# 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 noninterchangeable trip units are suitable for reverse feed use

# **Standards and Certifications**

• CE marked

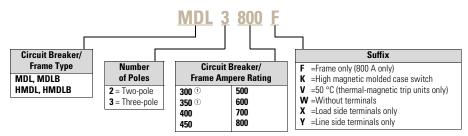


#### **Catalog Number Selection**

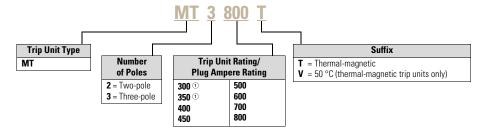
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

## MDL Frame with Thermal-Magnetic Trip Unit Technology

## Thermal-Magnetic Breakers and Frame ®

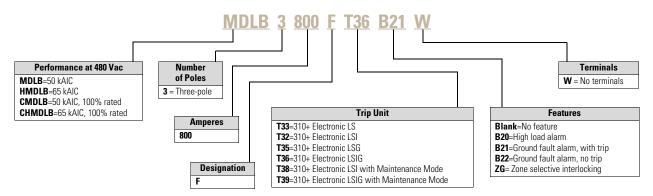


## Thermal-Magnetic Trip Unit 10

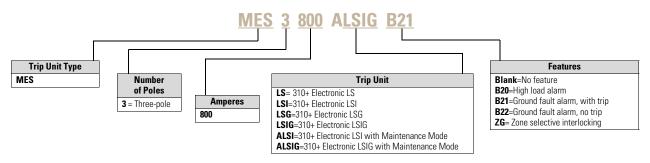


## MDL Frame with 310+ Electronic Trip Unit Technology

### 310+ Circuit Breaker



### 310+ Electronic Trip Unit 10



#### Note

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

# **Product Selection**

# Types MDL and HMDLThermal-Magnetic Circuit Breakers with Interchangeable Trip Units—Two-Pole

	Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac			High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac		
Maximum Continuous Ampere	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Frame Only		Factory Assembled Circuit 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 Up Through 600 A; 4–8 on 700 and 800 A x Continuous Ampere Rating	Standard Terminals Only ① See Page V4-T2-355 for Optional Terminals
Rating at 40 °C	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	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 HMDLThermal-Magnetic Circuit Breakers with Interchangeable Trip Units — Three-Pole

	Standard Interrupting 600 Vac Rated 50 kAI		High Interrupting Ca <sub>l</sub> 600 Vac Rated 65 kAl		Thermal-Magnetic Trip Unit Only		
Maximum Continuous Ampere	Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Frame Only		Factory Assembled Circuit 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 Up Through 600 A; 4–8 on 700 and 800 A x Continuous Ampere Rating	Standard Terminals Only ⊕ See Page V4-T2-355 for Optional Terminals	
Rating at 40 °C	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	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		TA800MA2	

# Note

 $<sup>^{\</sup>scriptsize \textcircled{\scriptsize 1}}$  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-T2-358**.

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

	Circuit Breaker Frame Only		Digitrip RMS 310+ Trip Unit Only ①					
			Standard LS	Optional LSI	LSG	LSIG		
Maximum Continuous Ampere	Rated 50 kAIC at 480 Vac	Rated 65 kAIC at 480 Vac	Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay Ramp	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Ground Fault Protection	Neutral CT for LSG and LSIG 23	
Rating at 40 °C	Catalog Number	Catalog Number	Catalog Number				Catalog Number	Terminal Information
800	MDL3800F	HMDL3800F	MES3800LS	MES3800LSI	MES3800LSG	MES3800LSIG	LGFCT600	See <b>Page</b> <b>V4-T2-356</b>

# Types MDLB and HMDLB Electronic Circuit Breakers with Non-Interchangeable 310+Trip Units ®

	Factory-Assembled Circuit Breaker Consisting of Frame and Trip Unit Less Terminals								
Maximum Continuous Ampere Rating at 40 °C	LS  Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay Ramp Catalog Number	LSI Independently Adjustable Short Time Pickup and Delay	LSG Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay and Ground Fault Protection	LSIG Independently Adjustable Short Time Pickup and Ground Fault Protection	Neutral CT for LSG and LSIG 23 Catalog Number				
Three-Pole Standard Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac									
800	MDLB3800FT33W	MDLB3800FT32W	MDLB3800FT35W	MDLB3800FT36W	LGFCT600				
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac									
800	HMDLB3800FT33W	HMDLB3800FT32W	HMDLB3800FT35W	HMDLB3800FT36W	LGFCT600				

## 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-T2-358**.

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

	Circuit Breaker Frame Only		Digitrip RMS 310+ Trip Unit Only ①					
	Standard	High	Standard LS	Options LSI	LSG	LSIG		
Maximum Continuous Ampere Rating at 40°C	Interrupting Capacity 600 Vac Rated 50 kAIC at 480 Vac Catalog Number	Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay Ramp	Independently Adjustable Short Time Pickup and Delay	Adjustable Short Time Pickup with I <sup>2</sup> t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Ground Fault Protection	Neutral CT for LSG and LSIG ②③ Catalog Number	Terminal Information
800	CMDL3800F	CHMDL3800F	MES3800LS	MES3800LSI	MES3800LSG	MES3800LSIG	LGFCT600	See <b>Page V4-T2-356</b>

#### Notes

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