

Typical N-Frame Breaker

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N-Frame (400–1200 Amperes)

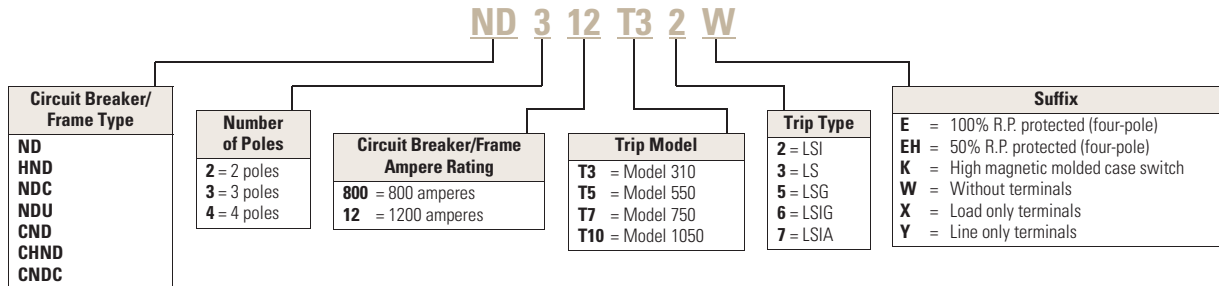
Product Description

- All Eaton N-Frame circuit breakers are suitable for reverse feed use
- All N-Frame circuit breakers are HACR rated

Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

Circuit Breaker/Frame



2.3

Molded Case Circuit Breakers

Series C

Product Selection

2

Type ND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Order as individual components: breaker frame, rating plug, terminals.

Type ND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	Standard	Options			Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Rating Plug Adjustable Ampere Ratings	
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				
Two-Pole								
800	ND2800T33W	ND2800T32W	ND2800T35W	ND2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	ND212T33W	ND212T32W	ND212T35W	ND212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole								
800	ND3800T33W or ND4800T33EW (100% Neutral)	ND3800T32W	ND3800T35W	ND3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	ND312T33W	ND312T32W	ND312T35W	ND312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Note

^① Two terminals are required per pole.

Type ND Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only		Adjustable Rating Plug	Standard Terminals Only ① See Page V4-T2-254 for Optional Terminals
	Standard	Options			Ampere Rating	Fixed Rating Plugs Catalog Number		
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				
Four-Pole ②								
800	ND4800T33W	ND4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	ND412T33W	ND412T32W	—	—	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

- ① Two terminals are required per pole.
- ② Neutral is in right pole.

2.3

Molded Case Circuit Breakers

Series C

Type HND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Order as individual components: breaker frame, rating plug, terminals.

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Type HND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only		Adjustable Rating Plug	Standard Terminals Only ^①
	Standard	Options			Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Ampere Ratings	See Page V4-T2-254 for Optional Terminals
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				
Two-Pole								
800	HND2800T33W	HND2800T32W	HND2800T35W	HND2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	HND212T33W	HND212T32W	HND212T35W	HND212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole								
800	HND3800T33W	HND3800T32W	HND3800T35W	HND3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	HND312T33W	HND312T32W	HND312T35W	HND312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Note

^① Two terminals are required per pole.

Type HND Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only		Adjustable Rating Plug	Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	Standard	Options			Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Ampere Ratings	
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				
Four-Pole ^②								
800	HND4800T33W	HND4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	HND412T33W	HND412T32W	—	—	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

① Two terminals are required per pole.

② Neutral is in right pole.

2.3

Molded Case Circuit Breakers

Series C

Type NDC Electronic Circuit Breakers with Non-Interchangeable Trip Units

Order as individual components: breaker frame, rating plug, terminals.

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Type NDC Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only		Adjustable Rating Plug	Standard Terminals Only ^①
	Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac							
	Standard	Options			Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Ampere Ratings	See Page V4-T2-254 for Optional Terminals
Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection					
Two-Pole								
800	NDC2800T33W	NDC2800T32W	NDC2800T35W	NDC2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	NDC212T33W	NDC212T32W	NDC212T35W	NDC212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole								
800	NDC3800T33W	NDC3800T32W	NDC3800T35W	NDC3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	NDC312T33W	NDC312T32W	NDC312T35W	NDC312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Note

^① Two terminals are required per pole.

Type NDC Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only		Adjustable Rating Plug	Standard Terminals Only ①
	Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac							
	Standard	Options			Ampere Rating	Fixed Rating Plugs	Adjustable Ampere Ratings	See Page V4-T2-254 for Optional Terminals
Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Catalog Number				
Four-Pole ②								
800	NDC4800T33W	NDC4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	NDC412T33W	NDC412T32W	—	—	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

- ① Two terminals are required per pole.
- ② Neutral is in right pole.

2.3

Molded Case Circuit Breakers

Series C

Type ND, 1200 Amperes 150 kA at 480 Vac

2

Type NDU Ultra High Capacity—U_e Max. 600 Vac, 150 kA I_{cu} at 480 Vac

Circuit Breaker Frame Including Digitrip RMS 310 Electronic Trip Unit Less Terminals and Rating Plug—Catalog Number ①

L—Adjustable Long Delay Pickup (By Adjustable Rating Plug)

S—Adjustable Short Delay Pickup with Fixed Short Delay Time (I²t Response) or Adjustable Short Time (Flat Response)

I—Adjustable Instantaneous Pickup by Setting Short Time Delay Time to Instantaneous

G—Adjustable Ground Fault Pickup with Adjustable Ground Fault Delay (Flat Response)

Interchangeable Rating Plugs (Order as Individual Component)
Fixed Rating Plug

Included with Breaker Adjustable Rating Plug Adjustable Ampere Setting

Maximum Continuous Ampere Rating at 40°C ②③	Number of Poles	LS	LSI	LSG	LSIG	Ampere Rating	Catalog Number	Included with Breaker Adjustable Ampere Setting
Short Time Range	2–8 x I _n	2–8 x I _n	2–8 x I _n	2–8 x I _n	2–8 x I _n	400	8NES400T	400/500/
Short Time Delay	—	—	—	—	—	450	8NES450T	600/800
Ground Fault Pickup	—	—	—	Varies by frame	Varies by frame	500	8NES500T	A8NES800T1
Ground Fault Delay	—	—	—	0–500 ms	0–500 ms	550	8NES550T	
						600	8NES600T	
						630	8NES630T	
						700	8NES700T	
						800	8NES800T	
	4 ④	NDU4800T33W	NDU4800T32W	—	—	400	8NES400T	400/500/
						450	8NES450T	600/800
						500	8NES500T	A8NES800T1
						550	8NES550T	
						600	8NES600T	
						630	8NES630T	
						700	8NES700T	
						800	8NES800T	

Notes

① Order terminals separately.

② For AC use only.

③ ND MCCBs are suitable for 40°C or 50°C applications. Order suffix V3 to eliminate standard 40°C labeling.

④ Unprotected left pole neutral. Insert “E” for 100% neutral or “EH” for 60% neutral between “W” and “P” (e.g., **NDS412T32EHP08**). Neutral is on LH side.

Non-UL listed ND 1250 with 1250 ampere trip unit is also available.

100% Rated Type CND Electronic Circuit Breakers with Non-Interchangeable Trip Units

The NEC allows the breaker to be rated at 100% of its frame size in an assembly, provided that 90°C wire is applied at the 75°C ampacity. Order as individual components: breaker frame, rating plug, terminals.

100% Rated Type CND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	Standard	Options			Adjustable Rating Plug			
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Ampere Ratings	
Two-Pole^②								
800	CND2800T33W	CND2800T32W	CND2800T35W	CND2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CND212T33W	CND212T32W	CND212T35W	CND212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole^②								
800	CND3800T33W	CND3800T32W	CND3800T35W	CND3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CND312T33W	CND312T32W	CND312T35W	CND312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

① Two terminals are required per pole.

② For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end. Terminal ordered separate.

2.3

Molded Case Circuit Breakers

Series C

2

100% Rated Type CND Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	Standard	Options			Adjustable Rating Plug			
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Ampere Ratings	
Four-Pole ^{②③}								
800	CND4800T33W	CND4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CND412T33W	CND412T32W	—	—	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB
					1200	12NES1200T		TA1200NB1

Notes

- ① Two terminals are required per pole.
- ② Neutral is in right pole.
- ③ For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end. Terminal ordered separate.

100% Rated Type CHND Electronic Circuit Breakers with Non-Interchangeable Trip Units

The NEC allows the breaker to be rated at 100% of its frame size in an assembly, provided that 90°C wire is applied at the 75°C ampacity. Order as individual components: breaker frame, rating plug, terminals.

100% Rated Type CHND Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				Ampere Rating	Fixed Rating Plugs Catalog Number	Adjustable Rating Plug Adjustable Ampere Ratings	
	Standard	Options	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				
Two-Pole^②								
800	CHND2800T33W	CHND2800T32W	CHND2800T35W	CHND2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CHND212T33W	CHND212T32W	CHND212T35W	CHND212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole^②								
800	CHND3800T33W	CHND3800T32W	CHND3800T35W	CHND3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CHND312T33W	CHND312T32W	CHND312T35W	CHND312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

① Two terminals are required per pole.

② For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end. Terminal ordered separate.

100% Rated Type CHND Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^①
	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				Adjustable Rating Plug	Fixed Rating Plugs	Adjustable Ampere Ratings	
	Standard	Options						
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Ampere Rating	Catalog Number		See Page V4-T2-254 for Optional Terminals
Four-Pole ^{②③}								
800	CHND4800T33W	CHND4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CHND412T33W	CHND412T32W	—	—	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

- ① Two terminals are required per pole.
- ② Neutral is in right pole.
- ③ For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end. Terminal ordered separate.

100% Rated Type CNDC Electronic Circuit Breakers with Non-Interchangeable Trip Units

The NEC allows the breaker to be rated at 100% of its frame size in an assembly, provided that 90°C wire is applied at the 75°C ampacity. Order as individual components: breaker frame, rating plug, terminals.

100% Rated Type CNDC Electronic Circuit Breakers with Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^① See Page V4-T2-254 for Optional Terminals
	Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				Adjustable Rating Plug	Fixed Rating Plugs	Adjustable Ampere Ratings	
	Standard	Options						
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Ampere Rating	Catalog Number		
Two-Pole^②								
800	CNDC2800T33W	CNDC2800T32W	CNDC2800T35W	CNDC2800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CNDC212T33W	CNDC212T32W	CNDC212T35W	CNDC212T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1
Three-Pole^②								
800	CNDC3800T33W	CNDC3800T32W	CNDC3800T35W	CNDC3800T36W	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
1200	CNDC312T33W	CNDC312T32W	CNDC312T35W	CNDC312T36W	600	12NES600T	Adjustable settings are: 600, 800, 1000, 1200 A12NES1200T1	TA700NB1
					700	12NES700T		TA700NB1
					800	12NES800T		TA1000NB1
					900	12NES900T		TA1000NB1
					1000	12NES1000T		TA1000NB1
					1200	12NES1200T		TA1200NB1

Notes

① Two terminals are required per pole.

② For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end. Terminal ordered separate.

100% Rated Type CNDC Electronic Circuit Breakers with Non-Interchangeable Trip Units, continued

Maximum Continuous Ampere Rating at 40°C	Digitrip RMS 310 Circuit Breaker Frame Only				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only ^①
	Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				Adjustable Rating Plug	Fixed Rating Plugs	Adjustable Ampere Ratings	
	Standard	Options						
	Adjustable Short Time Pickup with I ² t Short Delay Ramp Catalog Number	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection				See Page V4-T2-254 for Optional Terminals
Four-Pole ^{②③}								
800	CNDC4800T33W	CNDC4800T32W	—	—	400	8NES400T	Adjustable settings are: 400, 500, 600, 800 A8NES800T1	TA700NB1
					450	8NES450T		TA700NB1
					500	8NES500T		TA700NB1
					600	8NES600T		TA700NB1
					700	8NES700T		TA700NB1
					800	8NES800T		TA1000NB1
					1200	CNDC412T33W		CNDC412T32W
700	12NES700T	TA700NB1						
800	12NES800T	TA1000NB1						
900	12NES900T	TA1000NB1						
1000	12NES1000T	TA1000NB1						
1200	12NES1200T	TA1223200NB1						

Notes

- ① Two terminals are required per pole.
- ② Neutral is in right pole.
- ③ For 1200A rating, includes conductor extension kit that increases breaker length 3.75 on each end.

Digitrip OPTIM Electronic Circuit Breakers with Interchangeable Rating Plugs

Order as individual components: breaker frame (which includes trip unit), rating plug, terminals.

Digitrip OPTIM 550 Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only			Digitrip OPTIM Rating Plug Only	
	LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
OPTIM 550 ②					
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac					
800	ND3800T52W	ND3800T56W	ND3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200	ND312T52W	ND312T56W	ND312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
800	HND3800T52W	HND3800T56W	HND3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200	HND312T52W	HND312T56W	HND312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120

Notes① Long delay I⁴t response selection limits short delay time to flat response.② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

Digitrip OPTIM 550 Electronic Circuit Breakers with Interchangeable Rating Plugs, continued

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only			Digitrip OPTIM Rating Plug Only	
	LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
	L – Adjustable Long Delay Pickup (I ₁) with Adjustable Long Delay Time (I ² t or I ⁴ t Response) ^① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I ² t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I ² t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I ² t or Flat Response) OPTIM 550 ^②				
Three-Pole Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac					
800	NDC3800T52W	NDC3800T56W	NDC3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200	NDC312T52W	NDC312T56W	NDC312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120

Notes

- ① Long delay I⁴t response selection limits short delay time to flat response.
- ② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

Digitrip OPTIM 1050 Electronic Circuit Breakers with Interchangeable Rating Plugs

Circuit Breaker Frame Only

L– Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time (I^2t or I^4t Response) ①S– Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)

I– Adjustable Instantaneous Pickup

G– Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I^2t or Flat Response)A– Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I^2t or Flat Response)

OPTIM 1050 ②③

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				
800	ND3800T106W	ND3800T107W	400	ORPN80A400
			450	ORPN80A450
			500	ORPN80A500
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	ND312T106W	ND312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
800	HND3800T106W	HND3800T107W	400	ORPN80A400
			450	ORPN80A450
			500	ORPN80A500
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	HND312T106W	HND312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120
Three-Pole Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				
800	NDC3800T106W	NDC3800T107W	400	ORPN80A400
			450	ORPN80A450
			500	ORPN80A500
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	NDC312T106W	NDC312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120

Notes

- ① Long delay I^4t response selection limits short delay time to flat response.
 ② One Form C auxiliary switch and one Form C bell (trip) alarm switch supplied with breaker as standard.
 ③ Factory sealed.

2.3

Molded Case Circuit Breakers

Series C

100% Rated Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plugs

Order as individual components: breaker frame (which includes trip unit), rating plug, terminals.

2

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only			Digitrip OPTIM Rating Plug Only	
	LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
OPTIM 550 ②					
L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I^2t or Flat Response)					
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac					
800	CND3800T52W	CND3800T56W	CND3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200 ③	CND312T52W	CND312T56W	CND312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
800	CHND3800T52W	CHND3800T56W	CHND3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200 ③	CHND312T52W	CHND312T56W	CHND312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120

Notes

- ① Long delay I^4t response selection limits short delay time to flat response.
- ② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.
- ③ Includes conductor extension kit, which increases breaker length 3.75 on each end. Terminal ordered separate.

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plugs, continued

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only			Digitrip OPTIM Rating Plug Only	
	LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
	L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time (I^2t or I^4t Response) ^① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I^2t or Flat Response) OPTIM 550 ^②				
Three-Pole Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac					
800	CNDC3800T52W	CNDC3800T56W	CNDC3800T57W	400	ORPN80A400
				450	ORPN80A450
				500	ORPN80A500
				550	ORPN80A550
				600	ORPN80A600
				700	ORPN80A700
				800	ORPN80A800
1200 ^③	CNDC312T52W	CNDC312T56W	CNDC312T57W	600	ORPN12A600
				700	ORPN12A700
				800	ORPN12A800
				1000	ORPN12A100
				1200	ORPN12A120

Notes

- ① Long delay I^4t response selection limits short delay time to flat response.
 ② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.
 ③ Includes conductor extension kit, which increases breaker length 3.75 on each end. Terminal ordered separate.

2.3

Molded Case Circuit Breakers

Series C

2

100% Rated Digitrip OPTIM 1050 Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only		Digitrip OPTIM Rating Plug Only	
	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
	L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time (I^2t or I^4t Response) ^① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I^2t or Flat Response)			
	OPTIM 1050 ^{②③}			
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac				
800	CND3800T106W	CND3800T107W	400	ORPN80A400
			450	ORPN80A450
			500	ORPN80A500
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	CND312T106W	CND312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
800	CHND3800T106W	CHND3800T107W	400	ORPN80A400
			450	ORPN80A450
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	CHND312T106W	CHND312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120

Notes

- ① Long delay I^4t response selection limits short delay time to flat response.
- ② One Form C auxiliary switch one Form C bell (trip) alarm switch supplied with breaker as standard.
- ③ Factory sealed.

100% Rated Digitrip OPTIM 1050 Circuit Breakers with Interchangeable Rating Plugs, continued

Maximum Continuous Ampere Rating at 40°C	Circuit Breaker Frame Only		Digitrip OPTIM Rating Plug Only	
	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
	L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time (I^2t or I^4t Response) ^① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time Delay (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I^2t or Flat Response) OPTIM 1050 ^{②③}			
Three-Pole Ultra High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				
800	CNDC3800T106W	CNDC3800T107W	400	ORPN80A400
			450	ORPN80A450
			500	ORPN80A500
			550	ORPN80A550
			600	ORPN80A600
			700	ORPN80A700
			800	ORPN80A800
1200	CNDC312T106W ^④	CNDC312T107W	600	ORPN12A600
			700	ORPN12A700
			800	ORPN12A800
			1000	ORPN12A100
			1200	ORPN12A120

Type ND Molded Case Switches

Type ND High Instantaneous (K)

Continuous Ampere Rating at 40°C	Three-Pole Catalog Number	Four-Pole ^⑤ Catalog Number
800	ND3800WK	ND4800WK
	HND3800WK	HND4800WK
1200	ND312WK	ND412WK
	HND312WK	HND412WK

Notes

- ① Long delay I^4t response selection limits short delay time to flat response.
 ② One Form C auxiliary switch one Form C bell (trip) alarm switch supplied with breaker as standard.
 ③ Factory sealed.
 ④ Includes conductor extension kit, which increases breaker length 3.75 on each end. Terminal ordered separate.
 ⑤ Neutral is in right pole.

Molded case switch will trip above 14,000 amperes.

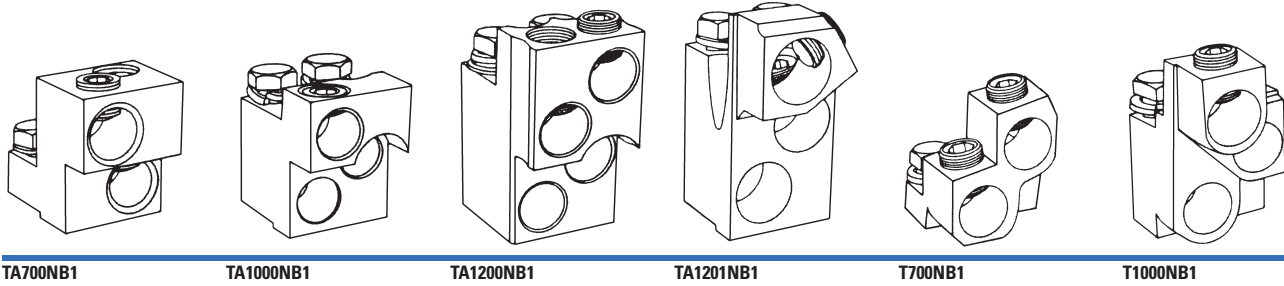
For UL listed, series tested molded case switch application data, refer to Eaton.

Accessories Selection Guide and Ordering Information

2

Line and Load Terminals—Ordering Information

N-Frame circuit breakers use Cu/Al terminals as standard. When optional copper or Cu/Al terminals are required, order by catalog number. Specify if factory installation is required.

**Line and Load Terminals**

Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/ No. Conductors	Metric Wire Range mm ²	Catalog Number
Standard Cu/Al Pressure Terminals					
700	Aluminum	Cu/Al	(2) 1–500 kcmil	50–240	TA700NB1
1000	Aluminum	Cu/Al	(3) 3/0–400 kcmil	95–185	TA1000NB1 ①
1200	Aluminum	Cu/Al	(4) 4/0–500 kcmil	120–240	TA1200NB1 ①
1200	Aluminum	Cu/Al	(3) 500–750 kcmil	300–400	TA1201NB1 ②
Optional Copper and Cu/Al Pressure Type Terminals					
700	Copper	Cu	(2) 2/0–500 kcmil	70–240	T700NB1
1000	Copper	Cu	(3) 3/0–500 kcmil	95–240	T1000NB1
1200	Copper	Cu	(4) 3/0–400 kcmil	95–185	T1200NB3

Notes

① Terminal rating is AL9CU.

② Terminal rating is AL7CU.

Accessories

Allowable Accessory Combinations

Different combinations of accessories can be supplied, depending on the types of accessories and the number of poles in the circuit breaker.

ND Frame Accessories

Description	Reference Page	Three-Pole			Four-Pole			Neutral
		Left	Center	Right	Left	Center	Right	
Internal Accessories (Only One Internal Accessory Per Pole) ①								
Alarm lockout (Make/Break)	V4-T2-305	■		■	■		■	
Alarm lockout (2Make/2Break)	V4-T2-305	■		■	■		■	
Auxiliary switch (1A, 1B)	V4-T2-307	■		■	■		■	
Auxiliary switch (2A, 2B)	V4-T2-307	■		■	■		■	
Auxiliary switch (3A, 3B)	V4-T2-307	■		■	■		■	
Auxiliary switch (1A, 1B) and alarm switch combination	V4-T2-309	■		■	■		■	
Auxiliary switch (2A, 2B) and alarm switch combination	V4-T2-309	■		■	■		■	
Shunt trip—standard	V4-T2-313	■			■			
Shunt trip—low energy	V4-T2-314	■			■			
Undervoltage release mechanism	V4-T2-321	■			■			
Eaton PowerNet communications kit (OPTIM 550)	V4-T2-322			■				
External Accessories								
Base mounting hardware	V4-T2-340	●	●	●	●	●	●	●
Interphase barriers	V4-T2-342	●	●	●	●	●	●	●
Terminal shield	V4-T2-342	■	■	■				
Non-padlockable handle block	V4-T2-343		■			■		
Padlockable handle lock hasp	V4-T2-344	□		□	□		□	
Key interlock kit	V4-T2-345	□		□	□		□	
Sliding bar interlock—requires two breakers	V4-T2-346	●	●	●				
Walking beam interlock—requires two breakers	V4-T2-346	●	●	●	●	●	●	●
Electrical (motor) operator	V4-T2-348	●	●	●	●	●	●	●
Plug-in adapters	V4-T2-349	●	●	●	●	●	●	●
Rear connecting studs	V4-T2-350	●	●	●	●	●	●	●
Panelboard connecting straps	V4-T2-351	●	●	●	●	●	●	●
Handle mechanisms	V4-T2-353	●	●	●	●	●	●	●
Handle extension	V4-T2-357	●	●	●	●	●	●	●
Solid-state (electronic) portable test kit	V4-T2-359	●	●	●	●	●	●	●
OPTIM System Components Three Poles								
Ground fault alarm unit	V4-T2-358							
Potential transformer module	V4-T2-358							
Breaker interface module (BIM)	V4-T2-359							
Digitrip OPTIMizer	V4-T2-359							
Auxiliary power module	V4-T2-359							
Modifications (Refer to Eaton)								
Special calibration	—	●	●	●	●	●	●	●
Moisture fungus treatment	V4-T2-123	●	●	●	●	●	●	●
Freeze-tested circuit breakers	—	●	●	●	●	●	●	●
Marine/naval application	—	●	●	●	●	●	●	●

Legend

- Applicable in indicated pole position
- May be mounted on left or right pole—not both
- Accessory available/modification available

Note

① OPTIM 550 and 1050 are factory sealed and do not have the right pole available for accessories.

Technical Data and Specifications

2

UL 489 Interrupting Capacity Ratings ^①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)			
		Volts AC (50/60 Hz)			
		240	277	480	600
ND	2, 3, 4	65	—	50	25
CND ^②	2, 3, 4	65	—	50	25
HND	2, 3, 4	100	—	65	35
CHND ^②	2, 3, 4	100	—	65	35
NDC	2, 3, 4	200	—	100	65
CNDC ^②	2, 3, 4	200	—	100	65
NDU ^③	3	300 ^④	—	150	75 ^⑤

IEC 947-2 Interrupting Capacity Ratings ^①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)		
		Volts AC (50/60 Hz)		
		240	415	690
ND				
I_{CU}	2, 3, 4	85	50	20
I_{CS}	2, 3, 4	85	50	10
CND ^②				
I_{CU}	2, 3, 4	85	50	20
I_{CS}	2, 3, 4	85	50	10
HND				
I_{CU}	2, 3, 4	100	70	25
I_{CS}	2, 3, 4	100	50	13
CHND ^②				
I_{CU}	2, 3, 4	100	70	25
I_{CS}	2, 3, 4	100	50	13
NDC				
I_{CU}	2, 3, 4	200	100	35
I_{CS}	2, 3, 4	100	50	18
CNDC ^②				
I_{CU}	2, 3, 4	200	100	35
I_{CS}	2, 3, 4	100	50	18

Notes

- ① Utilization Category A circuit breakers.
- ② 100% rated breakers.
- ③ 800 amperes maximum rating.
- ④ Successfully tested at 300 kAIC, although UL recognizes maximum of 200 kAIC at 240 Vac.
- ⑤ Successfully tested at 75 kAIC, although UL recognizes maximum of 65 kAIC at 600 Vac.

N-Frame Digitrip

Trip Unit Type	Digitrip RMS 310	Digitrip OPTIM 550	Digitrip OPTIM 550	Digitrip OPTIM 1050
rms sensing	Yes	Yes	Yes	Yes
Breaker Type				
Frame	N	N	N	N
Ampere range	400A–1200A	400A–1200A	400A–1200A	400A–1200A
Interrupting rating at 480 volts	50, 65, 100 (kA)	50, 65, 100 (kA)	50, 65, 100 (kA)	50, 65, 100 (kA)
Protection				
Ordering options	LS, LSG	LSI, LSIG	LSI, LSIG, LSI(A)	LSI(A), LISG
Fixed rated plug (I_n)	Yes	Yes	Yes	Yes
Overtemperature trip	Yes	Yes	Yes	Yes
Long Delay Protection (L)				
Adjustable rating plug (I_n)	Yes	Yes	No	No
Long delay pickup	0.5–1.0 (I_n) ^①	0.5–1.0 (I_n) ^①	0.4–1.0 x (I_n)	0.4–1.0 x (I_n)
Long delay time I^2t	12 seconds	12 seconds	2–24 seconds	2–24 seconds
Long delay time I^4t	No	No	1–5 Seconds	1–5 Seconds
Long delay thermal memory	Yes	Yes	Yes	Yes
High load alarm	No	No	No	0.5–1.0 x I_r
Short Delay Protection (S)				
Short delay pickup	200–800% x (I_n)	200–800% x (I_n)	150–800% x (I_r)	150–800% x (I_r)
Short delay time I^2t	100 ms	No	100–500 ms	100–500 ms
Short delay time flat	No	Inst–300 ms	100–500 ms	100–500 ms
Short delay time zone selective interlocking	No	No	Yes	Yes
Instantaneous Protection (I)				
Instantaneous pickup	No	200–800% x (I_n)	200–800% x (I_n)	200–800% x (I_n)
Discriminator	No	No	Yes	Yes
Instantaneous override	Yes	Yes	Yes	Yes
Ground Fault Protection (G)				
Ground fault alarm	No	No	20–100% x (I_s)	20–100% x (I_s)
Ground fault pickup	Varies by frame ^②	Varies by frame ^②	20–100% x (I_s)	20–100% x (I_s)
Ground fault delay I^2t	No	No	100–500 ms	100–500 ms
Ground fault delay flat	Inst–500 ms	Inst–500 ms	100–500 ms	100–500 ms
Ground fault zone selective interlocking	No	No	Yes ^③	Yes
Ground fault thermal memory	Yes	Yes	Yes	Yes
System Diagnostics				
Status LEDs	Yes	Yes	Yes	Yes
Cause of trip LEDs	No	No	Yes	Yes
Magnitude of trip information	No	No	Yes	Yes
Remote signal contact—ground alarm	Yes ^④	Yes ^④	Yes ^③	Yes
Local auxiliary and bell alarm contact	Optional	Optional	Optional	Included

Legend

BIM = Breaker Interface Module
(A) = GF Alarm
 I_s = Sensor Rating
 I_n = Rating Plug
 I_r = Long Delay Pickup Setting

Notes

- ① Adjust by rating plug.
② By OPTIMizer/BIM.
③ Zone interlock kit.
④ With separate ground fault alarm unit (GFAU).

N-Frame Digitrip, continued

Trip Unit Type	Digitrip RMS 310		Digitrip OPTIM 550	Digitrip OPTIM 1050
System Monitoring				
Digital display	No	No	Yes ^①	Yes ^①
Current	No	No	Yes	Yes
Power and energy	No	No	No	Yes
Power quality—harmonics	No	No	No	Yes
Power factor	No	No	No	Yes
Communications				
Eaton PowerNet	No	No	No ^②	Yes
Testing				
Testing method	Test set	Test set	OPTIMizer, BIM, PowerNet	OPTIMizer, BIM, PowerNet

Legend

BIM = Breaker Interface Module
 (A) = GF Alarm
 I_s = Sensor Rating
 I_n = Rating Plug
 I_r = Long Delay Pickup Setting

Notes

- ^① By OPTIMizer/BIM.
^② Eaton's PowerNet kit.

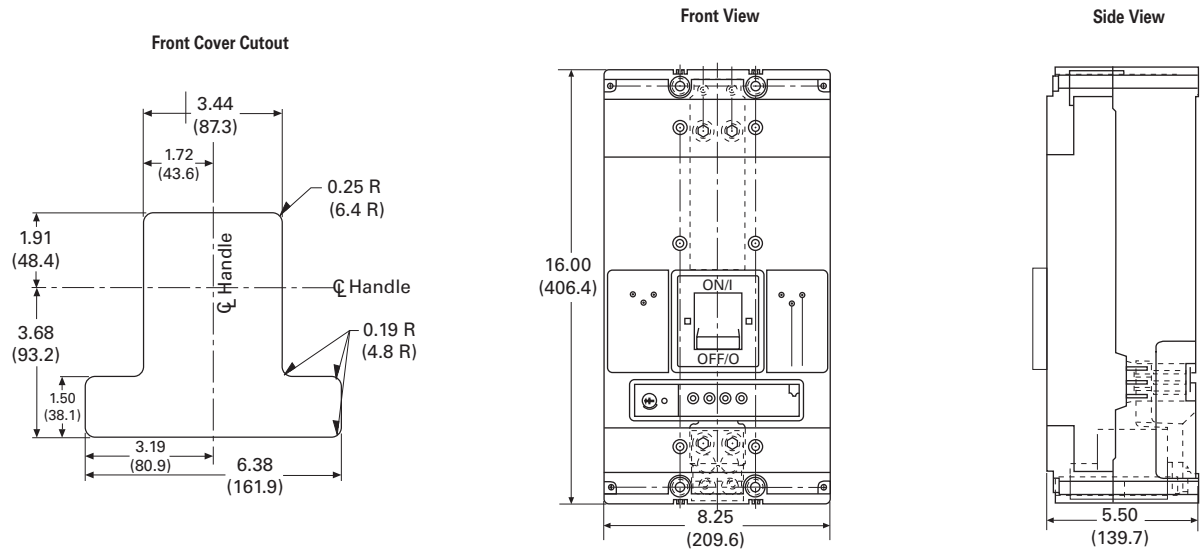
Dimensions and Weights

Approximate Dimensions in Inches (mm)

ND Frame

Number of Poles	Width	Height	Depth
2, 3	8.25 (209.6)	16.00 (406.4)	5.50 (139.7)
4	11.13 (282.6)	16.00 (406.4)	5.50 (139.7)

ND-Frame, Two- and Three-Pole



Approximate Shipping Weight in Lbs (kg)

ND Frame

Breaker Type	Complete Breaker		
	Two-Pole	Three-Pole	Four-Pole
ND, HND, NDC, NDU	37 (16.8)	45 (20.4)	58 (26.3)