

# DG 150A Frame, VL Series

## Selection

### Ordering Information

#### Complete Assembled Breaker

A complete factory assembled DG breaker includes the frame, trip unit, and standard line and load connectors, all factory installed and shipped as a complete breaker. Assembled breakers are only available with standard connectors.

For DC applications, use thermal magnetic trip unit only.

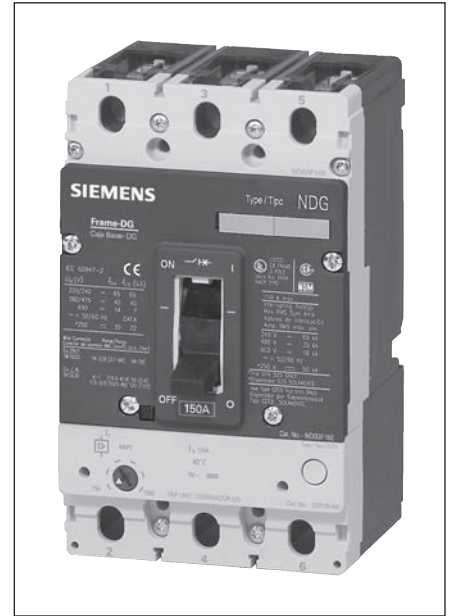
Breakers are suitable for reverse feed applications.

For special applications, refer to page 17/62.

Mounting hardware is included with each frame or complete breaker.

For 100% rated breakers with a non-interchangeable trip unit, change the 3rd character of the catalog number to "W". Available in electronic and electronic with LCD only.

HACR rated.



### Dimensions, inches (mm)

Number of Poles	Width	Length	Depth	To Handle D1
2, 3	4.1 (105)	6.9 (175)	3.4 (81)	4.2(107)

### Approx. Shipping Weight, lbs. (kg)

Poles	Frame	Trip Unit		Complete Breaker
		Thermal-Mag.	Electronic	
2, 3	3.7 (1.7)	2.2 (1.0)	2.6 (1.2)	5.9 (2.7)

### Interrupting Ratings

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (KA)										
		UL 489					IEC 60947-2					
		Volts AC (50/60 Hz)			Volts DC		Volts AC (50/60 Hz)					
		240	480	600Y/347	250	500	220/240		380/415		690	
					I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>		
N	NDGB	65	35	18	30	18	65	65	40	40	12	6
H	HDGB	100	65	18	30	18	100	75	70	70	12	6
L	LDGB	200	100	18	30	18	200	150	100	75	12	6

### Connectors for 75°C Wire

Construction	Ampere Rating	Wire Range	No. of cables per connector	Catalog Number
Steel	30-150	#8-1/0 Cu	1	3TW1DG20 <sup>②</sup>
Aluminum	30-150	#6-3/0 Al/Cu	1	3TA1DG30 <sup>①②</sup>
Copper	30-150	#6-3/0 Cu	1	3TC1DG30 <sup>②④</sup>
<b>Distribution Lugs</b>				
	30-150	#14-#2 Al/Cu (3pcs. Max)	3	3TA3DG02 <sup>②</sup>
	30-150	#14-#4 Cu, #14-#6 Al	6	3TA6DG04 <sup>②</sup>
<b>Compression Lugs</b>				
	30-150	#14-2/0 kcmil Al/Cu	-	2CLD20 <sup>③</sup>
	30-150	#14-2/0 kcmil Al/Cu	-	3CLD20 <sup>②</sup>

- ① Standard connector supplied with complete breakers.
- ② Kit consists of 3 terminal connectors.
- ③ 2 Lugs for 2-pole breakers.
- ④ Required for 100% rated DG breakers. Requires 90°C Cu cable sized at 75°C ampacity

### DG Thermal-Magnetic, Instantaneous Trip Adjustment Range

Trip Unit Continuous Amp Rating (I <sub>n</sub> )	Instantaneous Overcurrent Setting (I <sub>b</sub> )	
	Min.	Max.
50	450	600
60	450	600
70	450	700
80	450	800
90	500	1000
100	500	1000
110	550	1100
125	625	1250
150	800	1600

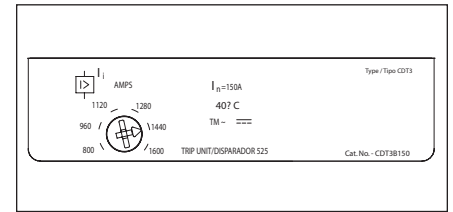
Note: Each breaker has 6 trip settings in this range.

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External Accessories pages 17/43 through 17/57

# DG 150A Thermal-Magnetic Trip Unit

## Selection



Model 525 Trip Unit

### DG 150A Frame 2-Pole with Thermal-Magnetic Trip Unit

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
50	NDK2B050L	HDK2B050L	LDK2B050L
60	NDK2B060L	HDK2B060L	LDK2B060L
70	NDK2B070L	HDK2B070L	LDK2B070L
80	NDK2B080L	HDK2B080L	LDK2B080L
90	NDK2B090L	HDK2B090L	LDK2B090L
100	NDK2B100L	HDK2B100L	LDK2B100L
110	NDK2B110L	HDK2B110L	LDK2B110L
125	NDK2B125L	HDK2B125L	LDK2B125L
150	NDK2B150L	HDK2B150L	LDK2B150L

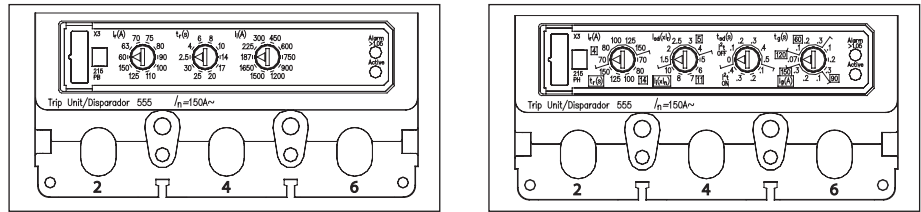
### DG 150A Frame 3-Pole with Thermal-Magnetic Trip Unit

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
50	NDK3B050L	HDK3B050L	LDK3B050L
60	NDK3B060L	HDK3B060L	LDK3B060L
70	NDK3B070L	HDK3B070L	LDK3B070L
80	NDK3B080L	HDK3B080L	LDK3B080L
90	NDK3B090L	HDK3B090L	LDK3B090L
100	NDK3B100L	HDK3B100L	LDK3B100L
110	NDK3B110L	HDK3B110L	LDK3B110L
125	NDK3B125L	HDK3B125L	LDK3B125L
150	NDK3B150L	HDK3B150L	LDK3B150L

A - Consult with Siemens for availability.

# DG 150A Electronic Trip Units

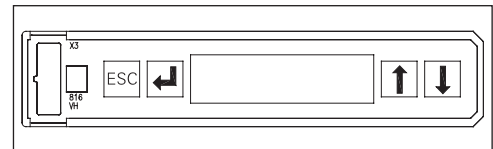
## Selection



Model 555 Trip Units

### DG 150A Frame 3-Pole Electronic Trip Unit<sup>①</sup>

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
ELECTRONIC LI TRIP			
60	NDK3R060L	HDK3R060L	LDK3R060L
100	NDK3R100L	HDK3R100L	LDK3R100L
150	NDK3R150L	HDK3R150L	LDK3R150L
ELECTRONIC LSI TRIP			
60	NDK3T060L	HDK3T060L	LDK3T060L
100	NDK3T100L	HDK3T100L	LDK3T100L
150	NDK3T150L	HDK3T150L	LDK3T150L
ELECTRONIC LSIG TRIP			
60	NDK3V060L	HDK3V060L	LDK3V060L
100	NDK3V100L	HDK3V100L	LDK3V100L
150	NDK3V150L	HDK3V150L	LDK3V150L
ELECTRONIC LIG TRIP			
60	NDK3W060L	HDK3W060L	LDK3W060L
100	NDK3W100L	HDK3W100L	LDK3W100L
150	NDK3W150L	HDK3W150L	LDK3W150L



Model 586 Trip Unit

### DG 150A Frame 3-Pole Electronic LCD Trip Unit<sup>①</sup>

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
LCD ELECTRONIC LSI TRIP			
60	NDK3A060L	HDK3A060L	LDK3A060L
100	NDK3A100L	HDK3A100L	LDK3A100L
150	NDK3A150L	HDK3A150L	LDK3A150L
LCD ELECTRONIC LSIG TRIP			
60	NDK3G060L	HDK3G060L	LDK3G060L
100	NDK3G100L	HDK3G100L	LDK3G100L
150	NDK3G150L	HDK3G150L	LDK3G150L
LCD ELECTRONIC LSI TRIP + GF ALARM ONLY			
60	NDK3K060L	HDK3K060L	LDK3K060L
100	NDK3K100L	HDK3K100L	LDK3K100L
150	NDK3K150L	HDK3K150L	LDK3K150L

<sup>①</sup> Due to the location of the magnetic tripping solenoid, the left accessory pocket is not available for accessories.

# FG 250A Frame, VL Series

## Selection/Dimensions

### Ordering Information

#### Complete Assembled Breaker

A complete factory assembled FG breaker includes the frame, trip unit, and standard line and load connectors, all factory installed and shipped as a complete breaker. Assembled breakers are available only with standard connectors.

For DC applications, use thermal magnetic trip unit only.

Breakers are suitable for reverse feed applications.

For special applications, refer to page 17/62.

Mounting hardware is included with each frame or complete breaker.

HACR rated.



### Interrupting Ratings

Breaker Type	RMS Symmetrical Amperes (KA)										
	UL 489					IEC 60947-2					
	Volts AC (50/60 Hz)			Volts DC		Volts AC (50/60 Hz)					
	240	480	600Y/347	250	500	220/240		380/415		690	
					I <sub>CU</sub>	I <sub>CS</sub>	I <sub>CU</sub>	I <sub>CS</sub>	I <sub>CU</sub>	I <sub>CS</sub>	
NFG	65	35	18	30	18	65	65	40	40	12	6
HFG	100	65	18	30	18	100	75	70	70	12	6
LFG	200	100	18	30	18	200	150	100	75	12	6

### Connectors for 75°C Wire

Construction	Ampere Rating	Wire Range	No. of cables per connector	Catalog Number
Steel	50-250	#4-350 kcmil Cu	1	3TW1FG350 <sup>Ⓢ</sup>
Aluminum <sup>Ⓢ</sup>	50-250	#4-350 kcmil Al/Cu	1	3TAW1FG350 <sup>Ⓢ</sup>
Copper	50-250	#4-350 kcmil Cu	1	3TCW1FG350 <sup>Ⓢ</sup>
Distribution Lugs				
	50-250	#12-2/0 Cu/Al	3	3TA3FG20 <sup>Ⓢ</sup>
	50-250	#14-#4 Cu/Al	6	3TA6FG04 <sup>Ⓢ</sup>

<sup>Ⓢ</sup> Standard connector supplied with complete breakers.

<sup>Ⓢ</sup> Kit consists of 3 terminal connectors.

<sup>Ⓢ</sup> 2 Lugs for 2-pole breakers.

<sup>Ⓢ</sup> 3 Lugs for 3-pole breakers.

### FG Thermal-Magnetic, Instantaneous Trip Adjustment Range

Trip Unit Continuous Amp Rating (I <sub>n</sub> )	Instantaneous Overcurrent Setting (I <sub>b</sub> )	
	Min.	Max.
100	625	1250
110	800	1600
125	800	1600
150	800	1600
175	1000	2000
200	1000	2000
225	1250	2500
250	1250	2500

Note: Each breaker has 6 trip settings in this range.

### Dimensions, inches (mm)

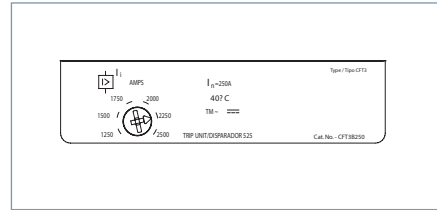
Number of Poles	Width	Length	Depth	To Handle D1
2, 3	4.1 (105)	6.9 (175)	3.4 (81)	4.2 (107)

### Shipping Weight, lbs. (kg)

Poles	Frame	Trip Unit		Complete Breaker
		Thermal-Mag.	Electronic	
2, 3	4.0 (1.8)	2.2 (1.0)	2.6 (1.2)	6.2 (2.8)

# FG 250A Thermal-Magnetic Trip Unit

## Selection



Model 525 Trip Unit

### FG 250A Frame 2-Pole with Thermal-Magnetic Trip Unit

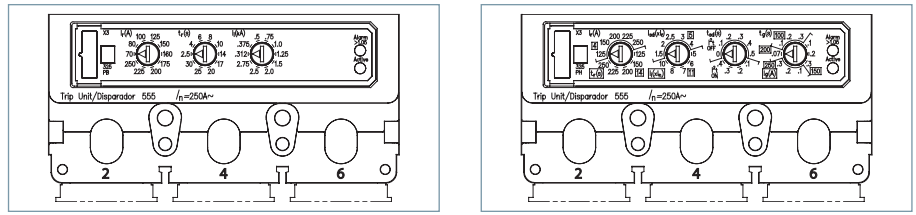
Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
100	NFK2B100L	HFK2B100L	LFK2B100L
110	NFK2B110L	HFK2B110L	LFK2B110L
125	NFK2B125L	HFK2B125L	LFK2B125L
150	NFK2B150L	HFK2B150L	LFK2B150L
175	NFK2B175L	HFK2B175L	LFK2B175L
200	NFK2B200L	HFK2B200L	LFK2B200L
225	NFK2B225L	HFK2B225L	LFK2B225L
250	NFK2B250L	HFK2B250L	LFK2B250L

### FG 250A Frame 3-Pole with Thermal-Magnetic Trip Unit

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
100	NFK3B100L	HFK3B100L	LFK3B100L
110	NFK3B110L	HFK3B110L	LFK3B110L
125	NFK3B125L	HFK3B125L	LFK3B125L
150	NFK3B150L	HFK3B150L	LFK3B150L
175	NFK3B175L	HFK3B175L	LFK3B175L
200	NFK3B200L	HFK3B200L	LFK3B200L
225	NFK3B225L	HFK3B225L	LFK3B225L
250	NFK3B250L	HFK3B250L	LFK3B250L

# FG 250A Electronic 3-Knob & LCD Trip Units

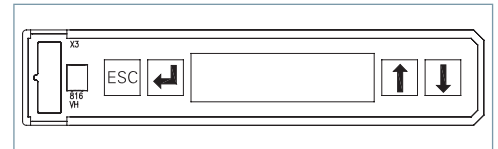
## Selection



Model 555 Trip Units

### FG 250A Frame 3-Pole Electronic Trip Unit<sup>Ⓢ</sup>

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
ELECTRONIC LI TRIP			
100	NFK3R100L	HFK3R100L	LFK3R100L
150	NFK3R150L	HFK3R150L	LFK3R150L
250	NFK3R250L	HFK3R250L	LFK3R250L
ELECTRONIC LSI TRIP			
100	NFK3T100L	HFK3T100L	LFK3T100L
150	NFK3T150L	HFK3T150L	LFK3T150L
250	NFK3T250L	HFK3T250L	LFK3T250L
ELECTRONIC LSIG TRIP			
100	NFK3V100L	HFK3V100L	LFK3V100L
150	NFK3V150L	HFK3V150L	LFK3V150L
250	NFK3V250L	HFK3V250L	LFK3V250L
ELECTRONIC LIG TRIP			
100	NFK3W100L	HFK3W100L	LFK3W100L
150	NFK3W150L	HFK3W150L	LFK3W150L
250	NFK3W250L	HFK3W250L	LFK3W250L



Model 586 Trip Unit

### FG 250A Frame 3-Pole Electronic LCD Trip Unit<sup>Ⓢ</sup>

Continuous Ampere Rating	COMPLETE FACTORY ASSEMBLED CIRCUIT BREAKER		
	N-Interrupting Class	H-Interrupting Class	L-Interrupting Class
	Catalog Number	Catalog Number	Catalog Number
LCD ELECTRONIC LSI TRIP			
100	NFK3A100L	HFK3A100L	LFK3A100L
150	NFK3A150L	HFK3A150L	LFK3A150L
250	NFK3A250L	HFK3A250L	LFK3A250L
LCD ELECTRONIC LSIG TRIP			
100	NFK3G100L	HFK3G100L	LFK3G100L
150	NFK3G150L	HFK3G150L	LFK3G150L
250	NFK3G250L	HFK3G250L	LFK3G250L
LCD ELECTRONIC LSI TRIP + GF ALARM ONLY			
100	NFK3K100L	HFK3K100L	LFK3K100L
150	NFK3K150L	HFK3K150L	LFK3K150L
250	NFK3K250L	HFK3K250L	LFK3K250L

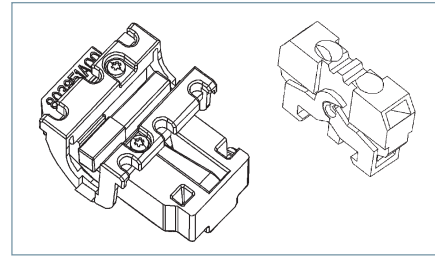
<sup>Ⓢ</sup> Due to the location of the magnetic tripping solenoid, the left accessory pocket is not available for accessories.

# Internal Accessories for DG 150A and FG 250A Frames

## Selection

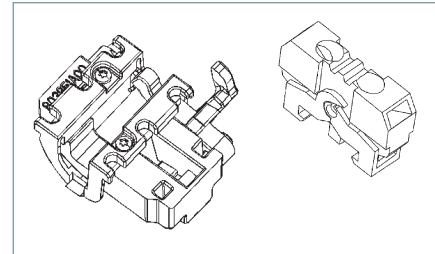
### Auxiliary Switch and Alarm Switch Combination Kits

Description	Mounting Pocket <sup>①</sup>	Catalog Number
1 Alarm Switch 1A/B <sup>③</sup> Bases AMBL2 & AMBL3	Left, Right <sup>②</sup>	ASKL1
2 Aux. Switches 1A + 1B Bases AMBL1	Left, Right	ASKL2
2 Aux. + 1 Alarm Switches 1A + 1B, 1A/B <sup>③</sup> Bases AMBL2 & AMBL3	Left, Right <sup>②</sup>	ASKL3



### Auxiliary/Alarm Switch Mounting Base Only

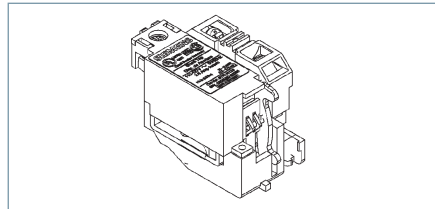
Description	Mounting Pocket	Catalog Number
Up to 3 Auxiliary Switches	Left, Right	AMBL1
2 Aux. + 1 Alarm Switch	Left Pocket Only	AMBL2
2 Aux. + 1 Alarm Switch	Right Pocket Only	AMBL3



### Auxiliary/Alarm Switch Only

Common to DG - PG Frames

Description	Catalog Number
1 Normally Open Contact (1A)	ASWPA
1 Normally Closed Contact (1B)	ASWPB



### Shunt Trips

Description	Mounting Pocket	Catalog Number
24 VDC	Right Pocket Only	STRLB24DC
48-60 VDC		STRLC60DC
110-127 VDC		STRLD125DC
220-250 VDC		STRLE250DC
48-60 VAC		STRLM60
110-127 VAC		STRLN120
208-277 VAC		STRLS277
380-600 VAC		STRLV600



### Undervoltage Release

Description	Mounting Pocket	Catalog Number
12 VDC	Right Pocket Only	UVRLA12DC
24 VDC		UVRLB24DC
48 VDC		UVRLC48DC
60 VDC		UVRLG60DC
110-127 VDC		UVRLD125DC
220-250 VDC		UVRLE250DC
24 VAC		UVRL24
110-127 VAC		UVRLN120
220-240 VAC		UVRLR240
208 VAC		UVRLP208
277 VAC		UVRLS277
380-415 VAC		UVRLT415
440-480 VAC		UVRLU480

① Refer to the "Accessory Locations" chart on page 17/58 for guidelines and limitations about which pockets may be used for accessory combinations.  
 ② These kits include two bases, one for mounting switches in the left pocket and another for mounting in the right.  
 ③ Includes 1A and 1B contact for alarm purposes, only one of which may be installed at any time.  
 'A' refers to a normally open contact (open when the breaker contacts are open).  
 'B' refers to a normally closed contact (closed when the breaker contacts are open).

# JG 400A Frame, VL Series

## Selection/Dimensions

### Ordering Information

#### Complete Assembled Breaker

A complete factory assembled JG breaker includes the frame, trip unit, and standard line and load connectors, all factory installed and shipped as a complete breaker. Assembled breakers are available only with standard connectors.

For any other configuration, order the frame, trip unit, and terminals as separate items.

For DC applications, use thermal magnetic trip unit only.

For reverse feed applications, select non-interchangeable trip breakers only.

For non-interchangeable trip breakers, change the third digit of the catalog number to "X" for standard breakers.

For 100% rated breakers with a non-interchangeable trip unit, change the 3<sup>rd</sup> character of the catalog number to "Y" (3-pole only).

For special applications, refer to page 17/62.

Mounting hardware is included with each frame or complete breaker.

HACR rated.



Dimensions, inches (mm)

Number of Poles	Width	Length	Depth	To Handle D1
2, 3	5.5 (139)	11 (279)	4.2 (102)	5.4 (138)

Shipping Weight, lbs. (kg)

Poles	Frame	Trip Unit		Complete Breaker
		Thermal-Mag.	Electronic	
2, 3	9.3 (4.2)	4.0 (1.8)	4.0 (1.8)	12.6 (5.7)

### Interrupting Ratings

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (KA)										
		UL 489 AIR (File E10848)					IEC 60947-2					
		Volts AC (50/60 Hz)					Volts DC					
		240	480	600	250	500	220/240			380/415		690
		I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>	I <sub>cu</sub>	I <sub>cs</sub>	
N	NJGA	65	35	25	30	25	65	65	45	45	12	6
H	HJGA	100	65	25	30	35	100	75	70	70	15	8
L	LJGA	200	100	25	30	35	200	150	100	75	15	8

### Connectors for 75°C Wire

Construction	Ampere Rating	Wire Range	No. of cables per connector	Catalog Number
Steel	70-400	1/0-600 kcmil Cu	1	3TW1JG600 <sup>②</sup>
Aluminum	70-400	3/0-250 kcmil Al/Cu	2	3TA2JG250 <sup>①②</sup>
Aluminum	70-400	250-750 kcmil Al	1	3TA1JG750 <sup>②</sup>
Aluminum	70-400	3/0-600 kcmil Cu	1	3TA1JG750 <sup>②</sup>
Copper	70-400	3/0-600 kcmil Cu	1	TC1JG750 <sup>③</sup>
Copper	70-400	3/0-250 kcmil Cu	2	TC2JG250 <sup>③</sup>
Distribution Lugs				
	70-400	#14-4 Cu	12	3TA12JG04 <sup>②</sup>
	70-400	#14-2/0 Al/Cu	6	3TA6JG20 <sup>②</sup>
Compression Lugs				
	70-400	#6-350 kcmil	—	3CLJ350 <sup>②</sup>
	70-400	250-600 kcmil	—	3CLJ600 <sup>②</sup>

① Standard construction supplied for each breaker.

② Kit consists of 3 terminal connectors.

③ Required for 100% rated JG breakers. Requires 90°C Cu cable sized at 75°C ampacity.

### JG Thermal-Magnetic, Instantaneous Trip Adjustment Range

Trip Unit Continuous Amp Rating (I <sub>n</sub> )	Instantaneous Overcurrent Setting (I <sub>i</sub> )	
	Min.	Max.
250	1250	2500
300	1500	3000
350	1750	3500
400	2000	4000

Note: Each breaker has 6 trip settings in this range.

External Accessories pages 17/43 through 17/57