

## 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.

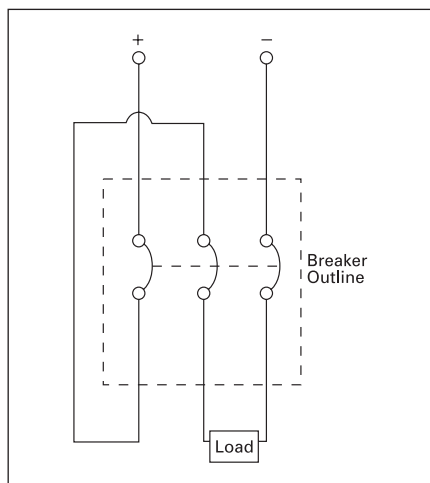
### Frame, Trip Unit and Lugs Ordered Together

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.

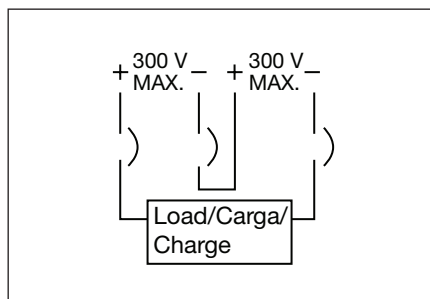


500V DC Wiring Configuration

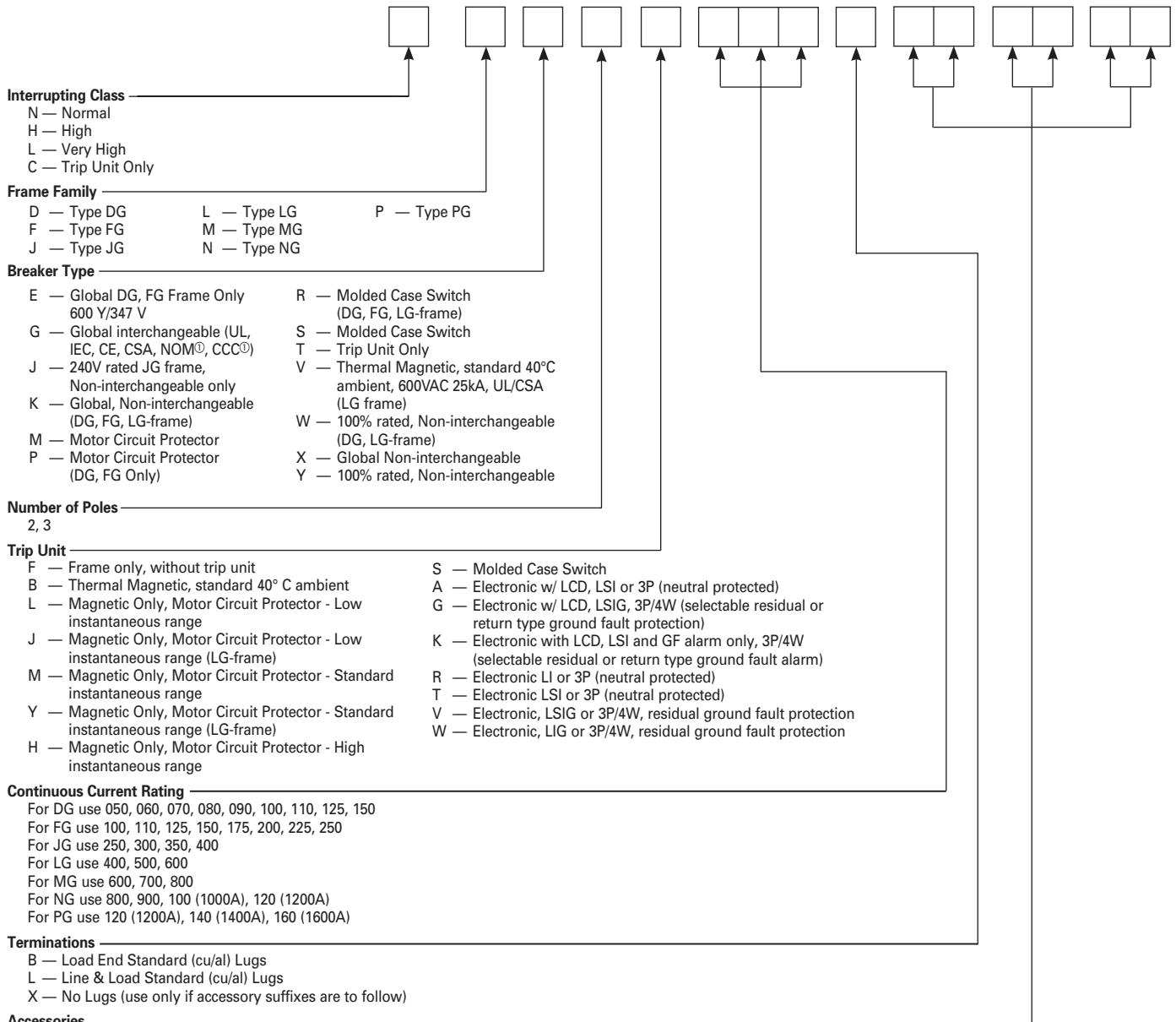
## Connecting Breakers for DC Application

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

ND 1200A Frame Sentron Series

Selection/Dimensions

Type HNXD6 <sup>①④</sup>		<b>Black Label</b>	
<b>Non-Interchangeable Trip (Assembled Circuit Breaker Without Lugs)</b>			
Continuous Current Rating @ 40°C	2-Pole	3-Pole	
	Catalog Number	Catalog Number	
900	For 2-pole application use outside poles of 3-pole circuit breaker	HNXD63B900	
1000		HNXD63B100	
1200		HNXD63B120	

Type HND6 <sup>④</sup>			<b>Black Label</b>	
<b>Interchangeable Trip</b>				
Continuous Current Rating @ 40°C	Complete Breaker Unassembled with Lugs	Frame Only	Trip Unit Only	
	Catalog Number	Catalog Number	Catalog Number	

<b>2-Pole 600V AC, 250V DC<sup>②</sup></b>				
800	For 2-pole application use outside poles of 3-pole circuit breaker			
900				
1000				
1200				

<b>3-Pole 600V AC, 500V DC<sup>③</sup></b>				
800	HND63B800	HND63F120	MD63T800	
900	HND63B900		ND63T900	
1000	HND63B100		ND63T100	
1200	HND63B120		ND63T120	

Type CND6 <sup>①④</sup>		<b>Red Label</b>	
<b>Fuseless Current Limiting</b>			
<b>Non-Interchangeable Trip (Assembled Circuit Breaker)</b>			
Continuous Current Rating @ 40°C	2-Pole	3-Pole	
	Catalog Number	Catalog Number	
900	For 2-pole application, use outside poles of 3-pole circuit breaker	CND63B900■	
1000		CND63B100	
1200		CND63B120	

## Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.)
<b>ND6, HND6, NXD6, HNXD6, CND6 Assembled Breaker (less terminals)</b>		
2	1	53
3	1	61.5
<b>ND6, HND6 Frame Only</b>		
2	1	42.25
3	1	46
<b>ND6, HND6 Trip Unit Only</b>		
2	1	4.5
3	1	6.5

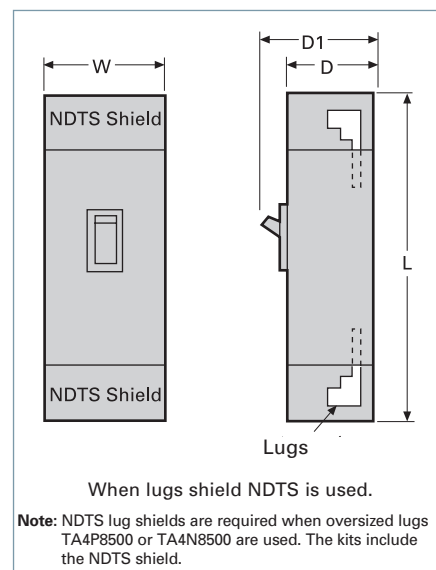
For inches / millimeters conversion, see Application Data section.

- Built to order. Allow 2-3 weeks for delivery.
- ① HNXD6 and CND6 circuit breakers are UL Listed for reverse connection applications.
- ② 2-pole units available in 3-pole width only.

- ③ When wired as shown on page 7-4, this circuit breaker is UL listed and rated for use on 500V DC ungrounded UPS systems only.
- ④ HACR rated.



NXD63B120



## Dimensions (in inches)

Breaker Type	W	L	D	D1
ND6, NXD6, HND6, HNXD6, CND6, SND6, SHND6, and SCND6	9	16	6	8.25
with NDTS lug shield	9	24	6	8.25

MOLDED CASE CIRCUIT BREAKERS