

contents

600V Circuit Breakers



Sentron MD Breakers

Selection and ordering data

	480V	600V
MD, SMD6	50KAIC	25KAIC
HMD, SHMD6	65KAIC	50KAIC
CMD, SCMD6	100KAIC	65KAIC

2- & 3-pole up to 800A for circuit protection up to 600 volt circuits (UL/CSA)



Sentron ND Breakers

Selection and ordering data

	480V	600V
ND, SND6	50KAIC	25KAIC
HND, SHND6	65KAIC	50KAIC
CND, SCND6	100KAIC	65KAIC

2- & 3-pole up to 1600A for circuit protection up to 600 volt circuits (UL/CSA)



Sentron PD Breakers

Selection and ordering data

	480V	600V
PD, SPD6	50KAIC	25KAIC
HPD, SHPD6	65KAIC	50KAIC
CPD	100KAIC	65KAIC

2- & 3-pole up to 1600A for circuit protection up to 600 volt circuits (UL/CSA)

600V Circuit Breakers



Sentron RD Breakers

Selection and ordering data

	480V	600V
RD	50KAIC	25KAIC
HRD	65KAIC	50KAIC

2- & 3-pole up to 2000A for circuit protection up to 600 volt circuits (UL/CSA)

Sentron Circuit Breakers: Additional Information

Contents	Page
Table of Contents	17/1–17/4
Catalog Numbering System	17/5–17/8
ETI Motor Circuit Protector	17/91–17/93
Adjustable Magnetic Trip Setting	17/94–17/96
Molded Case Switch	17/97
Internal Accessories–Combinations	
Sensitrip III Electronic Trip Breakers	17/98–17/99
Electronic & Communication Accessories	17/100
Lug Information	17/101–17/103
Unusual Operating Conditions	17/114
Breaker Modifications	17/115
400 Hz Systems	17/116

Information	Page
General Data	17/89
Internal Accessories	17/90
External Accessories	17/105–17/112

Introduction

Ordering

In the FD through RD frames, you may order molded case circuit breakers three basic ways:

- As separately ordered frames, trip units and lugs
- As frame, trip unit and lugs ordered as one catalog number and shipped unassembled or assembled
- As Frame and Trip Unit shipped assembled and with the trip unit made non-removable, in compliance with UL 489 requirements that to be reverse fed the circuit breaker must not have an interchangeable trip unit.

These two options are described in the following:

Components Ordered Separately

To get the components for a 3-pole, 400 Amp standard interrupting circuit breaker, you would order the frame (JD63F400), the trip unit (JD63T400) and six lugs (TA2J6500). This option is normally useful only if you stock and use large volumes of product and wish to reduce your inventory cost. You may stock, for example, a smaller number of frames (JD63F400) and a variety of trip units (JD63T300, JD63T350, etc.) and assemble breakers as you need them.

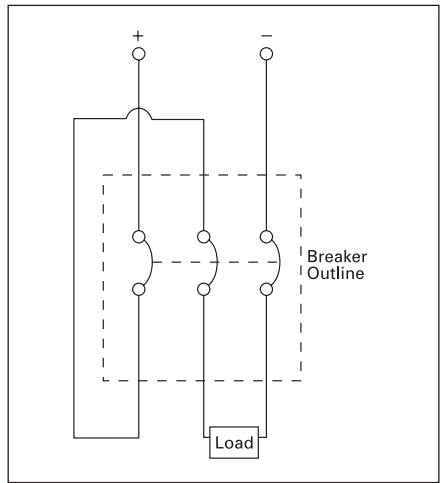
Frame, Trip Unit and Lugs Ordered Together

If you order the catalog number JD63B400, you will receive a frame, a trip unit and 6 lugs in separate packages. By suffixing this number with "L" (e.g. JD63B400L), you will receive frame, trip unit and lugs assembled in one container. Pursuant to UL 489, a product ordered thus will have the markings "LINE" and "LOAD", and may not be "reverse fed" (with power flowing from the "OFF" end of the breaker toward the "ON" end).

Non-Interchangeable Trip Breakers

If you place an "X" after the frame size designator (e.g. JXD63B400), you will receive a frame and trip unit assembled, with the trip unit made non-removable. If you suffix an "L" to this catalog number (e.g. JXD63B400L), you will receive the breaker, non-removable trip unit and lugs assembled. Unless you anticipate a specific need to change the breaker's ampere rating in the future, this is the preferred ordering method, as the products are assembled to Siemens' specifications in our factories. These breakers are suitable for use reverse fed according to UL 489, since the trip unit is not removable.

The smaller frames (QJ, ED and below) do not have removable trip units, and consequently are shipped only as assembled products. To add lugs, see the ordering instructions on each product's catalog page.

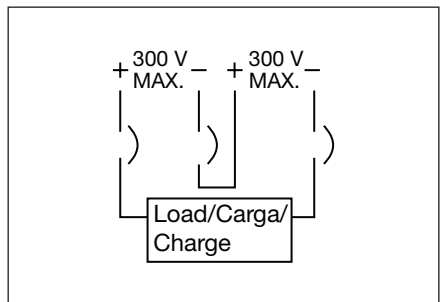


500V DC Wiring Configuration

Connecting Breakers for DC Application

Most Siemens thermal magnetic trip MCCBs are applicable on direct current (dc) systems. Generally, for 250 V dc systems a two pole breaker is used, with one pole on each leg of the supply circuit. For three pole breakers applied on 500 V undergrounded DC systems, it is important to connect the power supply "zig-zag" through the breaker as shown in the figure below. This assures that the Voltage between phases on the breaker terminals is uniformly distributed.

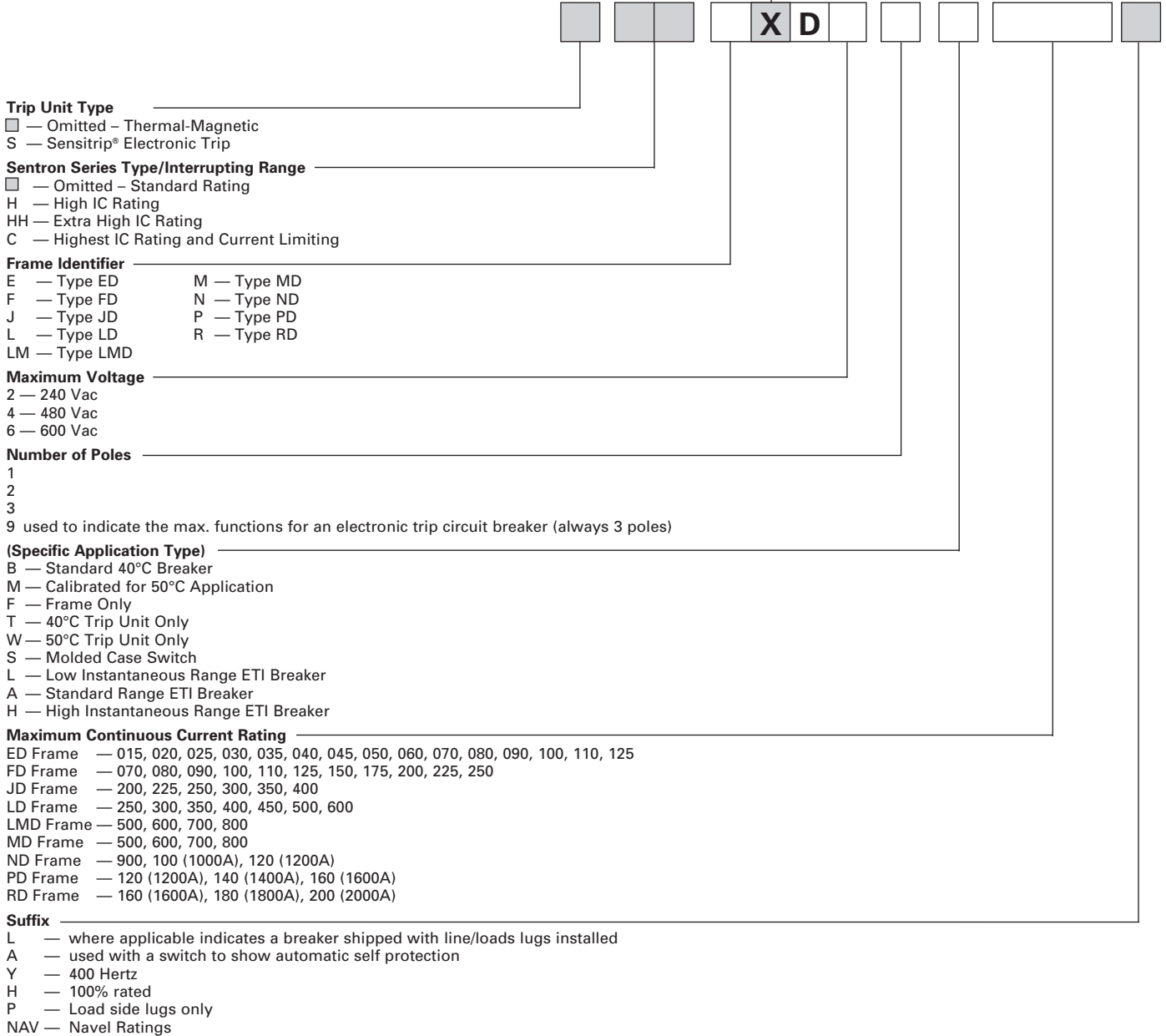
See below for an alternative connection diagram. For a list of Sentron breakers with the DC ratings, please refer to pages Speedfax pages 7-11 to 7-16.



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.



Molded Case Switch — Circuit Disconnect

Selection

Maximum Frame Amp Rating	2-Pole	3-Pole	Self-Protective Instantaneous Override ±20% ^③
	Catalog Number	Catalog Number	
100	BQ2S060 ■ BQ2S100 ■	BQ3S060 ■ BQ3S100 ■	1000 1000
125	ED22S100A ■ ED42S100A ■ ED42S125A ■ ED62S100A ■ — CED62S100A ■ CED62S125A ■ — —	ED23S100A ED43S100A ED43S125A ED63S100A ED63S125A CED63S100A ■ CED63S125A ■ HES3S100L HES3S125L	1000 1000 1000 1000 1000 1000 1000 1250 1250
225	—	HQR23S250HA	2000
250	FXD62S250A HFXD62S250A ■ ①	FXD63S250A HFXD63S250A ■ CFD63S250A ■	3200 3200 3200
400	JXD22S400A ■ — — ①	JXD23S400A JXD63S400A HJXD63S400A ■ CJD63S400A ■	6000 6000 6000 6000
600	— — ①	LXD63S600A HLXD63S600A ■ CLD63S600A ■	6000 6000 6000
800	— — ①	LMXD63S800A ■ MXD63S800A CMD63S800A	8000 8000 8000
1200	— ①	NXD63S120A CND63S120A ■	10000 10000
1600	①	PXD63S160A ^⑤	10000
2000	①	RXD63S200A ■ ^⑤	10000

Ordering Information

Order by catalog number. Switches include frame and self protective trip unit only. Order lugs separately from pages 17/101 to 17/103.

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

① For 2-pole application use outside poles of 3-pole circuit breaker.

② For additional lugs see pages 17/31 to 17/103.

③ Molded case switches up to R frame contain a self protecting instantaneous element, which may open circuit above their override set point.

④ UL file E57556 Volume 1, section 2 and CSA LR 42022-51.

⑤ Requires mounting block MB9301 or MBR9302.

Lugs pages 17/101 to 17/103
Accessories pages 17/108 to 17/113