

Typical R-Frame Breaker



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R-Frame (800–2500 Amperes)

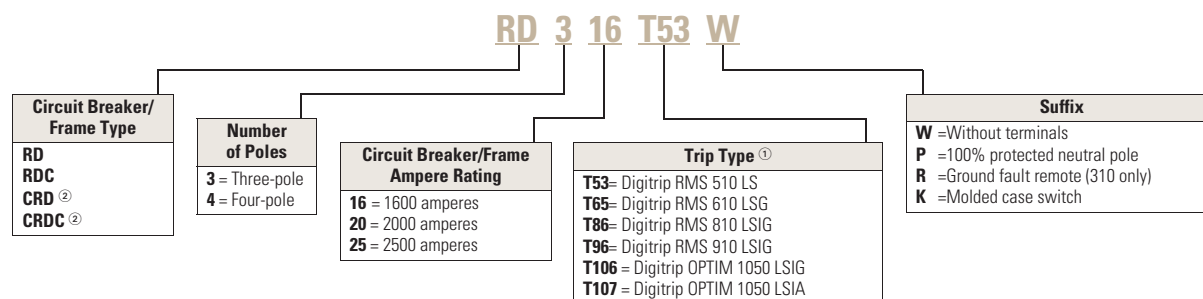
Product Description

- Eaton R-Frame circuit breakers are available as frame (which includes trip unit), rating plug and terminals
- All R-Frame circuit breakers are suitable for reverse feed use

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.

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Circuit Breaker/Frame**Notes**

- ^① For complete list of available trip types, refer to **Pages V4-T2-343 to V4-T2-352**.
^② No four-pole for CRD and CRDC.

Product Selection

Digitrip RMS 510 Electronic Circuit Breakers with Interchangeable Rating Plugs

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

Digitrip RMS 510 Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time 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)						Rated Current (I_n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	RD316T51W	RD316T53W	RD316T52W	RD316T54W	RD316T55W	RD316T56W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RD320T51W	RD320T53W	RD320T52W	RD320T54W	RD320T55W	RD320T56W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RD325T51W	RD325T53W	RD325T52W	RD325T54W	RD325T55W	RD325T56W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	RDC316T51W	RDC316T53W	RDC316T52W	RDC316T54W	RDC316T55W	RDC316T56W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RDC320T51W	RDC320T53W	RDC320T52W	RDC320T54W	RDC320T55W	RDC320T56W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RDC325T51W	RDC325T53W	RDC325T52W	RDC325T54W	RDC325T55W	RDC325T56W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250

100% Rated Digitrip RMS 510 Circuit Breakers

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 75 °C ampacity. Order as individual components: breaker frame (which includes trip unit) and rating plug.

100% Rated Digitrip RMS 510 Circuit Breakers

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time 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)						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
	Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac							
1600	CRD316T51W	CRD316T53W	CRD316T52W	CRD316T54W	CRD316T55W	CRD316T56W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRD320T51W	CRD320T53W	CRD320T52W	CRD320T54W	CRD320T55W	CRD320T56W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	—	CRDC316T53W	CRDC316T52W	CRDC316T54W	CRDC316T55W	CRDC316T56W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRDC320T51W	CRDC320T53W	CRDC320T52W	CRDC320T54W	CRDC320T55W	CRDC320T56W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200

Note

① Includes B2016RDL rear connectors.

Digitrip RMS 610 Electronic Circuit Breakers with Interchangeable Rating Plugs

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

Digitrip RMS 610 Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I_L) with Adjustable Long Delay Time						Rated Current (I_n)	Fixed Rating Plug Catalog Number
	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)							
LI	LS	LSI	LIG	LSG	LSIG			
Catalog Number								
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	RD316T61W	RD316T63W	RD316T62W	RD316T64W	RD316T65W	RD316T66W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RD320T61W	RD320T63W	RD320T62W	RD320T64W	RD320T65W	RD320T66W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RD325T61W	RD325T63W	RD325T62W	RD325T64W	RD325T65W	RD325T66W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	RDC316T61W	RDC316T63W	RDC316T62W	RDC316T64W	RDC316T65W	RDC316T66W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RDC320T61W	RDC320T63W	RDC320T62W	RDC320T64W	RDC320T65W	RDC320T66W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RDC325T61W	RDC325T63W	RDC325T62W	RDC325T64W	RDC325T65W	RDC325T66W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250

100% Rated Digitrip RMS 610 Circuit Breakers

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 75 °C ampacity. Order as individual components: breaker frame (which includes trip unit) and rating plug.

100% Rated Digitrip RMS 610 Circuit Breakers

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	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)							
LI	LS	LSI	LIG	LSG	LSIG			
Catalog Number								
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	CRD316T61W	CRD316T63W	CRD316T62W	CRD316T64W	CRD316T65W	CRD316T66W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRD320T61W	CRD320T63W	CRD320T62W	CRD320T64W	CRD320T65W	CRD320T66W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	CRDC316T61W	CRDC316T63W	CRDC316T62W	CRDC316T64W	CRDC316T65W	CRDC316T66W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRDC320T61W	CRDC320T63W	CRDC320T62W	CRDC320T64W	CRDC320T65W	CRDC320T66W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200

Note

① Includes B2016RDL rear connectors.

Digitrip RMS 810 Electronic Circuit Breakers with Interchangeable Rating Plugs

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

Digitrip RMS 810 Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time 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)						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	RD316T81W	RD316T83W	RD316T82W	RD316T84W	RD316T85W	RD316T86W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RD320T81W	RD320T83W	RD320T82W	RD320T84W	RD320T85W	RD320T86W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RD325T81W	RD325T83W	RD325T82W	RD325T84W	RD325T85W	RD325T86W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	RDC316T81W	RDC316T83W	RDC316T82W	RDC316T84W	RDC316T85W	RDC316T86W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RDC320T81W	RDC320T83W	RDC320T82W	RDC320T84W	RDC320T85W	RDC320T86W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RDC325T81W	RDC325T83W	RDC325T82W	RDC325T84W	RDC325T85W	RDC325T86W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250

100% Rated Digitrip RMS 810 Circuit Breakers

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 75 °C ampacity. Order as individual components: breaker frame (which includes trip unit) and rating plug.

100% Rated Digitrip RMS 810 Circuit Breakers

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time 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)						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	CRD316T81W	CRD316T83W	CRD316T82W	CRD316T84W	CRD316T85W	CRD316T86W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRD320T81W	CRD320T83W	CRD320T82W	CRD320T84W	CRD320T85W	CRD320T86W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	CRDC316T81W	CRDC316T83W	CRDC316T82W	CRDC316T84W	CRDC316T85W	CRDC316T86W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRDC320T81W	CRDC320T83W	CRDC320T82W	CRDC320T84W	CRDC320T85W	CRDC320T86W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200

Note

① Includes B2016RDL rear connectors.

Digitrip RMS 910 Electronic Circuit Breakers with Interchangeable Rating Plugs

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

Digitrip RMS 910 Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time 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)						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	RD316T91W	RD316T93W	RD316T92W	RD316T94W	RD316T95W	RD316T96W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RD320T91W	RD320T93W	RD320T92W	RD320T94W	RD320T95W	RD320T96W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RD325T91W	RD325T93W	RD325T92W	RD325T94W	RD325T95W	RD325T96W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	RDC316T91W	RDC316T93W	RDC316T92W	RDC316T94W	RDC316T95W	RDC316T96W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000	RDC320T91W	RDC320T93W	RDC320T92W	RDC320T94W	RDC320T95W	RDC320T96W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
2500	RDC325T91W	RDC325T93W	RDC325T92W	RDC325T94W	RDC325T95W	RDC325T96W	1600	RP6R25A160
							2000	RP6R25A200
							2500	RP6R25A250

100% Rated Digitrip RMS 910 Circuit Breakers

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 75 °C ampacity. Order as individual components: breaker frame (which includes trip unit) and rating plug.

100% Rated Digitrip RMS 910 Circuit Breakers

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only						Digitrip Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time 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)						Rated Current (I _n)	Fixed Rating Plug Catalog Number
	LI	LS	LSI	LIG	LSG	LSIG		
	Catalog Number							
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac								
1600	CRD316T91W	CRD316T93W	CRD316T92W	CRD316T94W	CRD316T95W	CRD316T96W	800	RP6R16A080
							1000	RP6R16A100
							1200	RP6R16A120
							1600	RP6R16A160
2000 ①	CRD320T91W	CRD320T93W	CRD320T92W	CRD320T94W	CRD320T95W	CRD320T96W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac								
1600	CRDC316T91W	CRDC316T93W	CRDC316T92W	CRDC316T94W	CRDC316T95W	CRDC316T96W	800	RP6R16A080
							1000	RP6R16A100
							1000	RP6R16A100
							1200	RP6R16A120
2000 ①	CRDC320T91W	CRDC320T93W	CRDC320T92W	CRDC320T94W	CRDC320T95W	CRDC320T96W	1000	RP6R20A100
							1200	RP6R20A120
							1600	RP6R20A160
							2000	RP6R20A200

Note

① Includes B2016RDL rear connectors.

Digitrip OPTIM Electronic Circuit Breakers with Interchangeable Rating Plugs

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

Digitrip OPTIM Electronic Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only		Digitrip OPTIM Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _l) with Adjustable Long Delay Time 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)			
	LSIA 1050 Catalog Number	LSIG 1050 Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
1600	RD316T107W	RD316T106W	800	ORPR16A080
			1000	ORPR16A100
			1200	ORPR16A120
			1600	ORPR16A160
2000	RD320T107W	RD320T106W	1000	ORPR20A100
			1200	ORPR20A120
			1600	ORPR20A160
			2000	ORPR20A200
2500	RD325T107W	RD325T106W	1600	ORPR25A160
			2000	ORPR25A200
			2500	ORPR25A250
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				
1600	RDC316T107W	RDC316T106W	800	ORPR16A080
			1000	ORPR16A100
			1200	ORPR16A120
			1600	ORPR16A160
2000	RDC320T107W	RDC320T106W	1000	ORPR20A100
			1200	ORPR20A120
			1600	ORPR20A160
			2000	ORPR20A200
2500	RDC325T107W	RDC325T106W	1600	ORPR25A160
			2000	ORPR25A200
			2500	ORPR25A250

100% Rated 600 Volts AC Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plugs

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

100% Rated 600 Volts AC Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plugs

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only		Digitrip OPTIM Rating Plug Only	
	L – Adjustable Long Delay Pickup (I _L) with Adjustable Long Delay Time			
	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)			
Maximum Continuous Ampere Rating at 40 °C	A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time Delay (I ² _t or Flat Response)		Ampere Rating	Fixed Rating Plug Catalog Number
	LSIA 1050 Catalog Number	LSIG 1050 Catalog Number		
Three-Pole Standard Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
1600	CRD316T107W	CRD316T106W	800	ORPR16A080
			1000	ORPR16A100
			1200	ORPR16A120
			1600	ORPR16A160
2000 ①	CRD320T107W	CRD320T106W	1000	ORPR20A100
			1200	ORPR20A120
			1600	ORPR20A160
			2000	ORPR20A200
Three-Pole High Interrupting Capacity 600 Vac Rated 100 kAIC at 480 Vac				
1600	CRDC316T107W	CRDC316T106W	800	ORPR16A080
			1000	ORPR16A100
			1200	ORPR16A120
			1600	ORPR16A160
2000 ①	CRDC320T107W	CRDC320T106W	1000	ORPR20A100
			1200	ORPR20A120
			1600	ORPR20A160
			2000	ORPR20A200

Molded Case Switches

Refer to Eaton for UL listed, series tested Molded Case Switch application data.

Type RD—High Instantaneous (K)

Continuous Ampere Rating at 40 °C	Complete without Terminals	
	Three-Pole Catalog Number	Four-Pole Catalog Number
1600	RD316WK	RD416WK
2000	RD320WK	RD420WK

Notes

① Includes B2016RDL rear connectors.

Molded case switch may trip above 17,500 amperes.

Accessories Selection Guide and Ordering Information

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 Standards UL 486A and UL 486B and CSA C22.2 No. 65M. Unless otherwise specified, R-Frame circuit breaker line load terminals are shipped separately for field installation.

Ordering Information

R-Frame circuit breakers have Cu/Al terminals as standard and Cu only terminals as an option. Specify if factory installation is required.

Line and Load Terminals

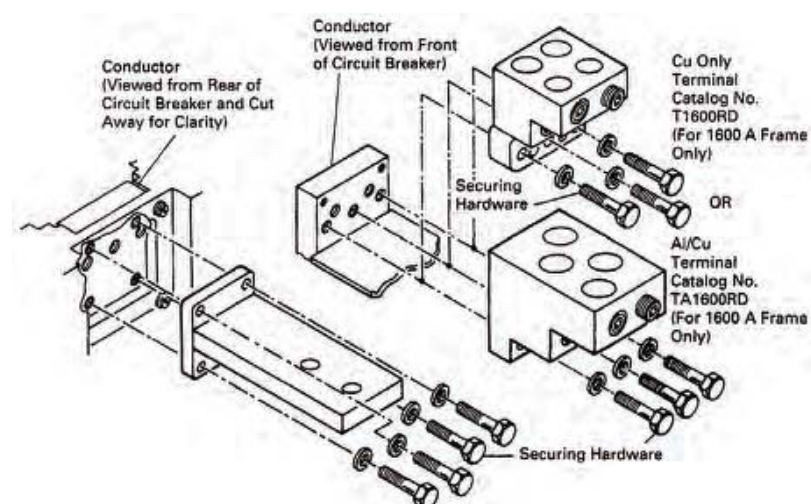
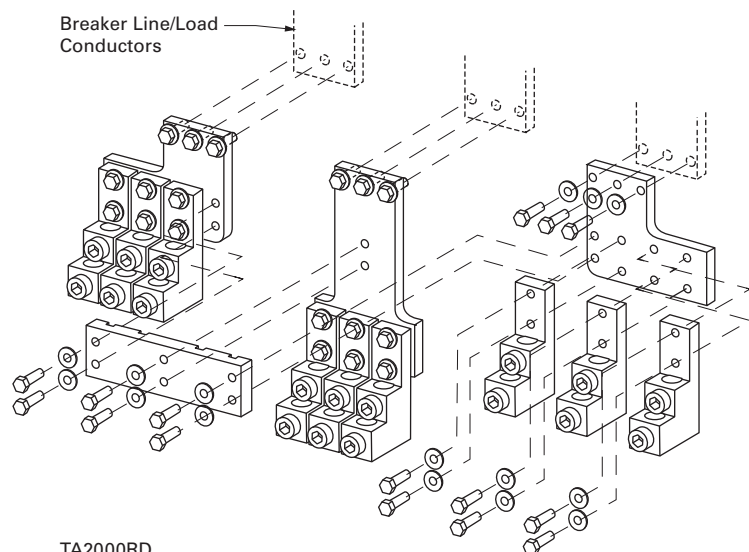
Maximum Breaker Amperes	Terminal Body Material	Wire Type	Hardware	AWG/kcmil Wire Range/ No. Conductors	Metric Wire Range mm ²	Catalog Number
Wire Terminals						
1600	Aluminum	Cu/Al	English	500–1000 (4)	300–500	TA1600RD
1600	Copper	Cu	English	1–600 (4)	50–300	T1600RD
2000	Aluminum	Cu/Al	English	2–600 (6)	35–300	TA2000RD ^①
Rear Connectors						
2000	Copper	—	English	—	—	B2016RD
2000	Copper	—	English	—	—	B2016RDL ^②
2500	Copper	—	English	—	—	B2500RD ^③

Notes

- ^① Catalog Number includes bus connection, terminals and hardware for either line side or load side of three-pole breaker.
- ^② For use with 100% rated 1600 A and 2000 A frame. Do not order separately unless for replacement purposes. Included in breaker carton when 100% rated device is ordered.
- ^③ For use with 2500 A frame. Do not order separately unless for replacement purposes. Included in breaker carton when 2500 A breaker is ordered.

Mounting Hardware

2



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.

RD Frame Accessories

Description	Reference Page	Three-Pole Left	Center	Right	Four-Pole Left	Center	Right	Neu.
Internal Accessories ^①								
Alarm lockout (Make/Break)	V4-T2-380			■			■	
Alarm lockout (2Make/2Break)	V4-T2-380			■			■	
Auxiliary switch (2A, 2B)	V4-T2-380			■			■	
Auxiliary switch (4A, 4B)	V4-T2-380			■			■	
Shunt trip—standard	V4-T2-388			■			■	
Shunt trip—low energy	V4-T2-389			■			■	
Undervoltage release mechanism	V4-T2-396			■			■	
Accessory terminal block ^②	V4-T2-397			■				■
External Accessories								
Base mounting hardware	V4-T2-417							
Padlockable handle lock hasp	V4-T2-420		●			●		
Key interlock kit	V4-T2-422	■	■	■		■		
Walking beam interlock	V4-T2-423							
Electrical (motor) operator	V4-T2-425	■	■	■		■		
Handle mechanisms	V4-T2-508	■	■	■		■		
Handle extension ^③	V4-T2-522		■			■		
OPTIM System Components								
Breaker interface module (BIM)	V4-T2-431	●	●	●				
Digitrip OPTIMizer	V4-T2-431	●	●	●				
Auxiliary power module	V4-T2-431	●	●	●				
Modifications (Refer to Eaton)								
Special calibration	—	●	●	●	●	●	●	●
Moisture fungus treatment	V4-T2-220	●	●	●	●	●	●	●
Freeze-tested circuit breakers	—	●	●	●	●	●	●	●
Marine/naval application	—	●	●	●	●	●	●	●

Legend

- Applicable in indicated pole position
- Accessory available/modification available

Notes

- ① All accessories mount in the RH cavity which will accept one each shunt trip, UVR, auxiliary switch and alarm switch.
- ② Mounts outside breaker.
- ③ Included with breaker.

Technical Data and Specifications

2

UL 489/CSA Interrupting Capacity Ratings ^①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)			
		Volts AC (50/60 Hz)			
		240	277	480	600
RD	3, 4	125	—	65	50
CRD ^②	3	125	—	65	50
RDC	3, 4	200	—	100	65
CRDC ^②	3	200	—	100	65

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
RD				
I _{cu}	3, 4	135	70	25
I _{cs}	3, 4	100	50	13
RDC				
I _{cu}	3, 4	200	100	35
I _{cs}	3, 4	100	50	18

Notes

① Utilization Category A circuit breakers.

② 100% rated breakers.

See **Page V4-T2-357** for Trip Unit Specifications.

Specifications**R-Frame Digitrip**

Trip Unit Type	Digitrip RMS 510	Digitrip RMS 610	Digitrip RMS 810	Digitrip RMS 910	Digitrip OPTIM 1050
rms sensing	Yes	Yes	Yes	Yes	Yes
Breaker Type					
Frame	R	R	R	R	R
Ampere range	800–2500 A	800–2500 A	800–2500 A	800–2500 A	800–2500 A
Interrupting rating at 480 volts	65, 100 (kA)	65, 100 (kA)	65, 100 (kA)	65, 100 (kA)	65, 100 (kA)
Protection					
Ordering options	LI, LS, LSI, LIG, LSG, LSIG	LI, LS, LSI, LIG, LSG, LSIG	LI, LS, LSI, LIG, LSG, LSIG	LI, LS, LSI, LIG, LSG, LSIG	LSI(A), LISG
Fixed rated plug (I_n)	Yes	Yes	Yes	Yes	Yes
Overtemperature trip	Yes	Yes	Yes	Yes	Yes
Long Delay Protection (L)					
Adjustable rating plug (I_n)	No	No	No	No	No
Long delay pickup	0.5–1.0 x (I_n)	0.5–1.0 x (I_n)	0.5–1.0 x (I_n)	0.5–1.0 x (I_n)	0.4–1.0 x (I_n)
Long delay time I^2t	2–24 seconds	2–24 seconds	2–24 seconds	2–24 seconds	2–24 seconds
Long delay time I^4t	No	No	No	No	1–5 Seconds
Long delay thermal memory	Yes	Yes	Yes	Yes	Yes
High load alarm	No	0.85 x I_r	0.85 x I_r	0.85 x I_r	0.5–1.0 x I_r
Short Delay Protection (S)					
Short delay pickup	200–600% S1 and S2 x (I_r)	200–600% S1 and S2 x (I_r)	200–600% S1 and S2 x (I_r)	200–600% S1 and S2 x (I_r)	150–800% x (I_r) ①②
Short delay time I^2t	100–500 ms	100–500 ms	100–500 ms	100–500 ms	100–500 ms
Short delay time flat	100–500 ms	100–500 ms	100–500 ms	100–500 ms	100–500 ms
Short delay time zone selective interlocking	Yes	Yes	Yes	Yes	Yes
Instantaneous Protection (I)					
Instantaneous pickup	200–600% M1 and M2 x (I_n)	200–600% M1 and M2 x (I_n)	200–600% M1 and M2 x (I_n)	200–600% M1 and M2 x (I_n)	200–800% x (I_n) ②
Discriminator	Yes ③	Yes ③	Yes ③	Yes ③	Yes
Instantaneous override	Yes	Yes	Yes	Yes	Yes
Ground Fault Protection (G)					
Ground fault alarm ④	No	No	No	No	25–100% x (I_n)
Ground fault pickup ④	25–100% x (I_s)	25–100% x (I_s)	25–100% x (I_s)	25–100% x (I_s)	25–100% x (I_n)
Ground fault delay I^2t	100–500 ms	100–500 ms	100–500 ms	100–500 ms	100–500 ms
Ground fault delay flat	100–500 ms	100–500 ms	100–500 ms	100–500 ms	100–500 ms
Ground fault zone selective interlocking	Yes	Yes	Yes	Yes	Yes
Ground fault thermal memory	Yes	Yes	Yes	Yes	Yes

Legend

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

Notes

- ① Except 2500 ampere frame is 200–600%.
 ② Varies by frame.
 ③ LS/LSG only.
 ④ Not to exceed 1200 amperes.

R-Frame Digitrip, continued

Trip Unit Type	Digitrip RMS 510	Digitrip RMS 610	Digitrip RMS 810	Digitrip RMS 910	Digitrip OPTIM 1050
System Diagnostics					
Status LEDs	Yes	Yes	Yes	Yes	Yes
Cause of trip LEDs	Yes	Yes	Yes	Yes	Yes
Magnitude of trip information	No	Yes	Yes	Yes	Yes
Remote signal contacts	No	Yes	Yes	Yes	Yes
System Monitoring					
Digital display	No	Yes	Yes	Yes	Yes ^①
Current	No	Yes	Yes	Yes	Yes
Voltage	No	No	No	Yes	No
Power and energy	No	No	Yes	Yes	Yes
Power quality—harmonics	No	No	No	Yes	Yes
Power factor	No	No	Yes (over Eaton PowerNet only)	Yes	Yes
Communications					
Eaton PowerNet	No	No	Yes	Yes	Yes
Testing					
Testing method	Integral	Integral	Integral	Integral	OPTIMizer, BIM, PowerNet

Legend

BIM = Breaker Interface Module

(A) = GF Alarm

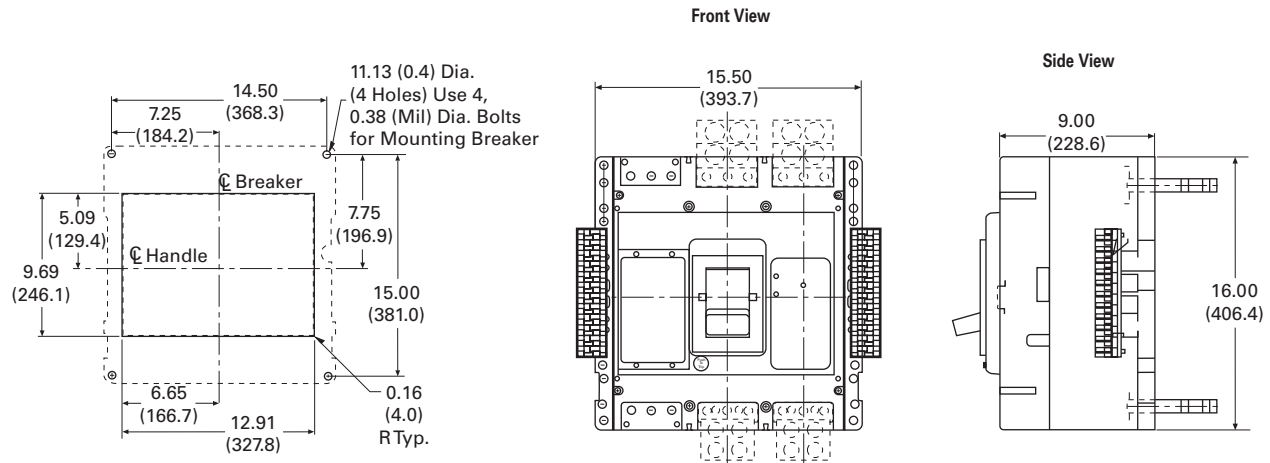
I_s = Sensor RatingI_n = Rating PlugI_r = Long Delay Pickup Setting x I_n**Note**^① By OPTIMizer/BIM.

Dimensions and Weights

Dimensions in Inches (mm)

RD Frame

Number of Poles	Width	Height	Depth
3	15.50 (393.7)	16.00 (406.4)	9.75 (247.7)
4	20.00 (508.0)	16.00 (406.4)	9.75 (247.7)

RD-Frame, Three-Pole, 1600 and 2000 Amperes

Approximate Shipping Weight in Lbs (kg)

RD Frame

Breaker Type	Complete Breaker	
	Three-Pole	Four-Pole
1600 Amperes		
RD, CRD ①, RDC, CRDC ①	102 (46.3)	135 (61.2)
2000 Amperes		
RD, RDC	102 (46.3)	135 (61.2)
CRD, CRDC	130 (59.0)	175 (79.4)
2500 Amperes		
RD, RDC	135 (61.2)	182 (82.6)

Note

① No four-pole for CRD and CRDC.