

Molded Case Circuit Breakers

Introduction

What's New?

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

WL Power Circuit Breakers



It's the Circuit Breaker that changes everything! And it's armed with a full array of competitive advantages:

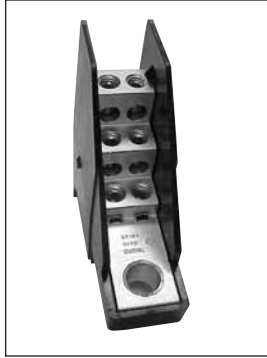
- Reliable – increased operations and better than 1% metering accuracy
- Compact – smallest switchgear footprint in the industry
- Easy to Use – straightforward catalog numbers & selection tools
- Modular – drop-in, front-mounted accessories & field changeable main contacts
- System Solution – Internet/Ethernet, Modbus and Profibus communications
- Safety – customized interlocking and unique status indicators

Specifications and Applications:

- Standards: UL489, UL1066 and ANSI C37
- Frame Ratings: 800A to 5000A
- Rated Nominal Voltages: 240, 480 and 600VAC
- Interrupting Ratings: from 50KA to 150KA un-fused and 200KA fused
- Assemblies: Fixed mounted, draw-out Circuit Breaker or Non-automatic Switch
- Applicable for all ICCB or RL Breaker applications

The WL Circuit Breaker may be new to North America, but it has already been proven in the field – with two years of flawless performance in Europe. No other product on the market today offers more flexibility or greater reliability.

Sentron Distribution Lug



Distribution lugs are now available for use with Siemens Sentron E, F, J and L-frame circuit breakers. These lugs are UL 486-B recognized and are ideal for UL 508 control panel applications to replace a distribution block. Using the Sentron distribution lugs can reduce the need for extra wire stripping. They also reduce the use of extra crimp connectors going between the circuit breaker and distribution block.

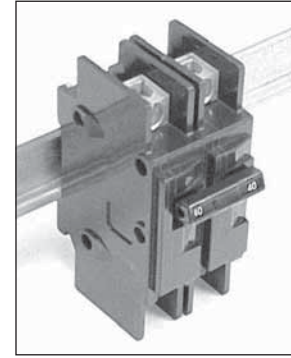
CE Marking

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.

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.

NGG Type 125A Frame Circuit Breaker



The new NGG Circuit Breaker is a compact, industrial design with true value-added features such as Global Ratings (UL/CSA/IEC/CE/NOM), flexible DIN or base mounting without the need for adapters and UL Listed for field install-able accessories. This NGG125 has a 25KAIC interrupting rating at 480VAC and features a Quick Make/Quick Break Trip-free Mechanism. All this in a 3.0W x 5.4H x 2.8D package. Please consult your sales office for availability.

HID Lighting Breakers

Siemens BQD and CQD circuit breakers have been tested and approved for use in switching HID lighting. One, two and three pole breakers from 15A to 50A are now approved and marked for use in these high energy lighting systems where the breakers is used to directly control the lighting in 120VAC, 240VAC, 277AC or 480/277VAC circuits.

Molded Case Circuit Breakers

Catalog Numbering System

Selection/Application

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 | M — Type MD |
| F — Type FD | N — Type ND |
| J — Type JD | P — Type PD |
| L — Type LD | R — Type RD |
| LM — Type LMD | T — Type TD |

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
- P — Load side lugs only

NOTE:

- Position omitted if not used.

Molded Case Circuit Breakers

MD 800A Frame Sentron Series

Selection

Type HMXD6 ①⑤

Black Label

Non-Interchangeable Trip (Assembled Circuit Breaker Without Lugs)				
Continuous Current Rating @ 40°C	2-Pole 600V AC 250V DC		3-Pole 600V AC 500V DC	
	Catalog Number	List Price \$	Catalog Number	List Price \$
500 600 700 800	For 2-pole application use outside poles of 3-pole circuit breaker		HMXD63B500■ HMXD63B600■ HMXD63B700■ HMXD63B800■	



Type HMD6 ⑤

Black Label

Interchangeable Trip						
Continuous Current Rating @ 40°C	Complete Breaker Unassembled with Lugs		Frame Only		Trip Unit Only	
	Catalog Number	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
500 600 700 800	HMD62B500■ HMD62B600■ HMD62B700■ HMD62B800■		HMD62F800■		MD62T500■ MD62T600■ MD62T700■ MD62T800■	

2-Pole 600V AC, 250V DC ②

500	HMD62B500■				MD62T500■	
600	HMD62B600■				MD62T600■	
700	HMD62B700■		HMD62F800■		MD62T700■	
800	HMD62B800■				MD62T800■	

3-Pole 600V AC, 500V DC ④

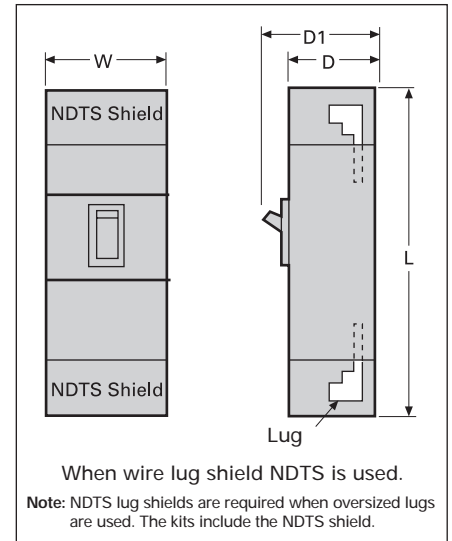
500	HMD63B500				MD63T500	
600	HMD63B600				MD63T600	
700	HMD63B700		HMD63F800		MD63T700	
800	HMD63B800				MD63T800	

Type CMD6 ①⑤

Fuseless Current Limiting

Red Label

Non-Interchangeable Trip (Assembled Circuit Breaker Without Lugs)				
Continuous Current Rating @ 40°C	2-Pole 600V AC/250V DC		3-Pole 600V AC/500V DC	
	Catalog Number	List Price \$	Catalog Number	List Price \$
500 600 700 800	For 2-pole application use outside poles of 3-pole circuit breaker		CMD63B500■ CMD63B600■ CMD63B700■ CMD63B800■	



Interrupting Ratings

Breaker Type	UL 489 AIR—File E10848					IEC 947-2 AIR					
	RMS Symmetrical Amperes (KA)					Volts AC (50/60HZ)					
	Volts AC			Volts DC		220/240		380/415		500	
	240	480	600	250	500 ^③	(Icu)	(Ics)	(Icu)	(Ics)	(Icu)	(Ics)
MD6, MXD6	65	50	25	30 (2-P)	25 (3-P)	65	33	40	20	30	15
HMD6, HMXD6	100	65	50	30 (2-P)	50 (3-P)	100	50	65	33	42	21
CMD6	200	100	65	—	50 (3-P)	200	100	100	50	65	33

Dimensions (in inches)

Breaker Type	W	L	D	(To Handle) D1
MD6, MXD6, HMD6, HMXD6, CMD6, MXD6-ETI, CMD6-ETI, SMD6, SHMD6, and SCMD6	9	16	6	8.25
with lug shields	9	24	6	8.25

For inches / millimeters conversion, see Application Data section.

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

①HMXD6 and CMD circuit breakers are UL listed for reverse connection applications.

②2-pole units available in 3-pole width only.

③MXD6-ETI, CMD6-ETI see page 17/52 for catalog information.

④When wired as shown on page 17/3, this circuit breaker is UL listed and rated for use on 500V DC ungrounded UPS systems only.

⑤HACR rated.