

Product Selection

2

Types KD, HKD and KDC Thermal-Magnetic Circuit Breakers with Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40 °C	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals ①	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals ①	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals ①	Thermal-Magnetic Trip Unit Only ①	Standard Terminals Only
	Catalog Number	Catalog Number	Catalog Number	For Use with Standard or High or Ultra High Interrupting Frames Catalog Number	See Page V4-T2-283 for Optional Terminals Catalog Number
Two-Pole					
100	KD2100	HKD2100	KDC2100	KT2100T	TA300K ②
125	KD2125	HKD2125	KDC2125	KT2125T	TA300K ②
150	KD2150	HKD2150	KDC2150	KT2150T	TA300K ②
175	KD2175	HKD2175	KDC2175	KT2175T	TA300K ②
200	KD2200	HKD2200	KDC2200	KT2200T	TA300K ②
225	KD2225	HKD2225	KDC2225	KT2225T	TA300K ②
250	KD2250	HKD2250	KDC2250	KT2250T	TA350K ②
300	KD2300	HKD2300	KDC2300	KT2300T	TA350K ②
350	KD2350	HKD2350	KDC2350	KT2350T	TA350K ②
400	KD2400	HKD2400	KDC2400	KT2400T	2TA400K ③
Three-Pole					
100	KD3100	HKD3100	KDC3100	KT3100T	TA300K ②
125	KD3125	HKD3125	KDC3125	KT3125T	TA300K ②
150	KD3150	HKD3150	KDC3150	KT3150T	TA300K ②
175	KD3175	HKD3175	KDC3175	KT3175T	TA300K ②
200	KD3200	HKD3200	KDC3200	KT3200T	TA300K ②
225	KD3225	HKD3225	KDC3225	KT3225T	TA300K ②
250	KD3250	HKD3250	KDC3250	KT3250T	TA350K ②
300	KD3300	HKD3300	KDC3300	KT3300T	TA350K ②
350	KD3350	HKD3350	KDC3350	KT3350T	TA350K ②
400	KD3400	HKD3400	KDC3400	KT3400T	3TA400K ③
Four-Pole					
100	KD4100	HKD4100	KDC4100	KT3100T	TA300K ②
125	KD4125	HKD4125	KDC4125	KT3125T	TA300K ②
175	KD4175	HKD4175	KDC4175	KT3175T	TA300K ②
200	KD4200	HKD4200	KDC4200	KT3200T	TA300K ②
225	KD4225	HKD4225	KDC4225	KT3225T	TA300K ②
250	KD4250	HKD4250	KDC4250	KT3250T	TA350K ②
300	KD4300	HKD4300	KDC4300	KT3300T	TA350K ②
350	KD4350	HKD4350	KDC4350	KT3350T	TA350K ②
400	KD4400	HKD4400	KDC4400	KT3400T	4TA400K ③

Notes

- ① Magnetic trip adjustable 5–10 times continuous ampere rating.
- ② Individually packed.
- ③ 2TA400K, 3TA400K and 4TA400K terminal kits contain one terminal for each pole and one terminal cover.

Accessories Selection Guide and Ordering Guide

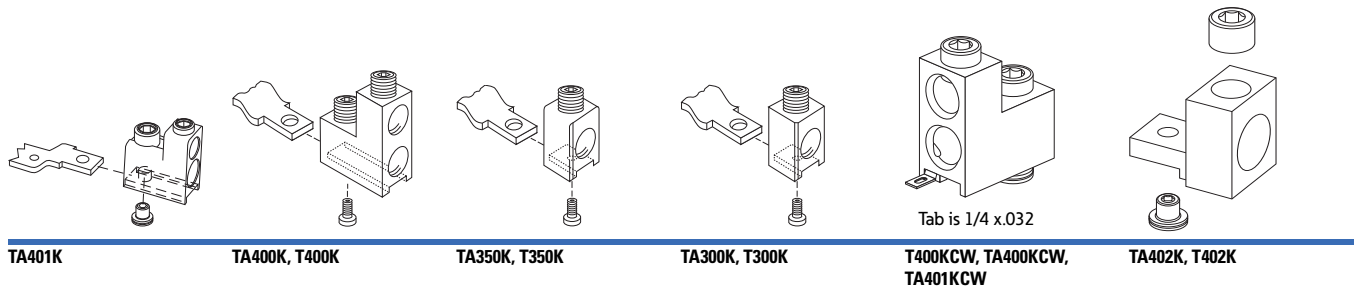
Line and Load Terminals

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. 65, or Electrical Bulletin 1165. Unless otherwise specified, K-Frame circuit breaker line and load terminals are shipped separately for field installation.

Ordering Information

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



Line and Load Terminals

Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/No. Conductors	Metric Wire Range mm ²	Terminal	Terminals with Control Wire Termination
					Catalog Number	Catalog Number
Standard Cu/Al Pressure Terminals						
225	Aluminum	Cu/Al	3–350 (1)	35–185	TA300K ①	—
400	Aluminum	Cu/Al	250–500 (1)	120–240	TA350K ①	—
400	Aluminum	Cu/Al	3/0–250 (2)	95–120	2TA400K ②③	2TA400KCW ②③
400	Aluminum	Cu/Al	3/0–250 (2)	95–120	3TA400K ②④	3TA400KCW ②④
400	Aluminum	Cu/Al	3/0–250 (2)	95–120	4TA400K ⑤⑥	4TA400KCW ⑤⑥
Optional Copper and Cu/Al Pressure Type Terminals						
225	Copper	Cu	3–350 (1)	35–185	T300K ①	—
400	Copper	Cu	250–500 (1)	120–240	T350K ①	—
400	Copper	Cu	3/0–250 (2)	95–120	2T400K ③	2T400KCW ②③
					3T400K ④	3T400KCW ②④
					4T400K ⑤	4T400KCW ⑤⑥
400	Aluminum	Cu/Al	2/0–250 (2) or 2/0–500 (1)	70–120	2TA401K ②③	2TA401KCW ②③
				70–240	3TA401K ②④	3TA401KCW ②④
				70–240	4TA401K ⑤⑥	4TA401KCW ⑤⑥
400	Aluminum	Cu/Al	500–750 (1)	300–400	2TA402K ②③	—
					3TA402K ②④	—
					4TA402K ⑤⑥	—
400	Copper	Cu	500–750 (1)	—	2T402K ②③	—
					3T402K ②④	—
					4T402K ⑤⑥	—

Notes

- ① Individually packed.
- ② Terminal kits contain one terminal for each pole and one terminal cover.
- ③ Two-pole kit.
- ④ Three-pole kit.
- ⑤ Four-pole kit.
- ⑥ Terminal kits contain one terminal for each pole and three interphase barriers.

Accessories Selection Guide and Ordering Information

Enclosures

Type 1 General Purpose

- Surface or flush mounting
- 15–1200 ampere range
- 600 Vac, 500 Vdc

Type 1 enclosed breakers are designed for use in commercial buildings, apartment buildings and other areas where a general purpose enclosure is applicable. The breaker is front operable and is capable of being padlocked in either the ON or OFF position. Ratings through 1200 amperes are listed with Underwriters Laboratories as approved for service entrance application. Both surface and flush mounted enclosures are available.

Type 3R Rainproof Surface Mounting

- Interchangeable hubs (through 400 amperes)
- 15–1200 ampere range
- 600 Vac, 500 Vdc

This general purpose outdoor service center employs a circuit breaker inside a weatherproof sheet steel breaker enclosure to serve

as a main disconnect and protective device for feeder circuits. Ratings through 1200 amperes are listed by Underwriters Laboratories as suitable for service entrance application.

Type 12 Dustproof Surface Mounting

- No knockouts or other openings
- 15–1200 ampere range
- 600 Vac, 500 Vdc

The Type 12 enclosure is designed in line with specifications for special industry applications where unusually severe conditions involving oil, coolant, dust and other foreign materials exist in the operating atmosphere. The handle padlocks in the OFF position and the cover is interlocked with the handle mechanism to prevent opening the cover with the circuit breaker in the ON position. Ratings through 1200 amperes are listed by Underwriters Laboratories as suitable for service entrance application.

Enclosure Selection Data

Breaker Frame Amperes	Enclosure Type Class	Catalog Number
FG 15–225	Type 1	SFDN225
	Type 3R	RFDN225
	Type 12	JFDN225
JG 175–250	Type 1	SJDN250
	Type 3R	RJDN250
	Type 12	JJDN250
KG 300–400	Type 1	SKDN400
	Type 3R	RKDN400
	Type 12	JKDN400
LG 450–600	Type 1	SLDN600
	Type 3R	RLDN600
	Type 12	JLDN600
NG 700–1200	Type 1	SNDN1200
	Type 3R	RNDN1200
	Type 12	JNDN1200

Options and Accessories

Standard Terminals

Breaker Frame	Max. Amp Rating	AWG Wire Range	Metric Wire Range mm ²	Catalog Number
FG	100	14–1/0	2.5–50	3T100FB ①
FG	150	4–4/0	25–95	3TA225FD ①
JG	250	4–350 kcmil	25–185	TA250KB
KG	350	250–500 kcmil	120–240	TA350K
KG	400	3/0–250 kcmil (2)	95–120	3TA400K ①
LG	600	250–500 kcmil (2)	120–240	3TA603LDK
NG	700	1–500 kcmil (2)	50–300	TA700NB1
NG	1000	3/0–400 kcmil (3)	95–185	TA1000NB1
NG	1200	4/0–500 kcmil (4)	120–300	TA1200NB1

Neutral Kits, Insulated and Groundable

Max. Enclosure Rating (Amperes)	Main Lug Number Size Cu/Al	Ground Lug Size Cu/Al	Catalog Number
100	(1) 14–1/0	(1) 14–1/0	INK100
250	(1) 6–350 kcmil	(1) 4–300 kcmil	INK250
400	(1) 4–750 kcmil or (2) 1/0–250 kcmil	(1) 4–300 kcmil	INK400
600	(2) 250–500 kcmil	(1) 4–300 kcmil	INK600
1200	(3) 1/0 to 750 kcmil or (4) 1/0 to 750 kcmil	(1) 6–250 kcmil	INK1200

Internal Accessories

Auxiliary Switch ②

Breaker Frame	Factory Mounted	1A-1B		2A-2B	
		Field Kit Catalog Number	Factory Mounted	Field Kit Catalog Number	Factory Mounted
FG ③	A06	A1X1PK	A13	A2X1RPK	A13
JG	A06	A1X2PK	A13	A2X2PK	A13
KG	A06	A1X3PK	A13	A2X3PK	A13
LG	A06	A1X4PK	A13	A2X4PK	A13
NG	A06	A1X5PK	A13	A2X5PK	A13

Shunt Trip ②

Breaker Frame	Rating	Factory Mounted	Field Kit Catalog Number
FG ③	12–24 Vdc	S02	SNT1LP03K
JG	12–24 Vdc	S42	SNT2P04K
KG	12–24 Vdc	S42	SNT3P04K
LG	12–24 Vdc	S02	SNT4LP03K
NG	12–24 Vdc	S02	SNT5LP03K

Notes

- ① Package of three terminals.
- ② Other accessories are available. Same as standard frame breakers.
- ③ Field installation on the FG Frame is not UL listed.

DC Breaker Terminal Wire Ranges

Breaker Frame	Maximum Breaker Ampacity	Terminal Body Material	Wire Type	AWG Wire Range/ Number of Conductors	Metric Wire Range mm ²	Number of Terminals Included	Standard Terminal Catalog Number
EGEDC, EGSDC, EGHDC	100	Aluminum	Cu/Al	14–1/0	2.5–50	3	3TA125EF
HFDDC	20	Steel	Cu/Al	14–10 (1)	2.5–4 (1)	3	3T20FB
	100	Steel	Cu/Al	14–1/0 (1)	2.5–50 (1)	3	3T100FB
	225	Aluminum	Cu/Al	4–4/0 (1)	25–95 (1)	3	3TA225FD
	250	Stainless steel	Cu	4–350 (1)	25–185 (1)	1	T250FJ
HJDDC	250	Aluminum	Cu/Al	4–350 kcmil (1)	25–185 (1)	1	TA250KB
HKDDC	225	Aluminum	Cu/Al	3–350 kcmil (1)	35–185 (1)	1	TA300K
	350	Aluminum	Cu/Al	250–500 kcmil (1)	120–240 (1)	1	TA350K
	400	Aluminum	Cu/Al	3/0–250 kcmil (2)	95–120 (1)	3	3TA400K
LGEDC, LGSDC, LGHDC	400	Aluminum	Cu/Al	2–500 (1)	35–240 (1)	1	TA350LK
	630	Aluminum	Cu/Al	2–500 kcmil (2)	35–240 (2)	1	TA632L
	630	Aluminum	Cu/Al	2–500 kcmil (2)	35–240 (2)	3	3TA632LK
HLDDC	500	Aluminum	Cu/Al	3/0–350 kcmil (2)	95–150 (2)	1	TA602LD
	600	Aluminum	Cu/Al	400–500 kcmil (2)	185–240 (2)	3	3TA603LDK
HMDLDC	600	Aluminum	Cu/Al	1–500 kcmil (2)	—	1	TA700MA1
	800	Aluminum	Cu/Al	3/0–400 kcmil (3)	—	1	TA800MA2
NBDC	700	Aluminum	Cu/Al	3/0–400 kcmil (3)	95–185 (3)	1	TA1000NB1
	800	Aluminum	Cu/Al	3/0–400 kcmil (3)	95–185 (3)	1	TA1000NB1
	900	Aluminum	Cu/Al	3/0–400 kcmil (3)	95–185 (3)	1	TA1000NB1
	1000	Aluminum	Cu/Al	3/0–400 kcmil (3)	95–185 (3)	1	TA1000NB1
	1200	Aluminum	Cu/Al	4/0–500 kcmil (4)	120–240 (4)	1	TA1200NB1

Note: RGHDC breakers include six rear connectors as standard.

Molded Case Switches

Eaton's DC molded case switches are used in applications requiring a compact, high-capacity disconnect. They are UL 489 listed and have automatic high instantaneous current protection. These devices do not provide overload protection.

Molded Case Switches

Maximum Continuous Ampere Rating at 40 °C	Interrupting Capacity (Volts DC)	Poles in Series	With Line and Load Terminals	Without Line and Load Terminals
			Catalog Number	Catalog Number
600 Vdc Maximum				
100	42	3	HFDDC3100KL	HFDDC3100KW
150	42	3	HFDDC3150KL	HFDDC3150KW
225	42	3	HFDDC3225KL	HFDDC3225KW
250	65	3	JGKDC3250KSG	JGKDC3250KSW
250	42	3	HJDDC3250K	HJDDC3250KW
	35	3	HKDDC3400K	HKDDC3400KW
400	65	3	LGKDC3400KSG	LGKDC3400KSW
	65	3	LGKDC3630KSG	LGKDC3630KSW
600	35	3	HLDDC3600K	HLDDC3600WK
	35	3	HMDLDC3800K	HMDLDC3800WK
500 Vdc Maximum				
100	65	3	EGK3100KSG	EGK3100KSW
250 Vdc Maximum				
100	50	2	HFDDC2100KL	HFDDC2100KW
150	50	2	HFDDC2150KL	HFDDC2150KW
225	50	2	HFDDC2225KL	HFDDC2225KW
1200	50	①	HLDDC21200K ①	HLDDC21200WK ①

Note

① Four-pole frame with two-pole connected in parallel.