

Typical M-Frame Circuit Breaker



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M-Frame (300–800 Amperes)

Product Description

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

Standards and Certifications

- CE marked



2.3

Molded Case Circuit Breakers

Series C

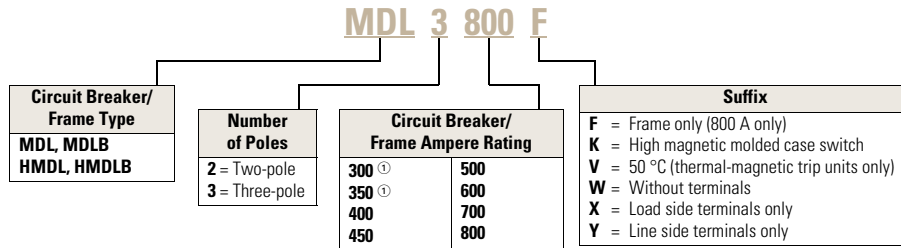
2

Catalog Number Selection

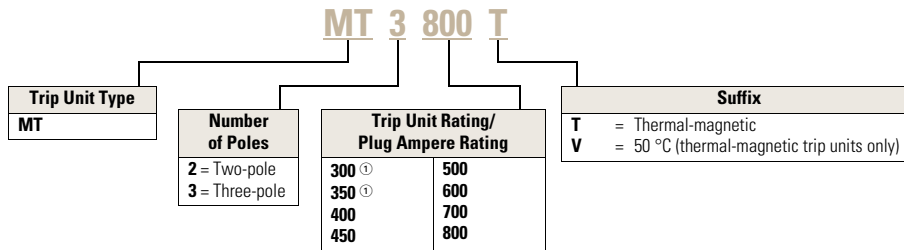
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

MDL Frame with Thermal-Magnetic Trip Unit Technology

Thermal-Magnetic Breakers and Frame ①

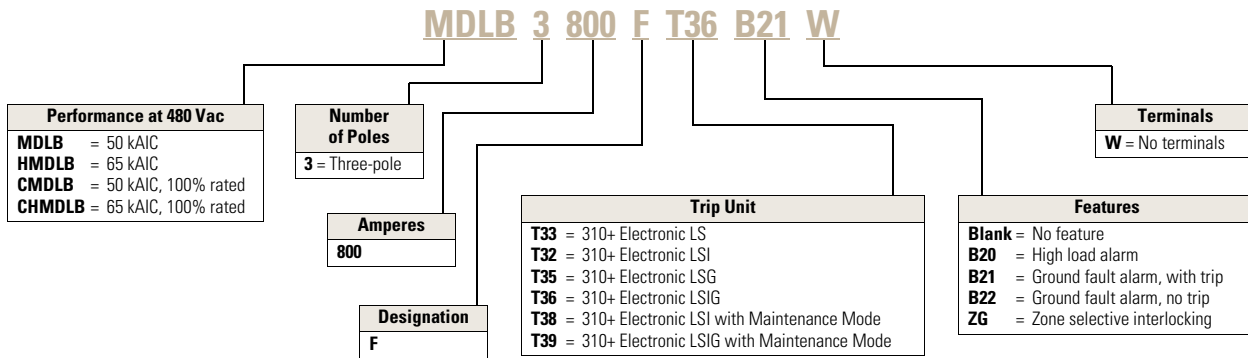


Thermal-Magnetic Trip Unit ①

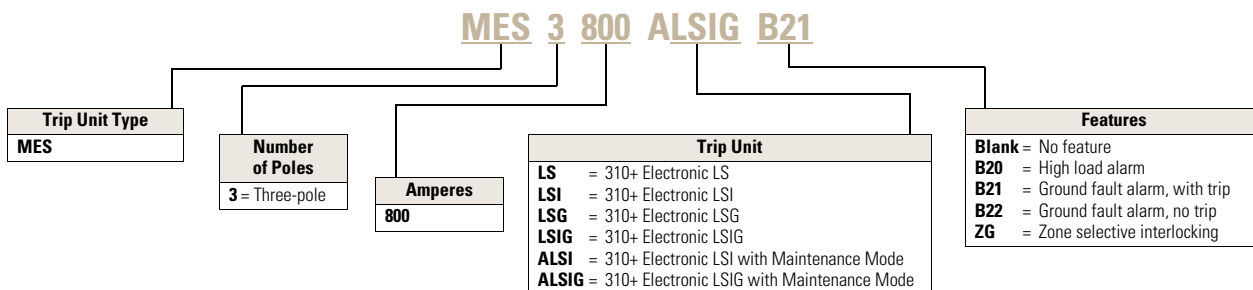


MDL Frame with 310+ Electronic Trip Unit Technology

310+ Circuit Breaker



310+ Electronic Trip Unit ①



Note

① Frames are the same for thermal-magnetic or 310+ electronic trip units, e.g., MDL3800F, HMDL3800F, etc.

Product Selection

Types MDL and HMDL Thermal-Magnetic Circuit Breakers with Interchangeable Trip Units—Two-Pole

Maximum Continuous Ampere Rating at 40 °C	Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac		High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac		Thermal-Magnetic Trip Unit Only	Standard Terminals Only ^① See Page V4-T2-217 for Optional Terminals Catalog Number
	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals		Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals		For Use with Standard or High or Ultra High Interrupting Frames Magnetic Trip Range is 5–10 Up Through 600 A; 4–8 on 700 and 800 A x Continuous Ampere Rating Catalog Number	
	Catalog Number	Frame Only Catalog Number	Catalog Number	Frame Only Catalog Number		
300	MDL2300	MDL2800F	HMDL2300	HMDL2800F	MT2300T	TA700MA1
350	MDL2350		HMDL2350		MT2350T	TA700MA1
400	MDL2400		HMDL2400		MT2400T	TA700MA1
450	MDL2450		HMDL2450		MT2450T	TA700MA1
500	MDL2500		HMDL2500		MT2500T	TA700MA1
600	MDL2600		HMDL2600		MT2600T	TA700MA1
700	MDL2700		HMDL2700		MT2700T	TA700MA1
800	MDL2800		HMDL2800		MT2800T	TA800MA2

Types MDL and HMDL Thermal-Magnetic Circuit Breakers with Interchangeable Trip Units—Three-Pole

Maximum Continuous Ampere Rating at 40 °C	Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac		High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac		Thermal-Magnetic Trip Unit Only	Standard Terminals Only ^① See Page V4-T2-217 for Optional Terminals Catalog Number
	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals		Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals		For Use with Standard or High or Ultra High Interrupting Frames Magnetic Trip Range is 5–10 Up Through 600 A; 4–8 on 700 and 800 A x Continuous Ampere Rating Catalog Number	
	Catalog Number	Frame Only Catalog Number	Catalog Number	Frame Only Catalog Number		
300	MDL3300	MDL3800F	HMDL3300	HMDL3800F	MT3300T	TA700MA1
350	MDL3350		HMDL3350		MT3400T	TA700MA1
400	MDL3400		HMDL3400		MT3400T	TA700MA1
450	MDL3450		HMDL3450		MT3450T	TA700MA1
500	MDL3500		HMDL3500		MT3500T	TA700MA1
600	MDL3600		HMDL3600		MT3600T	TA700MA1
700	MDL3700		HMDL3700		MT3700T	TA700MA1
800	MDL3800		HMDL3800		MT3800T	TA800MA2

Note

^① Two terminals are required per pole.

Types MDLB and HMDLB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units—Two-Pole ①

Maximum Continuous Ampere Rating at 40 °C	Standard Interrupting Capacity	High Interrupting Capacity	Standard Terminals Only ②
	600 Vac Rated 50 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	600 Vac Rated 65 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	See Page V4-T2-217 for Optional Terminals Catalog Number
300	MDLB2300	HMDLB2300	TA700MA1
350	MDLB2350	HMDLB2350	TA700MA1
400	MDLB2400	HMDLB2400	TA700MA1
450	MDLB2450	HMDLB2450	TA700MA1
500	MDLB2500	HMDLB2500	TA700MA1
600	MDLB2600	HMDLB2600	TA700MA1
700	MDLB2700	HMDLB2700	TA700MA1
800	MDLB2800	HMDLB2800	TA800MA2

Types MDLB and HMDLB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units—Three-Pole ①

Maximum Continuous Ampere Rating at 40 °C	Standard Interrupting Capacity	High Interrupting Capacity	Standard Terminals Only ②
	600 Vac Rated 50 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	600 Vac Rated 65 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	See Page V4-T2-217 for Optional Terminals Catalog Number
300	MDLB3300	HMDLB3300	TA700MA1
350	MDLB3350	HMDLB3350	TA700MA1
400	MDLB3400	HMDLB3400	TA700MA1
450	MDLB3450	HMDLB3450	TA700MA1
500	MDLB3500	HMDLB3500	TA700MA1
600	MDLB3600	HMDLB3600	TA700MA1
700	MDLB3700	HMDLB3700	TA700MA1
800	MDLB3800	HMDLB3800	TA800MA2

Notes

① Factory sealed for reverse feed application.

② Two terminals are required per pole.

Types MDL and HMDL Electronic Circuit Breakers with Interchangeable Trip Units

Order as Individual Components: breaker frame, trip unit and terminals.
See 310+ adjustability specifications on **Page V4-T2-220**.

Types MDL and HMDL Electronic Circuit Breakers with Interchangeable 310+ Trip Units—Three-Pole

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only		Digitrip RMS 310+ Trip Unit Only ^①				Neutral CT for LSG and LSIG ^{②③}	Terminal Information
	Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 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	Independently Adjustable Short Time Pickup and Ground Fault Protection		
Catalog Number	Catalog Number	Catalog Number	Catalog Number			Catalog Number		
800	MDL3800F	HMDL3800F	MES3800LS	MES3800LSI	MES3800LSG	MES3800LSIG	LGFACT600	See Page V4-T2-218

Types MDLB and HMDLB Electronic Circuit Breakers with Non-Interchangeable 310+ Trip Units ^④

Maximum Continuous Ampere Rating at 40 °C	Factory-Assembled Circuit Breaker Consisting of Frame and Trip Unit Less Terminals					Neutral CT for LSG and LSIG ^{②③}
	LS	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	
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac						
800	MDLB3800FT33W	MDLB3800FT32W	MDLB3800FT35W	MDLB3800FT36W	LGFACT600	
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac						
800	HMDLB3800FT33W	HMDLB3800FT32W	HMDLB3800FT35W	HMDLB3800FT36W	LGFACT600	

100% Rated Types CMDL and CHMDL 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-T2-220**.

100% Rated Types CMDL and CHMDL Electronic Circuit Breakers with Interchangeable 310+ Trip Units—Three-Pole

Maximum Continuous Ampere Rating at 40 °C	Circuit Breaker Frame Only		Digitrip RMS 310+ Trip Unit Only ^①				Neutral CT for LSG and LSIG ^{②③}	Terminal Information
	Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Standard LS	Options 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		
800	CMDL3800F	CHMDL3800F	MES3800LS	MES3800LSI	MES3800LSG	MES3800LSIG	LGFACT600	See Page V4-T2-218

Notes

- ① For AC use only.
- ② Required for four-wire systems if neutral protection is desired.
- ③ Included with LSG and LSIG trip units or breakers.
- ④ Factory sealed, suitable for reverse feed application. CMDLB and CHMDLB are also available.