

Typical L-Frame Circuit Breaker



Contents

<i>Description</i>	<i>Page</i>
Product Overview	V4-T2-246
Standards and Certifications	V4-T2-247
Quick Reference	V4-T2-248
G-Frame (15–100 Amperes)	V4-T2-251
F-Frame (10–225 Amperes)	V4-T2-265
J-Frame (70–250 Amperes)	V4-T2-283
K-Frame (70–400 Amperes)	V4-T2-291
L-Frame (125–600 Amperes)	
Catalog Number Selection	V4-T2-316
Product Selection	V4-T2-318
Accessories	V4-T2-334
Technical Data and Specifications	V4-T2-336
Dimensions and Weights	V4-T2-340
M-Frame (300–800 Amperes)	V4-T2-341
N-Frame (400–1200 Amperes)	V4-T2-352
R-Frame (800–2500 Amperes)	V4-T2-367
Motor Circuit Protectors (MCP)	V4-T2-386
Motor Protection Circuit Breakers (MPCB)	V4-T2-397
Type ELC Current Limiter Attachment (Size 0–4)	V4-T2-399
Current Limiting Circuit Breaker Module	V4-T2-400
Internal Accessories	V4-T2-403
External Accessories	V4-T2-436

L-Frame (125–600 Amperes)

Product Description

- All Eaton L-Frame circuit breakers are HACR rated
- L-Frame circuit breakers are available as individual components (frame, trip unit, terminals), or factory assembled complete breakers
- L-Frame circuit breakers with non-interchangeable trip units are suitable for reverse feed use

Standards and Certifications

- CE marked

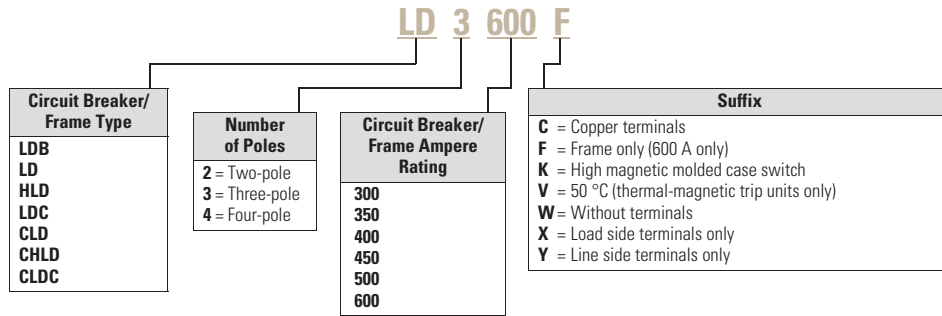


Catalog Number Selection

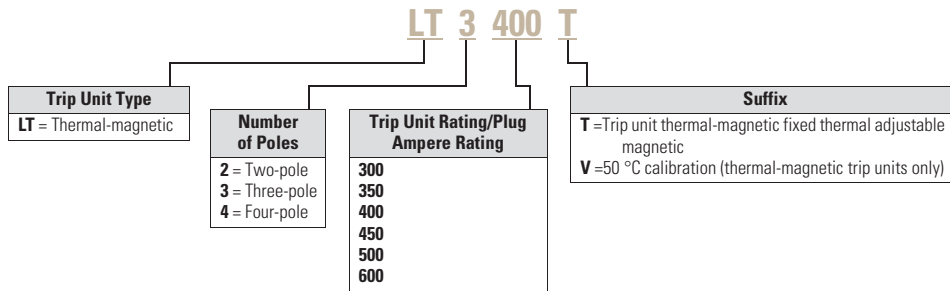
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

LD-Frame with Thermal-Magnetic Trip Unit Technology

Thermal-Magnetic Breakers and Frame ①



Thermal-Magnetic Trip Unit ①

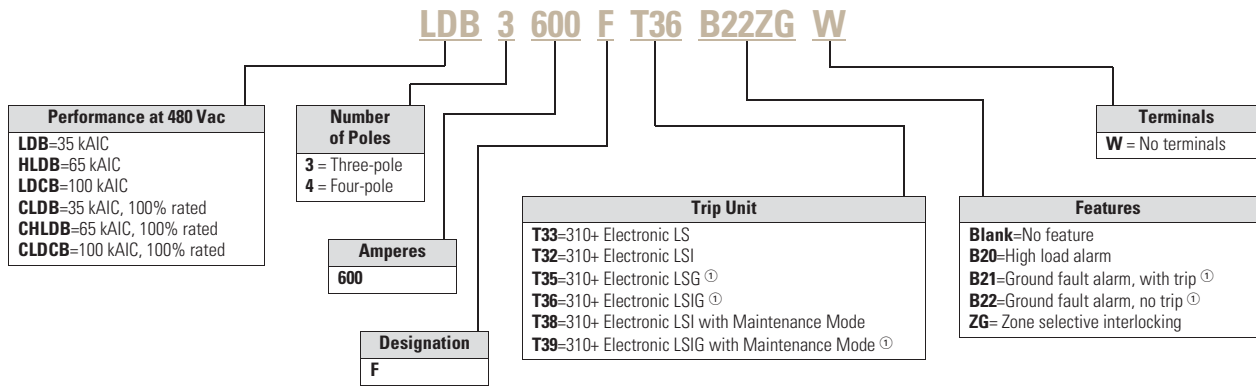


Note

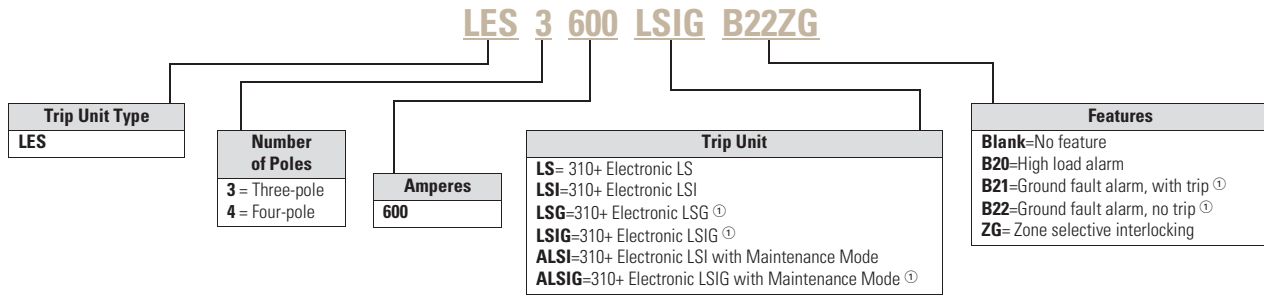
① Frames are the same for thermal-magnetic or 310+ electronic trip units, e.g., **LD3600F**, **HLD3600F**, etc.

LD-Frame with 310+ Electronic Trip Unit Technology

310+ Circuit Breakers

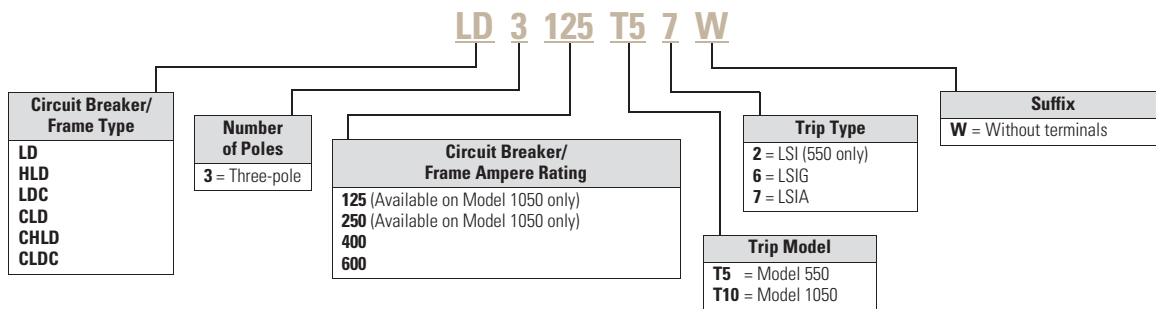


310+ Electronic Trip Units ②



LD-Frame with OPTIM Electronic Trip Unit Technology

OPTIM Circuit Breakers



Notes

- ① Not available in four-pole configurations.
- ② Frames are the same for thermal-magnetic or 310+ electronic trip units, e.g., LD3600F, HLD3600F, etc.

Product Selection

2

Types LD, HLD and LDC Thermal-Magnetic Circuit Breakers with Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40 °C ①	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac	Thermal-Magnetic Trip Unit Only	Standard Terminals Only
	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	For Use with Standard or High or Ultra High Interrupting Frames Catalog Number	See Page V4-T2-333 for Optional Terminals Catalog Number
Two-Pole					
300	LD2300	HLD2300	LDC2300	LT2300T	TA602LD ②
350	LD2350	HLD2350	LDC2350	LT2350T	TA602LD ②
400	LD2400	HLD2400	LDC2400	LT2400T	TA602LD ②
450	LD2450	HLD2450	LDC2450	LT2450T	TA602LD ②
500	LD2500	HLD2500	LDC2500	LT2500T	TA602LD ②
600	LD2600	HLD2600	LDC2600	LT2600T	2TA603LDK ③
Three-Pole					
300	LD3300	HLD3300	LDC3300	LT3300T	TA602LD ②
350	LD3350	HLD3350	LDC3350	LT3350T	TA602LD ②
400	LD3400	HLD3400	LDC3400	LT3400T	TA602LD ②
450	LD3450	HLD3450	LDC3450	LT3450T	TA602LD ②
500	LD3500	HLD3500	LDC3500	LT3500T	TA602LD ②
600	LD3600	HLD3600	LDC3600	LT3600T	3TA603LDK ③
Four-Pole ④					
300	LD4300	HLD4300	LDC4300	LT4300T	TA602LD ②
350	LD4350	HLD4350	LDC4350	LT4350T	TA602LD ②
400	LD4400	HLD4400	LDC4400	LT4400T	TA602LD ②
450	LD4450	HLD4450	LDC4450	LT4450T	TA602LD ②
500	LD4500	HLD4500	LDC4500	LT4500T	TA602LD ②
600	LD4600	HLD4600	LDC4600	LT4600T	4TA603LDK ③

Types LD, HLD and LDC Thermal-Magnetic Circuit Breakers—Frame Only

Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac Catalog Number	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac Catalog Number	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac Catalog Number
Two-Pole		
LD2600F	HLD2600F	LDC2600F
Three-Pole		
LD3600F	HLD3600F	LDC3600F
Four-Pole		
LD4600F	HLD4600F	LDC4600F

Notes

- ① Magnetic trip range 5–10 times continuous ampere rating.
- ② Individually packed.
- ③ Terminal kits contain one terminal for each pole and one terminal cover.
- ④ Neutral is in right pole.

Types LD, HLD and LDC Electronic Circuit Breakers with Interchangeable Trip Units

Order as individual components: breaker frame, trip unit and terminals. See 310+ adjustability specifications on **Page V4-T2-312**.

Types LD, HLD and LDC Electronic Circuit Breakers with Interchangeable 310+ Trip Units

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only			Digitrip RMS 310+ Trip Unit Only ①				Neutral CT for LSG and LSI ^{②③}	Terminal Information
	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac	Standard LS	Optional LSI	LSG	LSIG		
	Adjustable Short Time Pickup with I ² t Short Delay Ramp	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Adjustable Short Time Pickup with I ² t Short Delay	Independently Adjustable Short Time Pickup and Ground Fault Protection	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Ground Fault Protection		
	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
Three-Pole									
600	LD3600F	HLD3600F	LDC3600F	LES3600LS	LES3600LSI	LES3600LSG	LES3600LSIG	LGFACT600	See Page V4-T2-310
Four-Pole ④									
600	LD4600F	HLD4600F	LDC4600F	LES4600LS	LES4600LSI	—	—	—	See Page V4-T2-310

Types LDB, HLDB and LDCB Electronic Circuit Breakers with Non-Interchangeable 310+ Electronic Trip Units Suitable for Reverse Feed

See 310+ adjustability specifications on **Page V4-T2-312**.

Circuit Breaker Frame Including Digitrip RMS 310+ Electronic Trip Unit Less Terminals
Types LDB, HLDB and LDCB with Digitrip 310+ Non-Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40 °C	Number of Poles	Factory Assembled Circuit Breaker Consisting of Frame and Trip Unit Less Terminals ①				Neutral CT for LSG and LSI ^{②③}	Terminal Information
		Standard LS	Optional LSI	LSG	LSIG		
		Adjustable Short Time Pickup with I ² t Short Delay Ramp	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 Ground Fault Protection		
		Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
600	3	LDB3600FT33W	LDB3600FT32W	LDB3600FT35W	LDB3600FT36W	LGFACT600	See Page V4-T2-310
600	3	HLDB3600FT33W	HLDB3600FT32W	HLDB3600FT35W	HLDB3600FT36W		
600	3	LDCB3600FT33W	LDCB3600FT32W	LDCB3600FT35W	LDCB3600FT36W		

100% Rated Types CLD, CHLD and CLDC Electronic Circuit Breakers with 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. All 100% rated circuit breakers have electronic trip units. Order as individual components: breaker frame, trip unit and terminals. See 310+ adjustability specifications on **Page V4-T2-312**.

100% Rated Types CLD, CHLD and CLDC Electronic Circuit Breakers with 310+ Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only			Digitrip RMS 310+ Trip Unit Only				Neutral CT for LSG and LSI ^{②③}	Terminal Information
	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac	Standard LS	Optional LSI	LSG	LSIG		
	Adjustable Short Time Pickup with I ² t Short Delay Ramp	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Adjustable Short Time Pickup with I ² t Short Delay	Independently Adjustable Short Time Pickup and Ground Fault Protection	Adjustable Short Time Pickup with I ² t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Ground Fault Protection		
	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
Three-Pole									
600	CLD3600F	CHLD3600F	CLDC3600F	LES3600LS	LES3600LSI	LES3600LSG	LES3600LSIG	LGFACT600	See Page V4-T2-310

Notes

- ① For AC use only.
- ② Required for four-wire systems if neutral protection is desired.
- ③ Included with LSG and LSI trip units.
- ④ Neutral is in right pole.

Type LDB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units ^①

Maximum Continuous Ampere Rating	600 Vac Rated, 250 Vdc Complete Circuit Breaker	
	Without Line and Load Terminals Catalog Number	With Standard Line and Load Terminals Only Catalog Number
Two-Pole		
300	LDB2300W	LDB2300
350	LDB2350W	LDB2350
400	LDB2400W	LDB2400
450	LDB2450W	LDB2450
500	LDB2500W	LDB2500
600	LDB2600W	LDB2600
Three-Pole		
300	LDB3300W	LDB3300
350	LDB3350W	LDB3350
400	LDB3400W	LDB3400
450	LDB3450W	LDB3450
500	LDB3500W	LDB3500
600	LDB3600W	LDB3600

Molded Case Switches

Eaton's molded case switches are used as compact switches in applications requiring high current switching capabilities. Molded case switches are constructed of circuit breaker

components and are of the high instantaneous automatic type. Molded case switches are listed in accordance with Underwriters Laboratories Standard UL 489.

Molded Case Switches

Maximum Continuous Ampere Rating at 40 °C	600 Vac Maximum, 250 Vdc Circuit Breaker Only without Line and Load Terminals	
	Catalog Number	Standard Terminals Only See Page V4-T2-333 for Optional Terminals Catalog Number
Two-Pole		
600	LD2600WK	2TA603LDK
600	LDB2600WK ^①	2TA603LDK
600	HLD2600WK	2TA603LDK
Three-Pole		
600	LD3600WK	3TA603LDK
600	LDB3600WK ^①	3TA603LDK
600	HLD3600WK	3TA603LDK
Four-Pole		
600	LD4600WK	4TA603LDK
600	LDB4600WK ^①	4TA603LDK
600	HLD4600WK	4TA603LDK

Notes

^① Factory sealed—suitable for reverse feed application.

Molded case switch will trip above 6000 amperes.

Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

Digitrip OPTIM 550 Electronic Circuit Breaker with Interchangeable Rating Plug

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
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac					
125	LD3125T52W	LD3125T56W	LD3125T57W	—	ORPL125A070
				—	ORPL125A090
				—	ORPL125A100
				—	ORPL125A110
				—	ORPL125A125
250	LD3250T52W	LD3250T56W	LD3250T57W	—	ORPL025A125
				—	ORPL025A150
				—	ORPL025A175
				—	ORPL025A200
				—	ORPL025A225
400	LD3400T52W	LD3400T56W	LD3400T57W	200	ORPL40A200
				225	ORPL40A225
				250	ORPL40A250
				300	ORPL40A300
				350	ORPL40A350
600	LD3600T52W	LD3600T56W	LD3600T57W	400	ORPL40A400
				300	ORPL60A300
				350	ORPL60A350
				400	ORPL60A400
				500	ORPL60A500
600	ORPL60A600				

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 Breaker with Interchangeable Rating Plug, 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 (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response) OPTIM 550 ^②				
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
125	HLD3125T52W	HLD3125T56W	HLD3125T57W	70	ORPL125A070
				90	ORPL125A090
				100	ORPL125A100
				110	ORPL125A110
				125	ORPL125A125
250	HLD3250T52W	HLD3250T56W	HLD3250T57W	125	ORPL025A125
				150	ORPL025A150
				175	ORPL025A175
				200	ORPL025A200
				225	ORPL025A225
400	HLD3400T52W	HLD3400T56W	HLD3400T57W	250	ORPL025A250
				200	ORPL40A200
				225	ORPL40A225
				250	ORPL40A250
				300	ORPL40A300
600	HLD3600T52W	HLD3600T56W	HLD3600T57W	350	ORPL40A350
				400	ORPL40A400
				300	ORPL60A300
				350	ORPL60A350
				400	ORPL60A400
				500	ORPL60A500
				600	ORPL60A600

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.

Digitrip OPTIM 550 Electronic Circuit Breaker with Interchangeable Rating Plug, 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_t) 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 (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)				
	OPTIM 550 ^②				
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac					
125	LDC3125T52W	LDC3125T56W	LDC3125T57W	—	ORPL125A070
				—	ORPL125A090
				—	ORPL125A100
				—	ORPL125A110
				—	ORPL125A125
250	LDC3250T52W	LDC3250T56W	LDC3250T57W	—	ORPL025A125
				—	ORPL025A150
				—	ORPL025A175
				—	ORPL025A200
				—	ORPL025A225
400	LDC3400T52W	LDC3400T56W	LDC3400T57W	200	ORPL40A200
				225	ORPL40A225
				250	ORPL40A250
				300	ORPL40A300
				350	ORPL40A350
600	LDC3600T52W	LDC3600T56W	LDC3600T57W	400	ORPL40A400
				300	ORPL60A300
				350	ORPL60A350
				400	ORPL60A400
				500	ORPL60A500
				600	ORPL60A600

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.

Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

2

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug

Circuit Breaker Frame Only

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 (I^2t or Flat Response)

A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (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 35 kAIC at 480 Vac

Maximum Continuous Ampere Rating at 40 °C	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
125	LD3125T106W	LD3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	LD3250T106W	LD3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
			250	ORPL025A250
400	LD3400T106W	LD3400T107W	200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
			350	ORPL40A350
			400	ORPL40A400
			600	ORPL60A600
600	LD3600T106W	LD3600T107W	300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
			500	ORPL60A500
			600	ORPL60A600

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 alarm switch supplied with breaker as standard.

③ Factory sealed.

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, 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
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
125	HLD3125T106W	HLD3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	HLD3250T106W	HLD3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
400	HLD3400T106W	HLD3400T107W	250	ORPL025A250
			200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
600	HLD3600T106W	HLD3600T107W	350	ORPL40A350
			400	ORPL40A400
			300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
			500	ORPL60A500
			600	ORPL60A600

Notes

- ① Long delay I⁴t response selection limits short delay time to flat response.
 ② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
 ③ Factory sealed.

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, 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
	OPTIM 1050 ^{②③} 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 (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac				
125	LDC3125T106W	LDC3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	LDC3250T106W	LDC3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
400	LDC3400T106W	LDC3400T107W	250	ORPL025A250
			200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
600	LDC3600T106W	LDC3600T107W	350	ORPL40A350
			400	ORPL40A400
			300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
			500	ORPL60A500
			600	ORPL60A600

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 alarm switch supplied with breaker as standard.
- ③ Factory sealed.

100% Rated Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plug**Circuit Breaker Frame Only****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 (I^2t or Flat Response)**A** – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

OPTIM 550 ②

Digitrip OPTIM Rating Plug Only

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
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac					
125	CLD3125T52W	CLD3125T56W	CLD3125T57W	70	ORPL125A070
				90	ORPL125A090
				100	ORPL125A100
				110	ORPL125A110
				125	ORPL125A125
250	CLD3250T52W	CLD3250T56W	CLD3250T57W	125	ORPL025A125
				150	ORPL025A150
				175	ORPL025A175
				200	ORPL025A200
				225	ORPL025A225
				250	ORPL025A250
400	CLD3400T52W	CLD3400T56W	CLD3400T57W	200	ORPL40A200
				225	ORPL40A225
				250	ORPL40A250
				300	ORPL40A300
				350	ORPL40A350
				400	ORPL40A400
600	CLD3600T52W	CLD3600T56W	CLD3600T57W	300	ORPL60A300
				350	ORPL60A350
				400	ORPL60A400
				500	ORPL60A500
				600	ORPL60A600

Notes① 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.

2.4

Molded Case Circuit Breakers

Series C

2

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plug, 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 (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response) OPTIM 550 ^②				
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
125	CHLD3125T52W	CHLD3125T56W	CHLD3125T57W	70	ORPL125A070
				90	ORPL125A090
				100	ORPL125A100
				110	ORPL125A125
				125	ORPL125A125
250	CHLD3250T52W	CHLD3250T56W	CHLD3250T57W	125	ORPL025A125
				150	ORPL025A150
				175	ORPL025A175
				200	ORPL025A200
				225	ORPL025A225
400	CHLD3400T52W	CHLD3400T56W	CHLD3400T57W	200	ORPL40A200
				225	ORPL40A225
				250	ORPL40A250
				350	ORPL40A350
				400	ORPL40A400
600	CHLD3600T52W	CHLD3600T56W	CHLD3600T57W	300	ORPL60A300
				350	ORPL60A350
				400	ORPL60A400
				500	ORPL60A500
				600	ORPL60A600

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.

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

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 (I^2t or Flat Response)A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (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
NumberAmpere
Rating

Fixed Rating Plug

Catalog
Number

Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac

Maximum Continuous Ampere Rating at 40 °C	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
125	CLD3125T106W	CLD3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	CLD3250T106W	CLD3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
400	CLD3400T106W	CLD3400T107W	250	ORPL025A250
			200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
600	CLD3600T106W	CLD3600T107W	350	ORPL40A350
			400	ORPL40A400
			300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
600	CLD3600T106W	CLD3600T107W	400	ORPL60A400
			500	ORPL60A500
			600	ORPL60A600

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 alarm switch supplied with breaker as standard.

③ Factory sealed.

100% Rated Digitrip OPTIM 1050 Circuit Breakers with Interchangeable Rating Plug, 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
	OPTIM 1050 ^{②③}			
	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 (I^2t or Flat Response)			
	A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
125	CHLD3125T106W	CHLD3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	CHLD3250T106W	CHLD3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
			250	ORPL025A250
400	CHLD3400T106W	CHLD3400T107W	200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
			350	ORPL40A350
			400	ORPL40A400
600	CHLD3600T106W	CHLD3600T107W	300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
			500	ORPL60A500
			600	ORPL60A600

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 alarm switch supplied with breaker as standard.
 ③ Factory sealed.

100% Rated Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, 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
OPTIM 1050 ^{②③}				
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac				
125	CLDC3125T106W	CLDC3125T107W	70	ORPL125A070
			90	ORPL125A090
			100	ORPL125A100
			110	ORPL125A110
			125	ORPL125A125
250	CLDC3250T106W	CLDC3250T107W	125	ORPL025A125
			150	ORPL025A150
			175	ORPL025A175
			200	ORPL025A200
			225	ORPL025A225
			250	ORPL025A250
400	CLDC3400T106W	CLDC3400T107W	200	ORPL40A200
			225	ORPL40A225
			250	ORPL40A250
			300	ORPL40A300
			350	ORPL40A350
			400	ORPL40A400
600	CLDC3600T106W	CLDC3600T107W	300	ORPL60A300
			350	ORPL60A350
			400	ORPL60A400
			500	ORPL60A500
			500	ORPL60A500
			600	ORPL60A600

Notes

- ① Long delay I⁴t response selection limits short delay time to flat response.
- ② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
- ③ Factory sealed.

Accessories Selection Guide and Ordering Information

Line and Load Terminals

Eaton’s line and load terminals provide wire connecting capabilities for specific ranges of continuous current ratings and wire types. All terminals comply with Underwriters Laboratories Standards UL 486A and UL 486B and CSA Standard C22.2 No. 65M. Unless otherwise specified,

L-Frame circuit breaker line and load terminals are shipped separately for field installation.

The wire connecting terminal is secured with two pan-head, slotted screws and lockwashers that can be checked for the correct torque loading or retightened from the front of the circuit

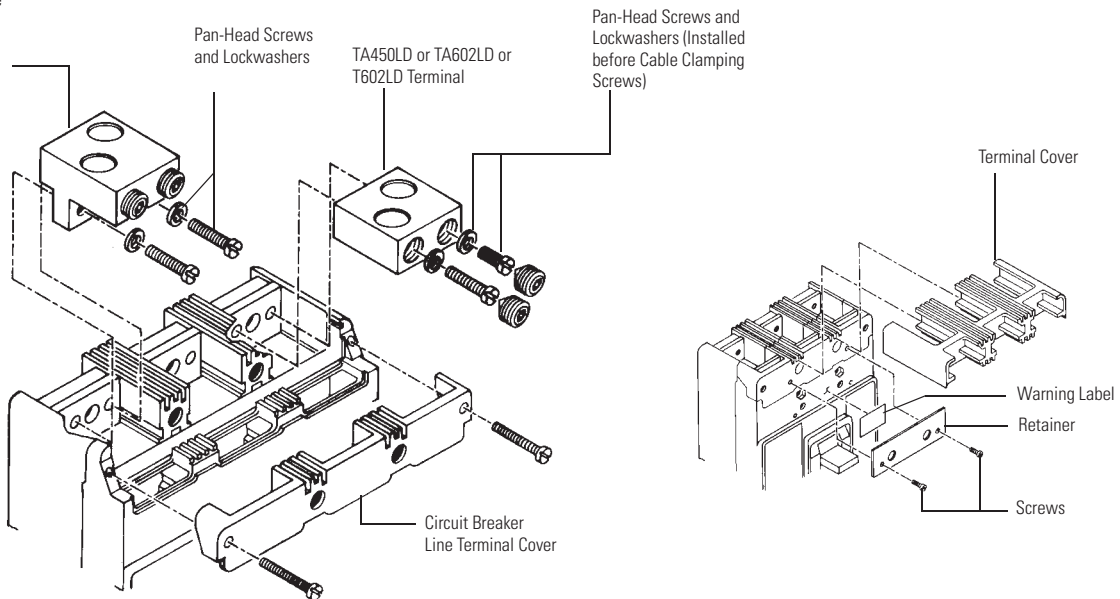
breaker before installation of the conductors. (Applies to all styles.) The circuit breaker line/load terminal conductors are positioned in the conducting holes in the wire connecting terminal and are secured with recessed socket screws that are tightened to the correct torque loading from the front of the circuit breaker.

Ordering Information

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

Terminals

TA401LD or TA603LD Terminal (Step-Type Terminal Requires Terminal Cover and Warning Label. See Inset.)



Line and Load Terminals

Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/Number of Conductors	Metric Wire Range mm ²	Terminal Poles	Catalog Number	Terminals with Control Wire Termination Catalog Number
Standard Cu/Al Pressure Terminals							
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Two-pole kit ①	2TA401LDK	—
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Three-pole kit ①	3TA401LDK	—
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Four-pole kit ①	4TA401LDK	—
450	Aluminum	Cu/Al	4–4/0 (2)	25–95	②	TA450LD	—
500	Aluminum	Cu/Al	3/0–350 (2)	95–150	②	TA602LD	TA602LDCW
600	Aluminum	Cu/Al	400–500 (2)	185–240	Two-pole kit ①	2TA603LDK	2TA603LDKCW
600	Aluminum	Cu/Al	400–500 (2)	185–240	Three-pole kit ①	3TA603LDK	3TA603LDKCW
600	Aluminum	Cu/Al	400–500 (2)	185–240	Four-pole kit ①	4TA603LDK	4TA603LDKCW
Optional Copper and Cu/Al Pressure Type Terminals							
600	Copper	Cu	250–350 (2)	120–250	②	T602LD	T602LDCW

Notes

- ① Terminal kits contain one terminal for each pole and one terminal cover.
- ② Individually packed.

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.

LD Frame Accessories

Description	Reference Page	Two-Pole ^① , Three-Pole			Four-Pole			Neutral ^②
		Left	Center	Right	Left	Center	Right	
Internal Accessories (Only One Internal Accessory Per Pole) ^③								
Alarm lockout (Make/Break)	V4-T2-406	■	—	■	■	—	■	—
Alarm lockout (2Make/2Break)	V4-T2-406	■	—	■	■	—	■	—
Auxiliary switch (1A, 1B)	V4-T2-408	■	—	■	■	—	■	—
Auxiliary switch (2A, 2B)	V4-T2-408	■	—	■	■	—	■	—
Auxiliary switch (3A, 3B)	V4-T2-408	■	—	■	■	—	■	—
Auxiliary switch (1A, 1B) and alarm switch combination	V4-T2-410	■	—	■	■	—	■	—
Auxiliary switch (2A, 2B) and alarm switch combination	V4-T2-410	■	—	■	■	—	■	—
Shunt trip—standard ^④	V4-T2-412	■	—	■	■	—	■	—
Shunt trip—low energy ^④	V4-T2-415	■	—	■	■	—	■	—
Undervoltage release mechanism ^④	V4-T2-421	■	—	■	■	—	■	—
Eaton PowerNet communications kit (OPTIM 550)	V4-T2-423	—	—	■	—	—	—	—
External Accessories								
End cap kit	V4-T2-440	●	●	●	●	●	●	●
Control wire terminal kit	V4-T2-441	●	●	●	●	●	●	●
Base mounting hardware	V4-T2-443	●	●	●	●	●	●	●
Terminal shields	V4-T2-445	●	●	●	●	●	●	●
Interphase barriers	V4-T2-445	●	●	●	●	●	●	●
Non-padlockable handle block	V4-T2-446	—	■	—	—	■	—	—
Padlockable handle lock hasp	V4-T2-447	□	—	□	□	—	□	—
Key interlock kit	V4-T2-448	□	—	□	□	—	□	—
Sliding bar interlock—requires two breakers	V4-T2-449	●	●	●	—	—	—	—
Walking beam interlock—requires two breakers	V4-T2-449	●	●	●	●	●	●	●
Electrical (motor) operator	V4-T2-450	●	●	●	●	●	●	●
Plug-in adapters	V4-T2-452	●	●	●	●	●	●	●
Rear connecting studs	V4-T2-453	●	●	●	●	●	●	●
Panelboard connecting straps	V4-T2-454	●	●	●	●	●	●	●
Handle mechanisms	V4-T2-534	●	●	●	●	●	●	●
Handle extension	V4-T2-546	●	●	●	●	●	●	●
Solid-state (electronic) portable test kit	V4-T2-456	●	●	●	●	●	●	●

Legend

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

Notes

- ① Two-pole breaker supplied in three-pole frame. Current carrying parts omitted from center pole.
- ② Refer to Eaton for appropriate neutral pole accessory combinations.
- ③ OPTIM model 1050 is factory sealed and does not have the right pole space available for accessories.
- ④ Shunt trip and UVR cannot be mounted in right poles on LES or OPTIM trip units. Standard non-tripping internal accessories can be mounted in the left or right poles of LES and 550 OPTIM trip units.

LD Frame Accessories, continued

Description	Reference Page	Two-Pole ^① , Three-Pole			Four-Pole			Neutral ^②
		Left	Center	Right	Left	Center	Right	
OPTIM System Components Three Poles								
Ground fault alarm unit	V4-T2-456	—	—	—	—	—	—	—
Potential transformer module	V4-T2-456	—	—	—	—	—	—	—
Breaker interface module (BIM)	V4-T2-457	—	—	—	—	—	—	—
Digitrip OPTIMizer	V4-T2-457	—	—	—	—	—	—	—
Auxiliary power module	V4-T2-457	—	—	—	—	—	—	—
Modifications (Refer to Eaton)								
Special calibration	—	●	●	●	●	●	●	●
Moisture fungus treatment	V4-T2-246	●	●	●	●	●	●	●
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

310+ Electronic Trip Unit Accessories

Description	Catalog Number
Electronic portable test kit	MTST230V ^③
Trip unit tamper protection wire seal	5108A03H01
External neutral sensor	LGFACT600 ^④
Breaker-mount cause-of-trip indication	TRIP-LED
Breaker-mount ammeter module	DIGIVIEW
Remote-mount ammeter module	DIGIVIEWR06 ^⑤

Notes

- ① Two-pole breaker supplied in three-pole frame. Current carrying parts omitted from center pole.
- ② Refer to Eaton for appropriate neutral pole accessory combinations.
- ③ MTST230V applies to 100–230 Vac.
- ④ Included with all LD LSG and LSG trip units and breakers.
- ⑤ Includes 6 ft cable for remote mounting; NEMA 3R rated.

Technical Data and Specifications

2

UL 489 Interrupting Capacity Ratings ^①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA rms Symmetrical Amperes)					
		Volts AC (50/60 Hz)				Volts DC	
		240	277	480	600	125	250 ^{②③}
LDB	2, 3	65	—	35	25	—	22
LD	2, 3, 4	65	—	35	25	—	22
CLD ^④	2, 3, 4	65	—	35	25	—	—
HLD, HLDB	2, 3, 4	100	—	65	35	—	25
CHLD ^④	2, 3, 4	100	—	65	35	—	—
LDC, LDCB ^⑤	2, 3, 4	200	—	100	50	—	30
CLDC ^{④⑤}	2, 3, 4	200	—	100	50	—	—

IEC 947-2 Interrupting Capacity Ratings ^①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)							
		Volts AC (50/60 Hz)				Volts DC			
		240		415		690		250 ^{②③}	
		I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}
LDB	2, 3	85	85	45	45	20	10	20	10
LD	2, 3, 4	85	85	45	45	20	10	20	10
CLD ^④	2, 3, 4	85	85	45	45	20	10	—	—
HLD, HLDB	2, 3, 4	100	100	70	70	25	13	20	10
CHLD ^④	2, 3, 4	100	100	70	70	25	13	—	—
LDC, LDCB	2, 3, 4	200	100	100	75	35	18	20	10
CLDC ^④	2, 3, 4	200	100	100	75	35	18	—	—

UL 489 Current Limiting Data

Frame	Circuit	I_p (kA)	I^2T ($10^6 A^2S$)
LDC	240 V/200 kA	64.80	6.80
LDC	480 V/100 kA	66.90	9.33
LDC	600 V/50 kA	54.30	8.92

Notes

- ① Utilization Category A circuit breakers.
- ② L/R = 8 milliseconds minimum.
- ③ Two-pole circuit breaker or two poles of three-pole circuit breaker. Incorporating thermal-magnetic trip unit only.
- ④ 100% rated breakers.
- ⑤ Current limiting.

310+ Specifications

Description	Specification
Trip Unit Type	Digitrip RMS 310+
Breaker Type	
Frame designation	LD
Frames available	600 A
Continuous current range (A)	250–600 A
Ground fault pickup (A)	120–600 A
Interrupting capacities at 480 Vac (kAIC)	35, 65, 100
100% rated	Yes
Protection	
Ordering options	LS, LSI, LSG, LSIG, ALSI, ALSIG
Arcflash Reduction Maintenance System (or Maintenance Mode)	Remote enabled on ALSI, ALSIG
Interchangeable trip unit	Yes
High load alarm (suffix B20) ①	Yes
Ground fault alarm with trip (suffix B21) ①	LSG, LSIG, ALSIG
Ground fault alarm, no trip (suffix B22) ①	LSG, LSIG, ALSIG
Zone selective interlocking (suffix ZG)	LSI, LSIG, ALSI, ALSIG
Cause of trip indication	Yes (via TRIP-LED or DIGIVIEW)
Thru-cover accessories	No

310+ Adjustability Specifications

Description	LD Frame Specification	
310+ settings	600 A	
I_r = continuous current or long delay pickup (amperes) (All 310+)	I_r	
	A	250
	B	300
	C	315
	D	350
	E	400
	F	450
	G	500
	H (= I_n)	600
t_r = long delay time (seconds) (All 310+)		
	2	2
	4	4
	7	7
	10	10
	12	12
	15	15
	20	20
	24	24
I_{sd} (x I_r) = short delay pickup (All 310+)		
	Position 1	2x
	Position 2	3x
	Position 3	4x
	Position 4	5x
	Position 5	6x
	Position 6	7x
	Position 7	8x
	Position 8	8x
	Position 9	8x
t_{sd} = short delay time I^2t (milliseconds) (LS and LSG)	Fixed	67 @10x
t_{sd} = short delay time flat (milliseconds) (LSI, LSIG, ALSI, ALSIG)		
	Position 1	Inst
	Position 2	120
	Position 3	300
I_g (x I_n) = ground fault pickup (amperes) (LSG, LSIG, ALSIG)		
	Position 1	120
	Position 2	180
	Position 3	240
	Position 4	360
	Position 5	480
	Position 6	600
t_g = ground fault delay time (milliseconds) (LSG, LSIG, ALSIG)		
	Position 1	Inst
	Position 2	120
	Position 3	300
Independently adjustable Instantaneous (Ii) setting	②	
Maintenance Mode pickup (2.5 x I_n) (amperes) (310+ with Maintenance Mode—ALSI and ALSIG)	Fixed	1500

Notes

- ① B2x suffixes cannot be combined with B2x suffixes.
 ② Not available for LD. Independently adjustable Ii setting available in LG, NG, and RG ALSI and ALSIG trip units.

Digitrip OPTIM Specifications

Trip Unit Type	Digitrip OPTIM 550	Digitrip OPTIM 1050
rms sensing	Yes	Yes
Breaker Type		
Frame	L	L
Ampere range	200–600 A	200–600 A
Interrupting rating at 480 volts	35, 65, 100 (kA)	35, 65, 100 (kA)
Protection		
Ordering options	LSI, LSI(A), LSIG	LSI(A), LSIG
Fixed rated plug (I_n)	Yes	Yes
Overtemperature trip	Yes	Yes
Long Delay Protection (L)		
Adjustable rating plug (I_n)	No	No
Long delay pickup	0.4–1.0 x (I_n)	0.4–1.0 x (I_n)
Long delay time I^2t	2–24 seconds	2–24 seconds
Long delay time I^4t	1–5 seconds	1–5 seconds
Long delay thermal memory	Yes	Yes
High load alarm	0.5–1.0 x I_r	0.5–1.0 x I_r
Short Delay Protection (S)		
Short delay pickup	150–800% x (I_r)	150–800% x (I_r)
Short delay time I^2t	100–500 ms	100–500 ms
Short delay time flat	100–500 ms	100–500 ms
Short delay time zone selective interlocking	Yes ^①	Yes
Instantaneous Protection (I)		
Instantaneous pickup	200–800% x (I_n)	200–800% x (I_n)
Discriminator	Yes	Yes
Instantaneous override	Yes	Yes
Ground Fault Protection (G)		
Ground fault alarm	20–100% x (I_g)	20–100% x (I_g)
Ground fault pickup	20–100% x (I_g)	20–100% x (I_g)
Ground fault delay I^2t	100–500 ms	100–500 ms
Ground fault delay flat	100–500 ms	100–500 ms
Ground fault zone selective interlocking	Yes ^①	Yes
Ground fault thermal memory	Yes	Yes

Legend

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

Note

① Zone interlock kit.

Digitrip OPTIM Specifications, continued

Trip Unit Type	Digitrip OPTIM 550	Digitrip OPTIM 1050
System Diagnostics		
Status LEDs	Yes	Yes
Cause of trip LEDs	Yes	Yes
Magnitude of trip information	Yes	Yes
Remote signal contact—ground alarm	Yes ①	Yes
Local auxiliary and bell alarm contact	Optional	Included
System Monitoring		
Digital display	Yes ②	Yes ②
Current	Yes	Yes
Power and energy	No	Yes
Power quality—harmonics	No	Yes
Power factor	No	Yes
Communications		
PowerNet	Yes ③	Yes
Testing		
Testing method	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 Zone interlock kit.
 ② By OPTIMizer/BIM.
 ③ Eaton's PowerNet kit.

2.4

Molded Case Circuit Breakers

Series C

Dimensions and Weights

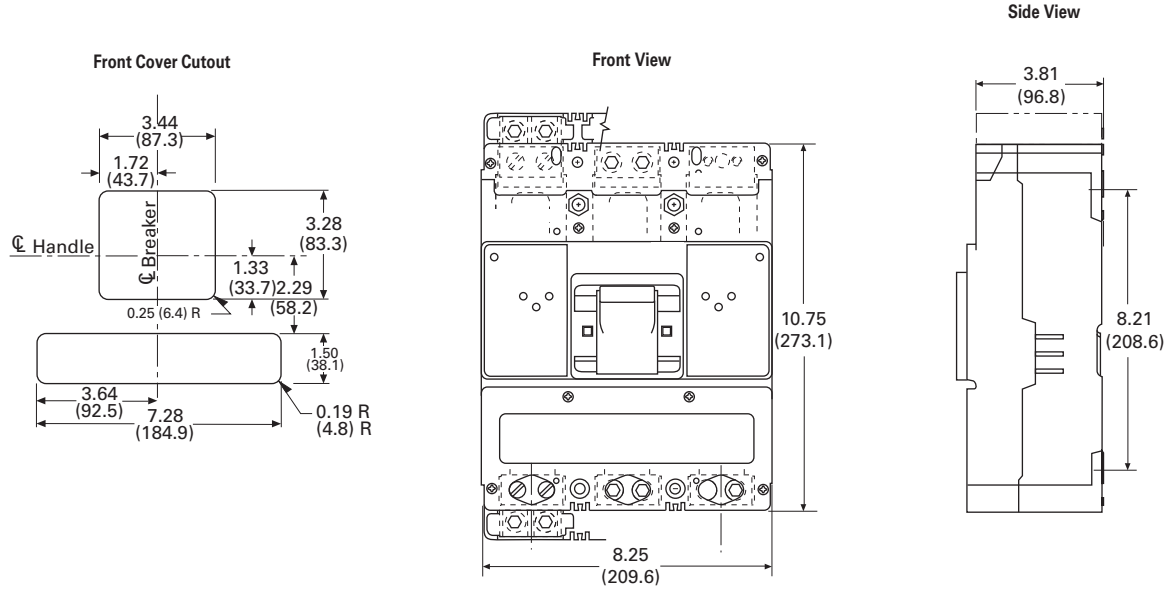
Dimensions in Inches (mm)

2

LD Frame

Number of Poles	Width	Height	Depth
2, 3	8.25 (209.6)	10.75 (273.1)	4.06 (103.1)
4	11.00 (279.4)	10.75 (273.1)	4.06 (103.1)

LD-Frame, Two- and Three-Pole



Approximate Shipping Weight, Lbs (kg)

LD Frame

Breaker Type	Complete Breaker			Frame Only			Trip Unit		
	Two-Pole	Three-Pole	Four-Pole	Two-Pole	Three-Pole	Four-Pole	Two-Pole	Three-Pole	Four-Pole
LD, HLD, LDC	18 (8.2)	20 (9.1)	25 (11.3)	14 (6.4)	15 (6.8)	20 (9.1)	3 (1.4)	4 (1.8)	5 (2.3)
LDB	18 (8.2)	20 (9.1)	25 (11.3)	—	—	—	—	—	—