		
IEC 947-2 (50/60 hz AC)	415/240Vac (Icu)	†	†	†	12.5	12.5	12.5	†	†	...	65	...	...	...	...	...	†	†	65	130	
	415/240Vac (Ics)	†	†	†	12.5	12.5	12.5	†	†	...	65	...	...	...	...	...	†	†	65	65	
Special Ratings																					
Fed. Specs W-C-375B/GEN		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	
HACR (2, 3-Pole)		✓		✓			✓								✓	✓	✓	✓			
Connections/Terminations																					
Unit Mount		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
I-LINE		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓	✓	
Rear Connection		✓	✓	✓			✓					✓	✓	✓			✓	✓			
Drawout																					
Optional Lugs		✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	✓	✓	✓	✓	
Accessories and Modifications																					
Shunt Trip		✓●		✓●			✓●	✓●	✓●		✓						✓●	✓●	✓●	✓●	
Undervoltage Trip		✓●		✓●			✓●	✓●	✓●		✓						✓●	✓●	✓●	✓●	
Auxiliary Switches		✓●		✓●			✓●	✓●	✓●		✓						✓●	✓●	✓●	✓●	
Alarm Switch		✓●	✓●	✓●	✓●	✓●	✓●	✓●	✓●		✓						✓●	✓●	✓●	✓●	
Motor Operator		✓	✓	✓			✓	✓	✓								✓	✓	✓	✓	
Handle Operators		✓		✓	✓	✓	✓	✓			✓						✓	✓	✓		
Mechanical Interlocks (3-Pole)		✓■		✓■			✓■										✓■	✓■			
Handle Padlock Attachment		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cylinder Lock (3-Pole)		✓●		✓●			✓●	✓●									✓●	✓●			
Optional GF Protection		✓▲		✓▲			✓▲	✓▲	✓▲								✓▲	✓▲	✓▲	✓▲	
Trip System Type																					
Thermal Magnetic		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Instantaneous Trip (3-Pole)				✓			✓				✓						✓	✓			
Molded Case Switch (Automatic)							✓					✓	✓	✓				✓			
Electronic																					
Enclosures																					
General Purpose (NEMA Type 1)		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓			
Raintight (NEMA Type 3R)		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	
Dusttight (NEMA Type 12)		✓	✓	✓	✓	✓	✓	✓	✓								✓	✓	✓	✓	
Watertight (NEMA Type 4, 4x, 5)		✓	✓	✓	✓	✓	✓	✓	✓								✓	✓	✓	✓	
Explosion Proof (NEMA Type 7, 9)		✓	✓	✓	✓	✓	✓	✓									✓	✓			
Dimensions (3P Unit Mount)	Height IN (mm)	6 (152)						8 (203)		4.72 (120)	6.44 (163)			7.06 (179)		8 (203)					
	Width IN (mm)	4.5 (114)						4.5 (114)		3.54 (90)	3 (76)			4.12 (105)		4.5 (114)					
	Depth IN (mm)	4.13 (105)						4.75 (121)		3.94 (100)	4.5 (114)			4.07 (103)		4.75 (121)					

NOTE: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

● Factory installed option only

◆ Ungrounded UPS systems only

★ 2-Pole Q2 is 10kA at 120/240Vac

■ Requires breaker with WB suffix

▲ Requires factory installed "G" Shunt trip and 3-Pole module

† See Product Data Bulletin No. 0500PD9502R5/97

Square D Circuit Breaker Selection Information (cont.)



		400A FRAME			600A FRAME					800/1000A FRAME				1200A FRAME			
																	
Breaker Type		Q4	LA	LH	LC	LX	LE	LI	LXI	MA	MH	MX	ME	NA	NC	NX	NE
Number of Poles		2, 3	2, 3	2, 3	2, 3	3	3	2, 3	2, 3	2, 3	2, 3	3	3	2, 3	2, 3	3	3
Current Range		250-400	125-400	125-400	300-600	100-600	100-600	300-600	100-600	300-1000	300-1000	450-800	450-800	600-1200	600-1200	600-1200	600-1200
Interrupting Ratings																	
UL/CSA/NOM Rating (kA RMS) (50/60 Hz AC)	240Vac	25	42	65	100	100	100	200	200	42	65	65	65	100	125	125	125
	480Y/277Vac	...	30	35	65	65	65	200	200	30	65	65	65	50	100	100	100
	480Vac	...	30	35	65	65	65	200	200	30	65	65	65	50	100	100	100
	600Y/347Vac	...	22	25	35	35	35	100	100	22	25	25	25	25	65	65	65
	600Vac	...	22	25	35	35	35	100	100	22	25	25	25	25	65	65	65
DC Ratings	250Vdc	...	10	10	...	...	...	...	...	14	14	...	...	...	...	...	...
	500Vdc◆	...	...	20	...	...	...	...	...	...	20	...	...	...	...	...	...
IEC 947-2 (50/60 Hz AC)	415/240Vac (Icu)	...	†	†	65	65	65	†	†	30	65	65	65	50	70	70	70
	415/240Vac (Ics)	...	†	†	65★	65★	65★	†	†	30	33	33	33	25	35	35	35
Special Ratings																	
Fed. Specs W-C-375B/GEN		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HACR																	
Connections/Terminations																	
Unit Mount		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
I-LINE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rear Connection		✓	✓	✓						✓	✓						
Drawout																	
Optional Lugs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Accessories and Modifications																	
Shunt Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	●	●	✓	✓	✓	✓
Undervoltage Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	●	●	✓	✓	✓	✓
Auxiliary Switches		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	●	●	✓	✓	✓	✓
Alarm Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	●	●	✓	✓	✓	✓
Motor Operator		✓	✓	✓						✓	✓						✓
Handle Operators		✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	✓
Mechanical Interlocks (3-Pole)			■	■						■	■						
Handle Padlock Attachment		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cylinder Lock (3-Pole)		✓	✓	✓						✓	✓						
Optional GF Protection						●	●		●			●	●			●	●
Trip System Type																	
Thermal Magnetic		✓	✓	✓	✓			✓		✓	✓			✓	✓		
Instantaneous Trip (3-Pole)			✓	✓						✓	✓			✓	✓		
Molded Case Switch (Automatic)				✓							✓				✓		
Electronic						✓	✓		✓			✓	✓			✓	✓
Enclosures																	
General Purpose (NEMA Type 1)		✓	✓	✓						✓	✓	✓	✓				
Raintight (NEMA Type 3R)		✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	
Dusttight (NEMA Type 12)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Watertight (NEMA Type 4, 4x, 5)		✓	✓	✓						✓	✓	✓	✓				
Explosion Proof (NEMA Type 7, 9)																	
Dimensions (3P Unit Mount)	Height IN (mm)	11 (279)			11.86 (301)					14 (356)		14.75 (375)		12.12 (308)			
	Width IN (mm)	6 (152)			7.5 (190)					9 (229)		9 (229)		15 (381)			
	Depth IN (mm)	5.84 (148)			6.74 (171)					6.5 (165)		6.5 (165)		8.07 (205)			

NOTE: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

- Factory installed option only
- ◆ Ungrounded UPS systems only
- ★ 50kA for 450A-600A ratings
- Requires breaker with WB suffix
- ▲ Requires factory installed "G" Shunt trip
- † See Product Data Bulletin No. 0500PD9502R5/97

		2500A Frame					250A – 6300A▼								
															
Breaker Type		PA	PH	PC	PX	PE	MP-H1	MP-H2	MP-H1	MP-H2	MP-H1	MP-H2	MC-H1▶	MC-H1▶	MC-H1▶
Number of Poles		2, 3	2, 3	2, 3	3	3	3,4▲	3,4▲	3,4▲	3,4▲	3	3	3	3	3
Current Range		600-2000	600-2000	1600-2500	600-2500	600-2500	250-1600	250-1600	1000-3000	1000-3000	2000-5000	2000-5000	250-1600	2000-3200	2000-5000
Interrupting Ratings															
UL/CSA/NOM Rating (kA RMS) (50/60 hz AC)	240Vac	65	125	125	125	125	65	100	75	100	100	125	50	65	100
	480Y/277Vac	50	100	100	100	100	65	100	75	100	100	125	50	65	100
	480Vac	50	100	100	100	100	65	100	75	100	100	125	50	65	100
	600Y/347Vac	42	65	65	65	65	65	65	75	75	100	100	50	65	100
	600Vac	42	65	65	65	65	65	65	75	75	100	100	50	65	100
DC Ratings	250Vdc	25	...	...	...	...	...	...	...	...	...	...	...	...	...
	500Vdc◆	25	...	...	...	...	...	...	...	...	...	...	...	...	...
IEC 947-2 (50/60 hz AC)	415/240Vac (Icu)	50	70	70	70	70	...	...	...	...	...	...	...	...	...
	415/240Vac (Ics)	38	53	53	53	53	...	...	...	...	...	...	...	...	...
Special Ratings															
Fed. Specs W-C-375B/GEN		✓	✓	✓											
Other Standard							IEC		IEC		IEC		UL 1066/ANSI C37.13/IEC		
Connections/Terminations															
Unit Mount		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
I-LINE															
Rear Connection							✓	✓	✓	✓	✓	✓	✓	✓	✓
Drawout							✓	✓	✓	✓	✓	✓	✓	✓	✓
Optional Lugs		✓	✓	✓	✓	✓									
Accessories and Modifications															
Shunt Trip		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Undervoltage Trip		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Auxiliary Switches		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Alarm Switch		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Motor Operator		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Handle Operators															
Mechanical Interlocks						✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Handle Padlock Attachment		✓	✓	✓	✓	✓	✱	✱	✱	✱	✱	✱	✱	✱	✱
Cylinder Lock						✓									
Optional GF Protection					✓●	✓●	✓●	✓●	✓●	✓●	✓●	✓●	✓●	✓●	✓●
Trip System Type															
Thermal Magnetic		✓	✓	✓											
Instantaneous Trip						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Molded Case Switch (Automatic)			✓	✓			✱	✱	✱	✱	✱	✱	✱	✱	✱
Electronic					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enclosures															
General Purpose (NEMA Type 1)		✓	✓	✓	✓	✓									
Raintight (NEMA Type 3R)		✓	✓	✓	✓	✓									
Dusttight (NEMA Type 12)															
Watertight (NEMA Type 4, 4x, 5)															
Explosion Proof (NEMA Type 7, 9)															
Dimensions (3P Unit Mount)	Height IN (mm)	20.06 (510)		26.1 (663)		20.06 (510)		(Fixed) 16 (D/O) 17		(Fixed) 16 (D/O) 19		2000 17 3200 17 5000 19			
	Width IN (mm)	13.7 (348)		23.3 (592)		13.7 (348)		17 17		32 32		17 22 32			
	Depth IN (mm)	10.47 (266)		16.55 (420)		10.47 (266)		11 14		11 14		14 14 14			

NOTE: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

▼ 6300A MASTERPACT information available from your local field office

★ Non-automatic switch

● Factory-installed option only

◆ Ungrounded UPS systems only

▲ MASTERPACT circuit breakers 250-3000 Amps are available UL Listed in 4-Pole construction

▶ These MASTERPACT circuit breakers are Listed to UL 1066

✱ Field-installable

Merlin Gerin Circuit Breaker Selection Information



MULTI 9 SUPPLEMENTARY PROTECTORS (Photos not to scale)									100A FRAME	150A FRAME		250A FRAME		400A FRAME		
   																
C60N			NC100H						NSE100	NSF150N	NSF150H	NSF250N	NSF250H	NSJ400N	NSJ400H	NSJ400L
1	2	3, 4	1	1	2	2	3, 4	3, 4	3	3	3	3	3	3	3	3
0.5-63	1-63	1-63	10-40	50-80	10-40	50-80	10-40	50-80	15-100	15-150	15-150	175-250	175-250	160-400	160-400	160-400
Interrupting Ratings																
10	10	10	20	5	20	5	20	5	...	...	...	...	...	...	...	...
10	10	10	20	5	20	5	20	5	...	...	...	...	...	...	...	...
10	10	10	20	5	20	5	20	5	65	65	100	65	100	65	100	150
5	5	5	10	...	10	...	10	...	...	...	...	...	...	...	...	...
...	5	5	...	...	10	...	10	...	18	35	65	35	65	35	65	100
...	...	...	...	...	...	...	...	...	18	35	65	35	65	35	65	100
...	...	...	...	...	...	...	...	...	...	18	25	18	25	18	25	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	25	25
10	10	...	10	10	10	10	10	10	...	...	...	...	...	...	...	...
10	10	...	10	10	10	10	10	10	...	...	...	...	...	...	...	...
...	10	...	10	...	10	10	10	10	...	...	...	...	...	...	...	...
...	...	...	...	...	10	...	10	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10*240V	10*240V	10*240V	20*240V	10*240V	20*240V	20*240V	20*240V	20*240V	30	36	70	36	70	45	70	150
...	5*415V	5*415V	...	...	10*415V	10*415V	10*415V	10*415V	50%	100%	100%	100%	100%	100%	100%	100%
Special Ratings																
IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC	IEC
Connections/Terminations																
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Accessories and Modifications																
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
										✦	✦	✦	✦	✦	✦	✦
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦	✦
	✦	✦														
Trip System Type																
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
									✓	✓	✓	✓	✓	✓	✓	✓
									✓	✓	✓	✓	✓	✓	✓	✓
Enclosures																
3.19			3.19						4.72	7.44		7.44		13.38		
0.71			1.06						3.54	4.13		4.13		5.51		
2.76			2.76						3.14	3.38		3.38		4.33		

NOTE: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

▼ C60N and NC100H are recognized components per UL1077

✦ Field-installable

		600A FRAME			800A FRAME		1200A FRAME		2500A FRAME		250A – 6300A▼								
											 MASTERPACT								
Breaker Type		NSJ600N	NSJ600H	NSJ600L	CK800N	CK800H	CK1200N	CK1200H	CM	MP-H1	MP-H2	MP-H1	MP-H2	MP-H1	MP-H2	MC-H1 [▶]	MC-H1 [▶]	MC-H1 [▶]	
Number of Poles		3			3,4		3,4		3	3,4●	3,4●	3,4●	3,4●	3	3	3	3	3	
Current Range		240-600			200-800		600-1200☆		1250-2500	250-1600	250-1600	1000-3000	1000-3000	2000-5000	2000-5000	250-1600	2000-3200	2000-5000	
Interrupting Ratings																			
UL/CSA Rating (kA RMS) (50/60 Hz AC)	120Vac	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	120/240Vac	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	240Vac	65	100	150	65	100	65	100	125	65	100	75	100	100	125	50	65	100	
	277Vac	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	480Y/277Vac	35	65	100	50	65	50	65	85	65	100	75	100	100	125	50	65	100	
	480Vac	35	65	100	50	65	50	65	85	65	100	75	100	100	125	50	65	100	
	600Y/347Vac	18	25	25	35	42	35	42	50	65	65	75	75	100	100	50	65	100	
600Vac	18	25	25	35	42	35	42	50	65	65	75	75	100	100	50	65	100		
DC Ratings	48Vdc	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	65Vdc	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	125Vdc	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	250Vdc	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
IEC 947-2 (50/60 Hz AC)	500Vdc	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	380/415Vac	45	70	150	50	70	50	70	85	65	100	75	100	100	150	...	...	...	
	Ultimate Rating	100%	100%	100%	50%	50%	50%	50%	50%	100%	100%	100%	100%	100%	100%	...	...	...	
Special Ratings																			
Fed. Specs W-C-375B/GEN																			
Other Standard		IEC			IEC		IEC		IEC	IEC		IEC		IEC		UL 1066/ANSI C37.13/IEC			
Connections/Terminations																			
Unit Mount		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
I-LINE																			
Rear Connection		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drawout		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Optional Lugs		✓	✓	✓	✓	✓	✓	✓											
Accessories and Modifications																			
Shunt Trip		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Undervoltage Trip		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Auxiliary Switches		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Alarm Switch		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Motor Operator		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓■	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Handle Operators		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖											
Mechanical Interlocks		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Handle Padlock Attachment		✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	✓❖	
Cylinder Lock									✓										
Optional GF Protection										✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	✓■	
Trip System Type																			
Thermal Magnetic																			
Instantaneous Trip (MAG-GARD)		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Molded Case Switch (Automatic)		✓	✓	✓	✓★	✓★	✓★	✓★	✓	✓★	✓★	✓★	✓★	✓★	✓★	✓★	✓★	✓★	
Electronic Trip Unit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Enclosures																			
General Purpose (NEMA Type 1)																			
Raintight (NEMA Type 3R)																			
Dusttight (NEMA Type 12)																			
Watertight (NEMA Type 4, 4x, 5)																			
Explosion Proof (NEMA Type 7, 9)																			
Dimensions (3P Unit Mount)	Height IN (mm)	13.38			15.75		15.75		16.875	(Fixed) 16		(D/O) 17		(Fixed) 16		(D/O) 19		2000 17 3200 17 5000 19	
	Width IN (mm)	5.51			8.25		8.25		16.5	17		17		32		32		17 22 32	
	Depth IN (mm)	4.33			4.5		4.5		10.375	11		14		11		14		14 14 14	

NOTE: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

▼ 6300A MASTERPACT information available from your local field office

☆ 1000A (CK1000HL, CK1000L) are available for interrupting ratings up to 150kA/480Vac

● These MASTERPACT circuit breakers are Listed to UL 1066

● MASTERPACT circuit breakers 250-3000 Amps are available UL Listed in 4-pole construction

❖ Field-installable

■ Factory-installed option only

★ Non-automatic switch

For more information about

Square D expertise in:

- **Circuit Protection**
- **Electrical Distribution**
- **Machine Supervisory Control**
- **Motor Control**

Contact your local field
sales office, distributor
or visit the Square D
web site at:

www.squared.com

