

L-Frame



Typical L-Frame Circuit Breaker

Product Description

- All 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. OPTIM circuit breakers are available as factory assembled only.
- L-frame circuit breakers are suitable for reverse feed use.

Technical Data and Specifications

CSA C22.2 No. 5 and UL489 Interrupting Capacity Ratings ①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (RMS Symmetrical Amperes) (kA)						Section Page Number
		Volts Ac (50/60 Hz)					Volts Dc	
		240	277	480	600	125		
LD	2, 3, 4	65	—	35	25	—	22	L-4,5,7
CLD ④	2, 3, 4	65	—	35	25	—	—	L-5,9
HLD	2, 3, 4	100	—	65	35	—	25	L-4,5,7
CHLD ④	2, 3, 4	100	—	65	35	—	—	L-5,9
LDC ⑤	2, 3, 4	200	—	100	50	—	30	L-4,5,8
CLDC ④⑤	2, 3, 4	200	—	100	50	—	—	L-5,10

IEC 947-2 Interrupting Capacity Ratings ①

Circuit Breaker Type	Number of Poles		Interrupting Capacity (Symmetrical Amperes) (kA)				Section Page Number
			Volts Ac (50/60 Hz)			Volts Dc	
			240	415	690		
LD	2, 3, 4	I_{cu} I_{cs}	85 85	45 45	20 10	20 10	L-4,5,7
CLD ④	2, 3, 4	I_{cu} I_{cs}	85 85	45 45	20 10	— —	L-5,9
HLD	2, 3, 4	I_{cu} I_{cs}	100 100	70 70	25 13	20 10	L-4,5,7
CHLD ④	2, 3, 4	I_{cu} I_{cs}	100 100	70 70	25 13	— —	L-5,9
LDC	2, 3, 4	I_{cu} I_{cs}	200 100	100 75	35 18	20 10	L-4,5,8
CLDC ④	2, 3, 4	I_{cu} I_{cs}	200 100	100 75	35 18	— —	L-5,10

① Utilization category A circuit breakers.

② L/R = 8 milliseconds minimum.

③ 2-pole circuit breaker or two poles of 3-pole circuit breaker. Incorporating Thermal-Magnetic trip unit only.

④ 100% rated breakers.

⑤ Current limiting.

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L-Frame Digitrip Specifications

Trip Unit Type	Digitrip RMS 310	Digitrip OPTIM 550	Digitrip OPTIM 1050	
RMS Sensing	Yes	Yes	Yes	
Breaker Type				
Frame	L	L	L	
Ampere Range	300-600A	200-600A	70-600A	
Interrupting Rating @ 600V	25, 35, 50 (kA)	25, 35, 50 (kA)	25, 35, 50 (kA)	
Protection				
Ordering Options	LS, LSG	LSI, LSIG	LSI, LSI(A), LSIG	LSI(A), LSIG
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	0.5-1.0 x I_r	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 ^④	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	1-5 x 1g (120A)	1-5 x 1g (120A)	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 ^④	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 ^⑤	Yes ^⑤	Yes ^{④⑤}	Yes ^⑤
Local Auxiliary and Bell Alarm Contact	Optional	Optional	Optional	Included
System Monitoring				
Digital Display	No	No	Yes ^②	Yes ^②
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				
Cutler-Hammer PowerNet	No	No	Yes ^③	Yes
Testing				
Testing Method	Test Set	OPTIMizer, BIM, Cutler-Hammer PowerNet		

① Adjust by rating plug.

② By OPTIMizer/BIM.

③ Require C-H PowerNet kit.

④ Require Zone interlock kit.

⑤ With separate ground fault alarm unit (GFAU).

Legend:

BIM = Breaker Interface Module

(A) = GF Alarm

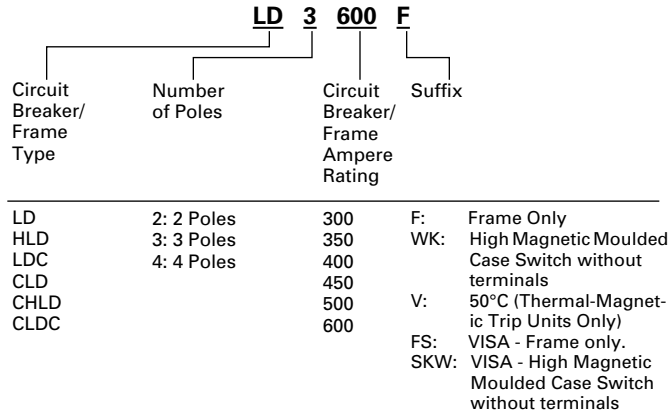
 I_s = Sensor Rating I_n = Rating Plug I_r = Long Delay Pickup Setting

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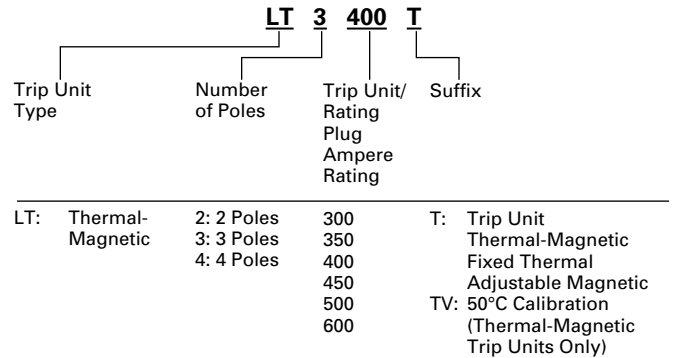
Catalogue Numbering System

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

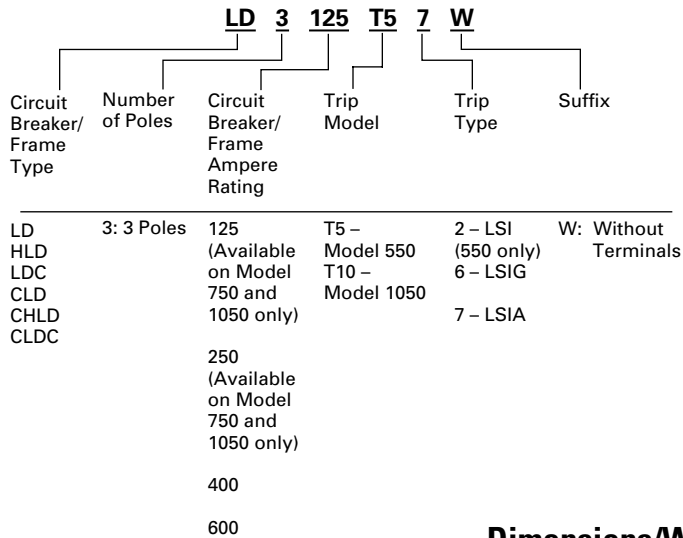
Circuit Breaker/Frame Catalogue Number



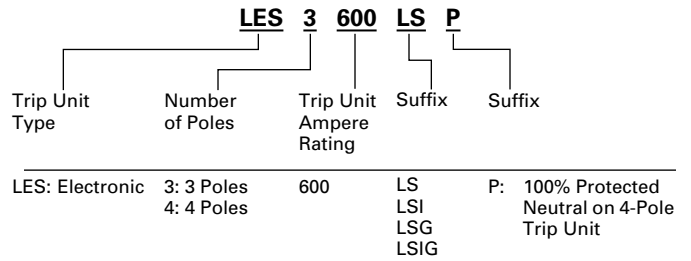
Thermal-Magnetic Trip Unit Catalogue Number



OPTIM Circuit Breaker/Frame Catalogue Number



Digitrip RMS 310 Trip Unit Catalogue Number



Dimensions/Weights

Dimensions, Inches (mm)

Number of Poles	Width	Height	Depth
2, 3	8.25 (210)	10.75 (274)	4.062 (103)
4	11 (279)	10.75 (274)	4.062 (103)

Approximate Shipping Weight, Lbs. (kg)

Breaker Type	Complete Breaker			Frame Only			Trip Unit		
	Number of Poles								
	2	3	4	2	3	4	2	3	4
LD, HLD, LDC	18 (8.172)	20 (9.080)	25 (11.340)	14 (6.356)	15 (6.810)	20 (9.072)	3 (1.361)	4 (1.814)	5 (2.268)

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Product Selection

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

Maximum Continuous Ampere Rating @ 40°C	Standard Interrupting Capacity 600 Vac Rated 25 kAIC @600 Vac		High Interrupting Capacity 600 Vac Rated 35 kAIC @ 600 Vac		Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 50 kAIC @ 600 Vac		Thermal Magnetic Trip Unit Only	Standard Terminals Only See Section Page Number L-11 for Optional Terminals
	Factory Assembled Circuit Breaker Consisting of Frame, Trip Unit, and Terminals	Frame Only ①	Factory Assembled Circuit Breaker Consisting of Frame, Trip Unit, and Terminals	Frame Only ①	Factory Assembled Circuit Breaker Consisting of Frame, Trip Unit, and Terminals	Frame Only	For Use With: Standard or High or Ultra High Interrupting Frames	
							Magnetic Trip Range is 5-10 x Continuous Ampere Rating	
Catalogue Number								

2-Pole ②

300	LD2300	LD2600F	HLD2300	HLD2600F	LDC2300	LDC2600F	LT2300T	TA602LD ④
350	LD2350		HLD2350		LDC2350		LT2350T	TA602LD ④
400	LD2400		HLD2400		LDC2400		LT2400T	TA602LD ④
450	LD2450		HLD2450		LDC2450		LT2450T	TA602LD ④
500	LD2500		HLD2500		LDC2500		LT2500T	TA602LD ④
600	LD2600		HLD2600		LDC2600		LT2600T	2TA603LDK ⑤

3-Pole

300	LD3300	LD3600F	HLD3300	HLD3600F	LDC3300	LDC3600F	LT3300T	TA602LD ④
350	LD3350		HLD3350		LDC3350		LT3350T	TA602LD ④
400	LD3400		HLD3400		LDC3400		LT3400T	TA602LD ④
450	LD3450		HLD3450		LDC3450		LT3450T	TA602LD ④
500	LD3500		HLD3500		LDC3500		LT3500T	TA602LD ④
600	LD3600		HLD3600		LDC3600		LT3600T	3TA603LDK ⑤

4-Pole ③

300	LD4300	LD4600F	HLD4300	HLD4600F	LDC4300	LDC4600F	LT4300T	TA602LD ④
350	LD4350		HLD4350		LDC4350		LT4350T	TA602LD ④
400	LD4400		HLD4400		LDC4400		LT4400T	TA602LD ④
450	LD4450		HLD4450		LDC4450		LT4450T	TA602LD ④
500	LD4500		HLD4500		LDC4500		LT4500T	TA602LD ④
600	LD4600		HLD4600		LDC4600		LT4600T	4TA603LDK ⑤

Instruction Leaflet Number 29C105 for Breaker; 29C607 for Thermal Magnetic Trip Unit

- ① When a "VISA" frame is required, add suffix "S" to circuit breaker frame catalogue number. LD and HLD only.
- ② 2-pole circuit breaker supplied in 3-pole frame.
- ③ Neutral is in right pole.
- ④ Individually packed.
- ⑤ Terminal kits contain one terminal for each pole and one terminal cover.

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

Order as individual components: Breaker Frame, Trip Unit, Rating Plug, Terminals.

Maximum Continuous Ampere Rating @ 40°C ③	Circuit Breaker Frame Only ①			Digitrip RMS 310 Trip Unit Only ②				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only See Section Page Number L-11 for Optional Terminals
	Standard Interrupting Capacity 600 Vac Rated 25 kAIC @ 600 Vac	High Interrupting Capacity 600 Vac Rated 35 kAIC @ 600 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 50 kAIC @ 600 Vac	L – Adjustable Long Delay Pickup (By Adjustable Rating Plug) S – Adjustable Short Delay Pickup with Fixed Short Delay Time (I ² t Response) or Adjustable Short Delay Time (Flat Response) I – Adjustable Instantaneous Pickup by Setting Short Delay Time to Instantaneous G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Delay (Flat Response)	Ampere Rating	Fixed Rating Plug	Adjustable Rating Plug Ampere Rating Catalogue Number	Standard	Options		
									Adjustable Short Delay Pickup with Fixed Short Delay Time (I ² t Response)	Independently Adjustable Short Delay Pickup and Short Delay Time (Flat Response)	
Catalogue Number											

3-Pole ④

600	LD3600F	HLD3600F	LDC3600F	LES3600LS	LES3600LSI	LES3600LSG	LES3600LSIG	300 350 400 450 500 600	6LES300T 6LES350T 6LES400T 6LES450T 6LES500T 6LES600T	300/400/500/600 A6LES600T1 420/440/460/480 A6LES400T5 520/540/560/580 A6LES500T5	TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ 3TA603LDK ⑦
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4-Pole ⑤

600	LD4600F	HLD4600F	LDC4600F	LES4600LS	LES4600LSI	–	–	300 350 400 450 500 600	6LES300T 6LES350T 6LES400T 6LES450T 6LES500T 6LES600T	300/400/500/600 A6LES600T1 420/440/460/480 A6LES400T5 520/540/560/580 A6LES500T5	TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ 4TA603LDK ⑦
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Instruction Leaflet Number 29C105 for Breaker; 29C615 for LES Trip Unit

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

The CEC 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, Rating Plug and Terminals.

Maximum Continuous Ampere Rating @ 40°C ③	Circuit Breaker Frame Only ①			Digitrip RMS 310 Trip Unit Only ②				Digitrip RMS 310 Rating Plug Only			Standard Terminals Only See Section Page Number L-11 for Optional Terminals
	Standard Interrupting Capacity 600 Vac Rated 25 kAIC @ 600 Vac	High Interrupting Capacity 600 Vac Rated 35 kAIC @ 600 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 50 kAIC @ 600 Vac	L – Adjustable Long Delay Pickup (By Adjustable Rating Plug) S – Adjustable Short Delay Pickup with Fixed Short Delay Time (I ² t Response) or Adjustable Short Delay Time (Flat Response) I – Adjustable Instantaneous Pickup by Setting Short Delay Time to Instantaneous G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Delay (Flat Response)	Ampere Rating	Fixed Rating Plug	Adjustable Rating Plug Ampere Rating Catalogue Number	Standard	Options		
									Adjustable Short Delay Pickup with Fixed Short Delay Time (I ² t Response)	Independently Adjustable Short Delay Pickup and Short Delay Time (Flat Response)	
Catalogue Number											

3-Pole ④

600	CLD3600F	CHLD3600F	CLDC3600F	LES3600LS	LES3600LSI	LES3600LSG	LES3600LSIG	300 350 400 450 500 600	6LES300T 6LES350T 6LES400T 6LES450T 6LES500T 6LES600T	300/400/500/600 A6LES600T1 420/440/460/480 A6LES400T5 520/540/560/580 A6LES500T5	TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ TA602LD ⑥ 3TA603LDK ⑦
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Instruction Leaflet Number 29C105 for Breaker; 29C615 for LES Trip Unit

① When a "VISA" frame is required, add suffix "S" to circuit breaker frame catalogue number. CLD & CHLD only.
② For AC use only.
③ Ampere rating is established by rating plug.

④ 3-pole LES Trip Units are for use in 3-pole frame only.
⑤ Trip unit includes unprotected right neutral pole. For 100% protected right pole neutral, add "P" to catalogue number. ie. LES4600LSP
⑥ Individually packed.
⑦ Terminal kits contain one terminal for each pole and one terminal cover.

L-Frame

Moulded Case Switches ①

Moulded case switches are used as compact switches in applications requiring high current switching capabilities. Moulded case switches are constructed of circuit breaker components and are of the high instantaneous automatic type. Moulded case switches are listed in accordance with CSA C22.2 No. 5 and UL 489, suitable for reverse feed use, and as 100% rated devices.

Maximum Continuous Ampere Rating @ 40°C	600 Vac Maximum, 250 Vdc	Standard Terminals Only
	MCS Only Without Line and Load Terminals	See Section Page Number L-11 for Optional Terminals
	Catalogue Number	

2-Pole

600	LD2600WK	HLD2600WK	2TA603LDK ②
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3-Pole

600	LD3600WK	HLD3600WK	3TA603LDK ②
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4-Pole

Note: Moulded Case Switch may trip above 6000 amperes.

Instruction Leaflet Number 29C105 for Moulded Case Switch

Moulded Case Switch Type	Number of Poles	Unfused Short Circuit Withstand Rating (Symmetrical Amperes) (kA)			
		Volts Ac (50/60 Hz)			Volts DC
		240	480	600	250
LD	2,3,4	65	35	25	22
HLD	2,3,4	100	65	35	25

① When a "VISA" type Moulded Case Switch is required, change the suffix of the MCS catalogue number from "WK" to "SKW". ie. LD3600SKW

② Terminal kits contain one terminal for each pole and one terminal cover.

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Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

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

Maximum Continuous Ampere Rating @ 40°C	Circuit Breaker Frame Only					Digitrip OPTIM Rating Plug Only	
	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)					Ampere Rating	Fixed Rating Plug
	OPTIM 550 ②			OPTIM 1050 ③④			
	LSI	LSIG	LSIA	LSIG	LSIA		
	Catalogue Number						

3-Pole Standard Interrupting Capacity 600 Volt Ac Rated 25 kAIC @ 600 Vac

Rating	LD3125T52W	LD3125T56W	LD3125T57W	LD3125T106W	LD3125T107W	Ampere Rating	Fixed Rating Plug
125						70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250						125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400						200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600						300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

3-Pole High Interrupting Capacity 600 Volt Ac Rated 35 kAIC @ 600 Vac

Rating	HLD3125T52W	HLD3125T56W	HLD3125T57W	HLD3125T106W	HLD3125T107W	Ampere Rating	Fixed Rating Plug
125						70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250						125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400						200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600						300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

Instruction Leaflet Number 29C105 for Breaker; 29C891 for OPTIM Trip Unit

- 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 Catalogue Number. (A factory assembly charge will be applied, please refer to the Breaker Accessories/Modifications section in the C-H MCCB Price List for details)
- ③ One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard on model 1050.
- ④ Factory sealed.

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Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

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

Maximum Continuous Ampere Rating @ 40°C	Circuit Breaker Frame Only					Digitrip OPTIM Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _t) 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 (I ² t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I ² t or Flat Response)					Ampere Rating	Fixed Rating Plug
	OPTIM 550 ②		OPTIM 1050 ③④				
	LSI	LSIG	LSIA	LSIG	LSIA		
	Catalogue Number						

3-Pole Ultra High Interrupting Capacity Current Limiting 600 Volt Ac Rated 50 kAIC @ 600 Vac

125	LDC3125T52W	LDC3125T56W	LDC3125T57W	LDC3125T106W	LDC3125T107W	70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250	LDC3250T52W	LDC3250T56W	LDC3250T57W	LDC3250T106W	LDC3250T107W	125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400	LDC3400T52W	LDC3400T56W	LDC3400T57W	LDC3400T106W	LDC3400T107W	200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600	LDC3600T52W	LDC3600T56W	LDC3600T57W	LDC3600T106W	LDC3600T107W	300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

Instruction Leaflet Number 29C105 for Breaker; 29C891 for OPTIM Trip Unit

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 Catalogue Number. (A factory assembly charge will be applied, please refer to the Breaker Accessories/Modifications section in the C-H MCCB Price List for details)
 ③ One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard on model 1050.
 ④ Factory sealed.

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100% Rated Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plug

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

Maximum Continuous Ampere Rating @ 40°C	Circuit Breaker Frame Only					Digitrip OPTIM Rating Plug Only	
	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 (I ² t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I ² t or Flat Response)					Ampere Rating	Fixed Rating Plug
	OPTIM 550 ②			OPTIM 1050 ③④			
	LSI	LSIG	LSIA	LSIG	LSIA		
	Catalogue Number						

3-Pole Standard Interrupting Capacity 600 Volt Ac Rated 25 kAIC @ 600 Vac

125	CLD3125T52W	CLD3125T56W	CLD3125T57W	CLD3125T106W	CLD3125T107W	70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250	CLD3250T52W	CLD3250T56W	CLD3250T57W	CLD3250T106W	CLD3250T107W	125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400	CLD3400T52W	CLD3400T56W	CLD3400T57W	CLD3400T106W	CLD3400T107W	200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600	CLD3600T52W	CLD3600T56W	CLD3600T57W	CLD3600T106W	CLD3600T107W	300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

3-Pole High Interrupting Capacity 600 Volt Ac Rated 35 kAIC @ 600 Vac

125	CHLD3125T52W	CHLD3125T56W	CHLD3125T57W	CHLD3125T106W	CHLD3125T107W	70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250	CHLD3250T52W	CHLD3250T56W	CHLD3250T57W	CHLD3250T106W	CHLD3250T107W	125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400	CHLD3400T52W	CHLD3400T56W	CHLD3400T57W	CHLD3400T106W	CHLD3400T107W	200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600	CHLD3600T52W	CHLD3600T56W	CHLD3600T57W	CHLD3600T106W	CHLD3600T107W	300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

Instruction Leaflet Number 29C105 for Breaker; 29C891 for OPTIM Trip Unit

- 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 Catalogue Number. (A factory assembly charge will be applied, please refer to the Breaker Accessories/Modifications section in the C-H MCCB Price List for details)
- ③ One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard on model 1050.
- ④ Factory sealed.

L-Frame

100% Rated Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

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

Maximum Continuous Ampere Rating @ 40°C	Circuit Breaker Frame Only				Digitrip OPTIM Rating Plug Only	
	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 (I ² t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I ² t or Flat Response)				Ampere Rating	Fixed Rating Plug
	OPTIM 550 ②		OPTIM 1050 ③④			
	LSI	LSIG	LSIA	LSIG	LSIA	
	Catalogue Number					

3-Pole Ultra High Interrupting Capacity Current Limiting 600 Volt Ac Rated 50 kAIC @ 600 Vac

125	CLDC3125T52W	CLDC3125T56W	CLDC3125T57W	CLDC3125T106W	CLDC3125T107W	70 90 100 110 125	ORPL125A070 ORPL125A090 ORPL125A100 ORPL125A110 ORPL125A125
250	CLDC3250T52W	CLDC3250T56W	CLDC3250T57W	CLDC3250T106W	CLDC3250T107W	125 150 175 200 225 250	ORPL025A125 ORPL025A150 ORPL025A175 ORPL025A200 ORPL025A225 ORPL025A250
400	CLDC3400T52W	CLDC3400T56W	CLDC3400T57W	CLDC3400T106W	CLDC3400T107W	200 225 250 300 350 400	ORPL40A200 ORPL40A225 ORPL40A250 ORPL40A300 ORPL40A350 ORPL40A400
600	CLDC3600T52W	CLDC3600T56W	CLDC3600T57W	CLDC3600T106W	CLDC3600T107W	300 350 400 500 600	ORPL60A300 ORPL60A350 ORPL60A400 ORPL60A500 ORPL60A600

Instruction Leaflet Number 29C105 for Breaker; 29C891 for OPTIM Trip Unit

- 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 Catalogue Number. (A factory assembly charge will be applied, please refer to the Breaker Accessories/Modifications section in the C-H MCCB Price List for details)
- ③ One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard on model 1050.
- ④ Factory sealed.

L-Frame

Line and Load Terminals

Line and load terminals provide wire connecting capabilities for specific ranges of continuous current ratings and wire types. All terminals comply with Underwriters Laboratories, Inc., Standards UL486A and UL486B and CSA Standard C22.2 No. 65. 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 lock washers which 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 termi-

nal and are secured with recessed socket screws which 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 Catalogue number. Specify if factory installation is required.

Line and Load Terminals

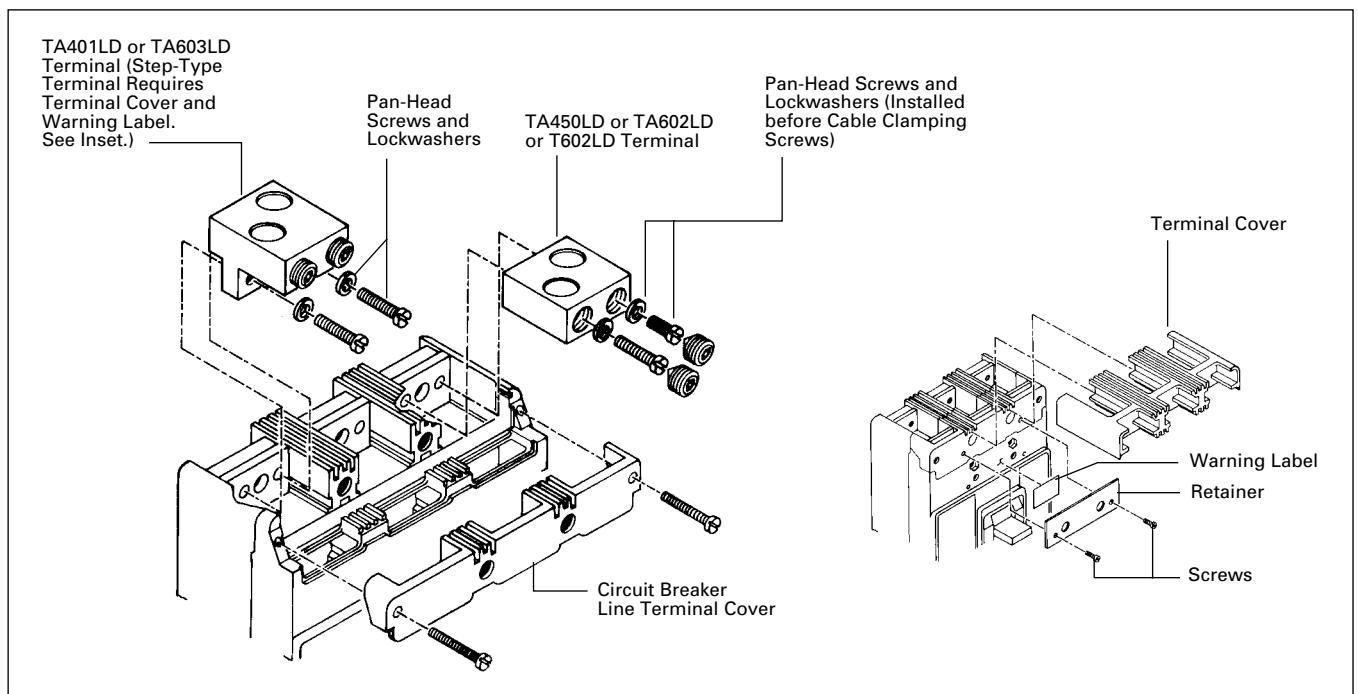
Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/ Number of Conductors	Metric Wire Range mm ²	Terminal Catalogue Number	Terminals with Control Wire Termination Catalogue Numbers
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Standard Cu/Al Pressure Terminals

400	Aluminum	Cu/Al	4/0-600 (1)	120-300	2TA401LDK- 2-Pole Kit ① 3TA401LDK- 3-Pole Kit ① 4TA401LDK- 4-Pole Kit ①	- - -
450	Aluminum	Cu/Al	4-4/0 (2)	25-95	TA450LD ②	-
500	Aluminum	Cu/Al	3/0-350 (2)	95-150	TA602LD ②	TA602LDCW
600	Aluminum	Cu/Al	400-500 (2)	185-240	2TA603LDK- 2-Pole Kit ① 3TA603LDK- 3-Pole Kit ① 4TA603LDK- 4-Pole Kit ①	2TA603LDCW 3TA603LDCW 4TA603LDCW

Optional Copper and Cu/Al Pressure Type Terminals

600	Copper	Cu	250-350 (2)	120-150	T602LD ②	T602LDCW
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① Terminal kits contain one terminal for each pole and one terminal cover.

② Individually packed.

L-Frame

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.

Description	Reference Page	2-Pole ①, 3-Pole			4-Pole			
		Left	Center	Right	Left	Center	Right	Neu. ②
Internal Accessories (Only One Internal Accessory Per Pole) ③								
Alarm Lockout (Make/Break)	INTA-3	■		■	■		■	
Alarm Lockout (2Make/2Break)	INTA-3	■		■	■		■	
Auxiliary Switch (1A, 1B)	INTA-7	■		■	■		■	
Auxiliary Switch (2A, 2B)	INTA-7	■		■	■		■	
Auxiliary Switch (3A, 3B)	INTA-7	■		■	■		■	
Auxiliary Switch (1A, 1B) and Alarm Switch Combination	INTA-9	■		■	■		■	
Auxiliary Switch (2A, 2B) and Alarm Switch Combination	INTA-9	■		■	■		■	
Shunt Trip – Standard ④	INTA-12	■		■	■		■	
Shunt Trip – Low Energy ④	INTA-15	■		■	■		■	
Undervoltage Release Mechanism ④	INTA-20	■		■	■		■	
Cutler-Hammer PowerNet and Zone Interlock Kit (OPTIM 550)	INTA-23			■				

External Accessories

End Cap Kit	EXTA-1		●				●	
Control Wire Terminal Kit	EXTA-2		●				●	
Base Mounting Hardware	EXTA-4		●				●	
Terminal Shields	EXTA-6		●				●	
Interphase Barriers	EXTA-7		●				●	
Non-Padlockable Handle Block	EXTA-9		■			■		
Padlockable Handle Lock Hasp	EXTA-10	□		□	□		□	
Key Interlock Kit	EXTA-11	□		□	□		□	
Sliding Bar Interlock – Requires Two Breakers	EXTA-12		●				●	
Walking Beam Interlock – Requires Two Breakers	EXTA-12		●				●	
Electrical (Motor) Operator	EXTA-14		●				●	
Plug-in Adapters	EXTA-15		●				●	
Rear Connecting Studs	EXTA-18		●				●	
Panelboard Connecting Straps	EXTA-19		●				●	
Handle Mechanisms	EXTA-20		●				●	
Handle Extension	EXTA-26		●				●	
Solid-State (Electronic) Portable Test Kit	EXTA-27		●				●	
Ground Fault Alarm Unit	EXTA-27		●				●	

OPTIM System Components 3-Poles

Breaker Interface Module (BIM)	EXTA-28							
Digitrip OPTIMizer	EXTA-28							
Auxiliary Power Module	EXTA-28							
Potential Transformer Module	EXTA-29							

Modifications (Refer to Cutler-Hammer)

Special Calibration	2		●				●	
Moisture Fungus Treatment	2		●				●	
Freeze-Tested Circuit Breakers	2		●				●	
Marine Application	2		●				●	

■ Applicable in indicated pole position

□ May be mounted on left or right pole – not both

● Accessory available/Modification available

① 2-pole breaker supplied in 3-pole frame. Current carrying parts omitted from center pole.

② Refer to Cutler-Hammer 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 trip units or OPTIM trip units.