

FDE 210+ and 310+ Specifications

Description	Digitrip RMS 210+	Digitrip RMS 310+
Breaker type		
Frame designation	FD	FD
Frames available	100 A, 150 A, 225 A	80 A, 160 A, 225 A
Continuous current range (A)	40–225 A	15–225 A
Ground fault pickup (A)	N/A	16–225 A
Interrupting capacities at 480 Vac (kAIC)	35, 65, 100	35, 65, 100
Protection		
Ordering options	LI, LSI	LS, LSI, LSG, LSIG
Arcflash Reduction Maintenance System™ (or Maintenance Mode)	No	No
Interchangeable trip unit	No	No
High load alarm (suffix B20)	No	No
Ground fault alarm with trip (suffix B21)	No	No
Ground fault alarm, no trip (suffix B22)	No	No
Zone selective interlocking (suffix ZG)	No	LSI, LSIG
Cause of trip indication	No	Yes
Thru-cover accessories	No	No
Test kit available	Yes	Yes

FDE 210+ Adjustability Specifications

210+ settings		FD Frame		
		100 A	150 A	225 A
I_r = continuous current or long delay pickup (amperes) (all 210+)	I_r			
	A	40	70	100
	B	50	80	110
	C	60	90	125
	D	70	100	150
	E	80	110	175
	F	90	125	200
	G (= I_n)	100	150	225
	I_i (x I_n) = Instantaneous pickup (210+ LSI version)	I_i	100	150
J–2x		200	300	450
K–2.5x		250	375	565
L–3x		300	450	675
M–3.5x		350	525	790
N–4x		400	600	900
O–5x		500	750	1125
P–6x		600	900	1350
Q–8x		800	1200	1800
R–10x		1000	1500	2250
S–12x ①		1200	1800	2400
Fixed instantaneous override (all 210+)		2400	2400	2400
"Isd (x Ir) / tsd = SD profile" ② (210+ LSI version)	I_{sd} / t_{sd}	100	150	225
	J	2x / 150	N/A	2x / 150
	K	2x / 300	N/A	2x / 300
	L	2x / I^2t	N/A	2x / I^2t
	M	4x / Inst	N/A	4x / Inst
	N	4x / 150	N/A	4x / 150
	O	4x / I^2t	N/A	4x / I^2t
	P	6x / Inst	N/A	6x / Inst
	Q	6x / 300	N/A	6x / 300
	R	10x / 150	N/A	10x / 150
	S	10x / 300	N/A	10x / 300

FDE 310+ Adjustability Specifications

310+ Settings		FD Frame		
		80 A	160 A	225 A
I_r = continuous current or long delay pickup (amperes) (All 310+)	I_r			
	A	15	60	100
	B	20	70	110
	C	30	80	125
	D	40	90	150
	E	50	100	160
	F	60	125	175
	G	70	150	200
	H (= I_n)	80	160	225
t_r = long delay time (seconds) (All 310+)	Position 1	2	2	2
	Position 2	4	4	4
	Position 3	7	7	7
	Position 4	10	10	10
	Position 5	12	12	12
	Position 6	15	15	15
	Position 7	20	20	20
	Position 8	24	24	24
	I_{sd} (x I_r) = short delay pickup (All 310+)	Position 1	2x	2x
Position 2		3x	3x	3x
Position 3		4x	4x	4x
Position 4		5x	5x	5x
Position 5		6x	6x	6x
Position 6		7x	7x	7x
Position 7		8x	8x	8x
Position 8		10x	10x	10x
Position 9		12x	12x	12x
t_{sd} = short delay time I^2t (milliseconds) (LS, LSG)	Fixed	67 at10x	67 at10x	67 at10x
	Position 1	Inst	Inst	Inst
	Position 2	120	120	120
t_{sd} = short delay time flat (milliseconds) (LSI, LSIG)	Position 3	300	300	300
	Position 1	16	32	45
	Position 2	24	48	67
I_g = ground fault pickup (amperes) (LSG, LSIG)	Position 3	32	64	90
	Position 4	48	96	135
	Position 5	64	128	180
	Position 6	80	160	225
	Position 1	Inst	Inst	Inst
	Position 2	120	120	120
t_g = ground fault delay time (milliseconds) (LSG, LSIG)	Position 3	300	300	300
	Independently Adjustable Instantaneous (I_i) setting ①			
Maintenance Mode pickup ($2.5 \times I_n$) (amperes) ②				

Notes

- ① Not available for FD. Independently adjustable I_i setting available in LG, NG and RG ALSI and ALSIG trip units.
- ② Maintenance Mode not available for FD frames. It is available for KD, LD, MDL, LG, NG and RG.

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Molded Case Circuit Breakers

Series C

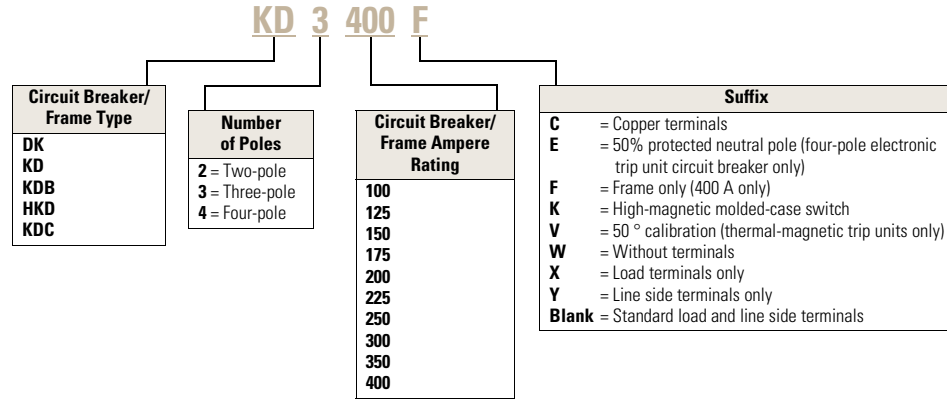
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Catalog Number Selection

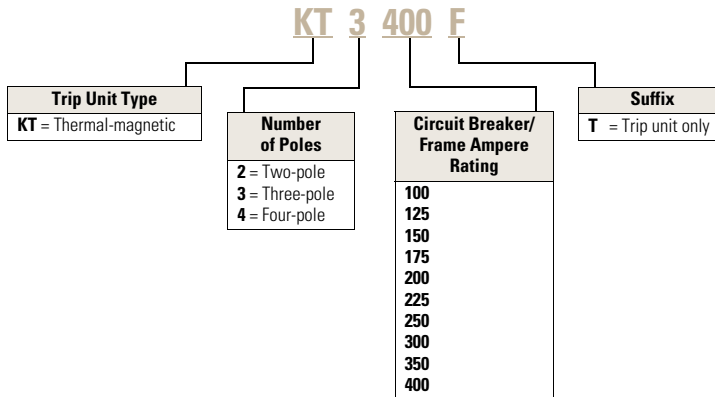
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

K-Frame with Thermal-Magnetic Trip Unit Technology

Thermal-Magnetic Breakers and Frames ①



Thermal-Magnetic Trip Unit ①



Notes

① Frames are the same for thermal-magnetic or 310+ electronic trip units, e.g., **KD3400F** or **HKD3400F**.

Ampere rating available with electronic trip unit only.

Product Selection

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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-T2-179 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.