

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.

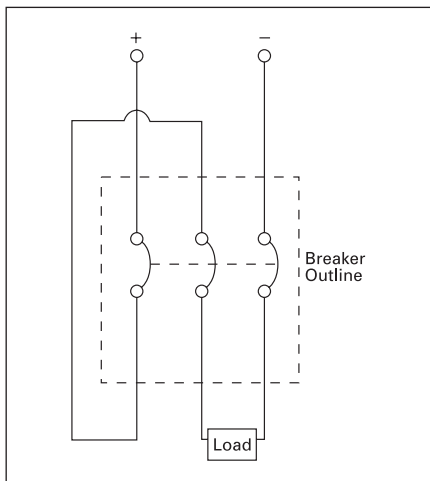
Frame, Trip Unit and Lugs Ordered Together

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.

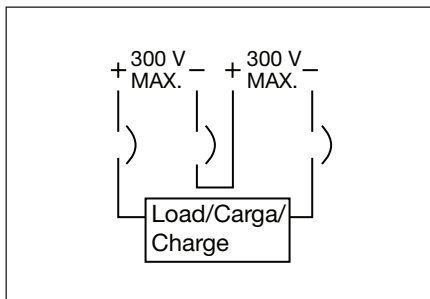


500V DC Wiring Configuration

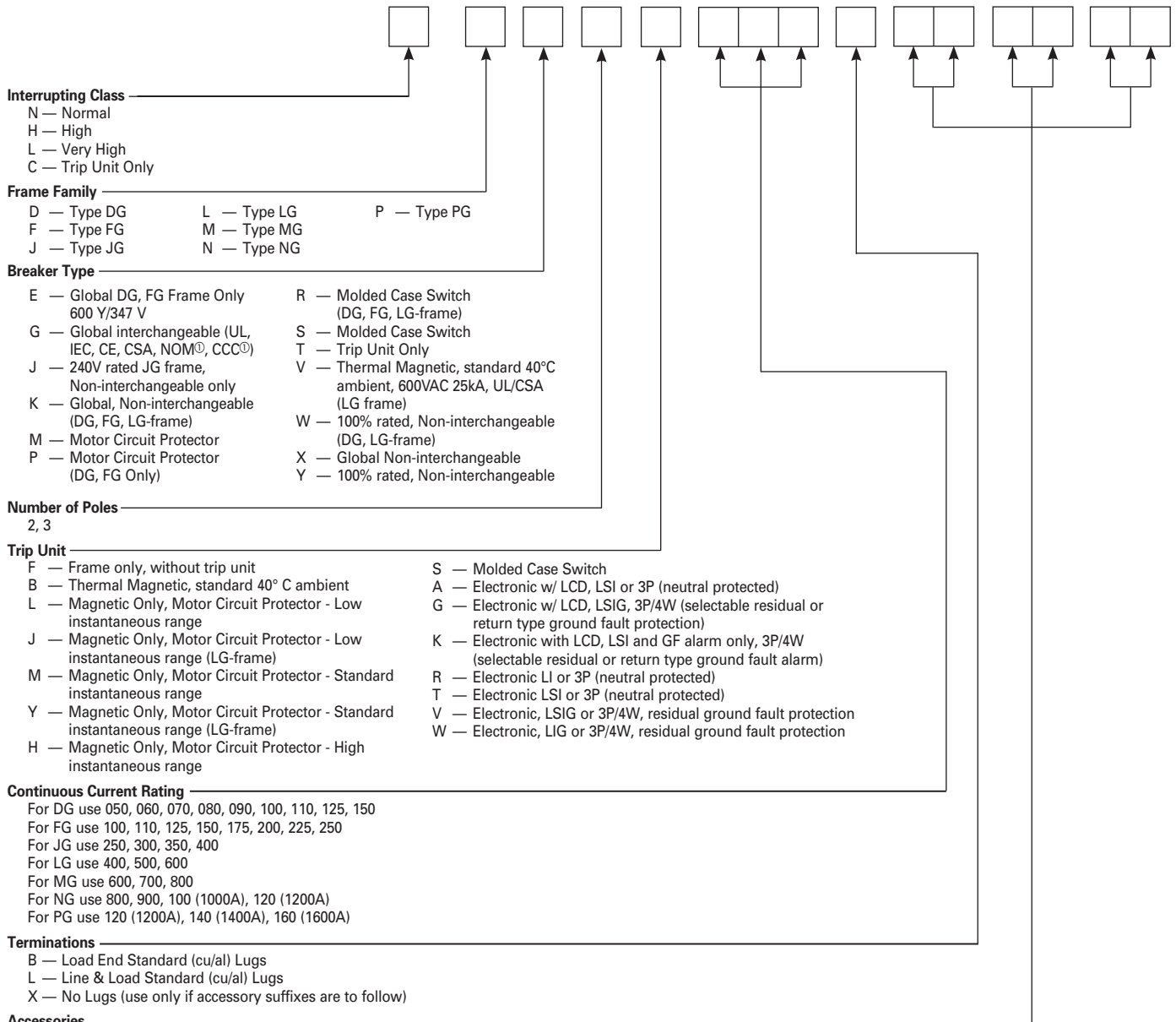
Connecting Breakers for DC Application

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 7-11 to 7-16.



VL Molded Case Circuit Breakers



LCD = Liquid Crystal Display
 LI = Long Delay & Instantaneous trip functions
 LSI = Long Delay, Short Delay, & Instantaneous trip functions
 LSIG = Long Delay, Short Delay, Instantaneous, & Ground Fault trip functions
 GF = Ground Fault
 3P = 3-pole
 4W = 4-wire

© Select Frames

Molded Case Circuit Breakers

Adjustable Instantaneous Magnetic Trip Settings

Application

Breaker Type	Maximum Continuous Amperes	Nominal AC Adjustable Trip Range								ETI Motor Circuit Protector Catalog Number	Thermal Magnetic Catalog Number		
		Low	2	3	4	5	6	7	High		3-Pole	2-Pole	3-Pole
HLMXD6	500	3000	3430	3860	4290	4710	5140	5570	6000	—	—	HLMXD63B500	
	600	3000	3430	3860	4290	4710	5140	5570	6000	—	—	HLMXD63B600	
	700	3200	3500	3700	4200	4700	6400	7300	8000	—	—	HLMXD63B700	
	800	3200	3500	3700	4200	4700	6400	7300	8000	—	—	HLMXD63B800	
HLMD6	500	3000	3430	3860	4290	4710	5140	5570	6000	—	HLMD62B500	HLMD63B500	
	600	3000	3430	3860	4290	4710	5140	5570	6000	—	HLMD62B600	HLMD63B600	
	700	3200	3500	3700	4200	4700	6400	7300	8000	—	HLMD62B700	HLMD63B700	
	800	3200	3500	3700	4200	4700	6400	7300	8000	—	HLMD62B800	HLMD63B800	
MD6	500	3000	3430	3860	4290	4710	5140	5570	6000	—	—	MD63B500	
	600	3000	3430	3860	4290	4710	5140	5570	6000	—	—	MD63B600	
	700	4000	4570	5140	5710	6280	6850	7420	8000	—	—	MD63B700	
	800	3000	3430	3860	4280	4710	5140	5570	6000	MXD63L800	—	—	
	800	4000	4570	5140	5710	6280	6850	7420	8000	MXD63A800	MD62B800	MD63B800	
MXD6	500	3000	3430	3860	4280	4710	5140	5570	6000	—	—	MXD63B500	
	600	3000	3430	3860	4280	4710	5140	5570	6000	—	—	MXD63B600	
	700	4000	4570	5140	5710	6280	6850	7420	8000	—	—	MXD63B700	
	800	3000	3430	3860	4280	4710	5140	5570	6000	MXD63L800	—	—	
	800	4000	4570	5140	5710	6280	6850	7420	8000	MXD63A800	MXD62B800	MXD63B800	
HMD6	500	3000	3430	3860	4280	4710	5140	5570	6000	—	—	HMD63B500	
	600	3000	3430	3860	4280	4710	5140	5570	6000	—	—	HMD63B600	
	700	4000	4570	5140	5710	6280	6850	7420	8000	—	—	HMD63B700	
	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	HMD63B800	
	800	5000	5715	6430	7145	7860	8575	9290	10000	MXD63H800	—	—	
HMXD6	500	3000	3430	3860	4280	4710	5140	5570	6000	—	—	HMXD63B500	
	600	3000	3430	3860	4280	4710	5140	5570	6000	—	—	HMXD63B600	
	700	4000	4570	5140	5710	6280	6850	7420	8000	—	—	HMXD63B700	
	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	HMXD63B800	
CMD6	400	3000	3430	3860	4280	4710	5140	5570	6000	—	—	—	
	500	3000	3430	3860	4280	4710	5140	5570	6000	—	—	—	
	600	3000	3430	3860	4280	4710	5140	5570	6000	—	—	—	
	700	4000	4570	5140	5710	6280	6850	7420	8000	—	—	CMD63B600	
	800	3000	3430	3860	4280	4710	5140	5570	6000	—	—	CMD63B700	
	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	CMD63B800	
ND6	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	ND63B800	
	900	5000	5715	6430	7145	7860	8575	9290	10000	—	—	ND63B900	
	1000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	ND63B100	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	ND63B120	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	ND62B100	
NXD6	900	5000	5715	6430	7145	7860	8575	9290	10000	—	—	NXD63B900	
	1000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	NXD63B100	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	NXD63B120	
HND6	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	HND63B800	
	900	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HND63B900	
	1000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HND63B100	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HND63B120	
HNXD6	900	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HNXD63B900	
	1000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HNXD63B100	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HNXD63B120	
CND6	800	4000	4570	5140	5710	6280	6850	7420	8000	—	—	CND63B800	
	900	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CND63B900	
	1000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CND63B100	
	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CND63B120	
PD6	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PD63B120	
	1400	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PD63B140	
	1600	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PD63B160	
PXD6	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PXD63B120	
	1400	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PXD63B140	
	1600	5000	5715	6430	7145	7860	8575	9290	10000	—	—	PXD63B160	
HPD6	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPD63B120	
	1400	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPD63B140	
	1600	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPD63B160	
HPXD6	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPXD63B120	
	1400	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPXD63B140	
	1600	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HPXD63B160	
CPD6	1200	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CPD63B120	
	1400	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CPD63B140	
	1600	5000	5715	6430	7145	7860	8575	9290	10000	—	—	CPD63B160	
RD6	1800	5000	5715	6430	7145	7860	8575	9290	10000	—	—	RD63B180	
	2000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	RD63B200	
RXD6	1800	5000	5715	6430	7145	7860	8575	9290	10000	—	—	RXD63B180	
	2000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	RXD63B200	
HRD6	1800	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HRD63B180	
	2000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HRD63B200	
HRXD6	1800	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HRXD63B180	
	2000	5000	5715	6430	7145	7860	8575	9290	10000	—	—	HRXD63B200	

7
MOLDED CASE
CIRCUIT BREAKERS