

Series C® K-Frame



Typical Series C K-Frame Circuit Breaker

- All Series C K-frame Circuit Breakers are HACR rated.
- K-frame circuit breakers are available as individual components (Frame, Trip Unit, Terminals), or factory assembled complete breakers. OPTIM circuit breakers are available as factory assembled only.
- K-frame circuit breakers with non-interchangeable trip units are suitable for reverse feed use.

Interrupting Capacity Ratings

NEMA/UL489/CSA Interrupting Capacity Ratings

Circuit Breaker Type	Number of Poles	Interrupting Capacity (Symmetrical Amperes) (kA)					Page Number
		Volts Ac (50/60Hz)				Volts Dc	
		240	277	480	600		
DK	2, 3	65	—	—	—	10	47
KDB	2, 3, 4	65	—	35	25	10	47
KD	2, 3, 4	65	—	35	25	10	45, 46, 49
HKD	2, 3, 4	100	—	65	35	22	45, 46, 49
KDC	2, 3, 4	200	—	100	50	22	45, 46, 49
CKD	3	65	—	35	25	10	48, 50
CHKD	3	100	—	65	35	22	48, 50

IEC 157-1 (P1) Interrupting Capacity Ratings

Circuit Breaker Type	Number of Poles	Interrupting Capacity (Symmetrical Amperes) (kA)						Page Number
		Volts Ac (50/60Hz)						
		240	380	415	440	500	600	
DK	2, 3	65	—	—	—	—	10	47
KDB	2, 3, 4	65	40	40	—	—	10	47
KD	2, 3, 4	65	40	40	—	—	10	45, 46, 49
HKD	2, 3, 4	100	65	65	—	—	22	45, 46, 49
KDC	2, 3, 4	200	100	100	—	—	22	45, 46, 49

① Weights shown are for thermal magnetic trip units. 3-pole electronic trip units weigh 2.5 lbs. (1.134 kg).
 ② 2-pole circuit breaker or two outside poles of 3-pole circuit breaker.
 ③ Time constant is 3 milliseconds minimum at 10 kA and 8 milliseconds minimum at 22 kA.

Series C® K-Frame

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

Maximum Continuous Ampere Rating @ 40°C	Standard Interrupting Capacity 600 Vac Rated 35 kAIC @ 480 Vac		High Interrupting Capacity 600 Vac Rated 65 kAIC @ 480 Vac		Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC @ 480 Vac		Thermal Magnetic Trip Unit Only For Use With: Standard or High or Ultra High Interrupting Frames	Standard Terminals Only See Page 51 for Optional Terminals
	Factory Assembled Circuit Consisting of Frame, Trip Unit, and Terminals	Frame Only	Factory Assembled Circuit Consisting of Frame, Trip Unit, and Terminals	Frame Only	Factory Assembled Circuit Consisting of Frame, Trip Unit, and Terminals	Frame Only		
	Catalog Number							

2-Pole

Rating	KD	KD2400F	HKD	HKD2400F	KDC	KDC2400F	KT	TA
100	KD2100		HKD2100		KDC2100		KT2100T	TA300K①
125	KD2125		HKD2125		KDC2125		KT2125T	TA300K①
150	KD2150		HKD2150		KDC2150		KT2150T	TA300K①
175	KD2175		HKD2175		KDC2175		KT2175T	TA300K①
200	KD2200		HKD2200		KDC2200		KT2200T	TA300K①
225	KD2225		HKD2225		KDC2225		KT2225T	TA300K①
250	KD2250		HKD2250		KDC2250		KT2250T	TA350K①
300	KD2300		HKD2300		KDC2300		KT2300T	TA350K①
350	KD2350		HKD2350		KDC2350		KT2350T	TA350K①
400	KD2400		HKD2400		KDC2400		KT2400T	2TA400K②

3-Pole

Rating	KD	KD3400F	HKD	HKD3400F	KDC	KDC3400F	KT	TA
100	KD3100		HKD3100		KDC3100		KT3100T	TA300K①
125	KD3125		HKD3125		KDC3125		KT3125T	TA300K①
150	KD3150		HKD3150		KDC3150		KT3150T	TA300K①
175	KD3175		HKD3175		KDC3175		KT3175T	TA300K①
200	KD3200		HKD3200		KDC3200		KT3200T	TA300K①
225	KD3225		HKD3225		KDC3225		KT3225T	TA300K①
250	KD3250		HKD3250		KDC3250		KT3250T	TA350K①
300	KD3300		HKD3300		KDC3300		KT3300T	TA350K①
350	KD3350		HKD3350		KDC3350		KT3350T	TA350K①
400	KD3400		HKD3400		KDC3400		KT3400T	3TA400K②



4-Pole

Rating	KD	KD4400F	HKD	HKD4400F	KDC	KDC4400F	KT	TA
100	KD4100		HKD4100		KDC4100		KT3100T	TA300K①
125	KD4125		HKD4125		KDC4125		KT3125T	TA300K①
150	KD4150		HKD4150		KDC4150		KT3150T	TA300K①
175	KD4175		HKD4175		KDC4175		KT3175T	TA300K①
200	KD4200		HKD4200		KDC4200		KT3200T	TA300K①
225	KD4225		HKD4225		KDC4225		KT3225T	TA300K①
250	KD4250		HKD4250		KDC4250		KT3250T	TA350K①
300	KD4300		HKD4300		KDC4300		KT3300T	TA350K①
350	KD4350		HKD4350		KDC4350		KT3350T	TA350K①
400	KD4400		HKD4400		KDC4400		KT3400T	4TA400K②

Instruction Leaflet/FRED Number 29C104 for Breaker; 29C603 for Thermal Magnetic Trip Unit

① Individually packed.
② 2TA400K, 3TA400K, and 4TA400K terminal kits contain one terminal for each pole and one terminal cover.

Series C® K-Frame

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, Inc., Standards UL486A and UL486B

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 Catalog Number	Figure	Terminals with Control Wire Termination Catalog Number	Figure
Standard Cu/Al Pressure Terminals								
225	Aluminum	Cu/Al	3-350/(1)	35-185	TA300K ^①	4	—	—
350	Aluminum	Cu/Al	250-500/(1)	120-240	TA350K ^①	3	—	—
400	Aluminum	Cu/Al	3/0-250/(2)	95-120	2TA400K ^④	2	2TA400KCW ^④	5
					3TA400K ^⑤	2	3TA400KCW ^⑤	5
					4TA400K ^⑥	2	4TA400KCW ^⑥	5

Optional Copper and Cu/Al Pressure Type Terminals

225	Copper	Cu	3-350/(1)	35-185	T300K ^①	4	—	—
350	Copper	Cu	250-500/(1)	120-240	T350K ^①	3	—	—
400	Copper	Cu	3/0-250/(2)	95-120	2T400K ^④	2	2T400KCW ^④	5
					3T400K ^⑤	2	3T400KCW ^⑤	5
					4T400K ^⑥	2	4T400KCW ^⑥	5
400	Aluminum	Cu/Al	2/0-250/(2)	70-120	2TA401K ^④	1	2TA401KCW ^④	5
			or	70-240	3TA401K ^⑤	1	3TA401KCW ^⑤	5
			2/0-500/(1)	70-240	4TA401K ^⑥	1	4TA401KCW ^⑥	5
400	Aluminum	Cu/Al	500-750/(1)	300-400	TA402K	6	—	—



Figure 1. TA401K

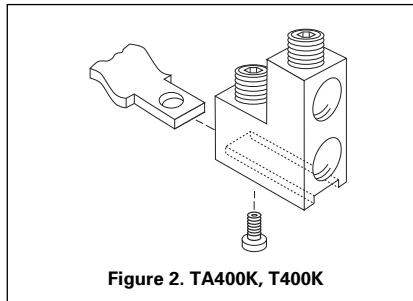


Figure 2. TA400K, T400K

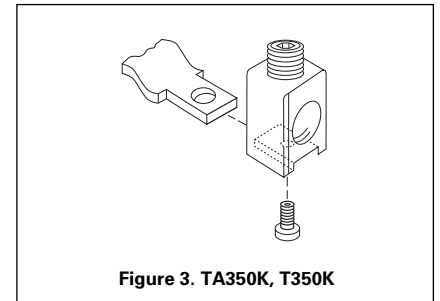


Figure 3. TA350K, T350K

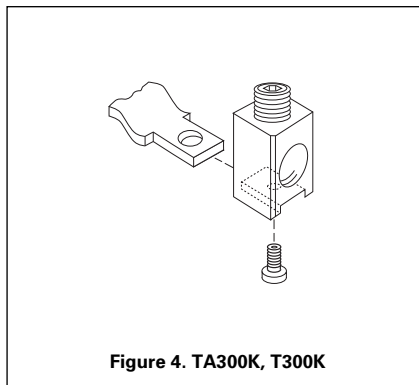


Figure 4. TA300K, T300K

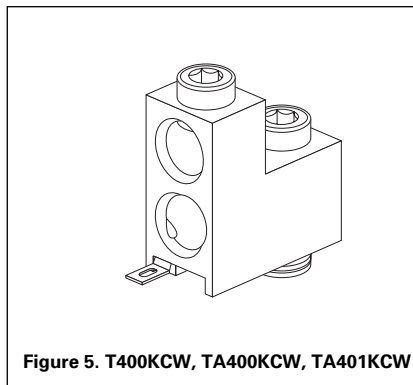


Figure 5. T400KCW, TA400KCW, TA401KCW

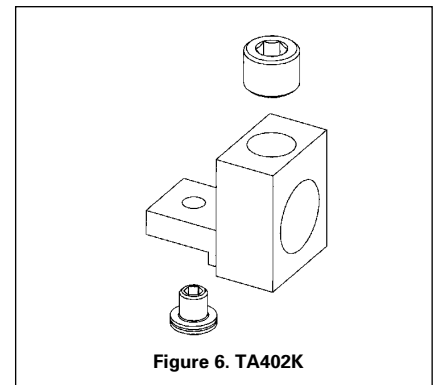


Figure 6. TA402K

See page 53 for other termination accessories.

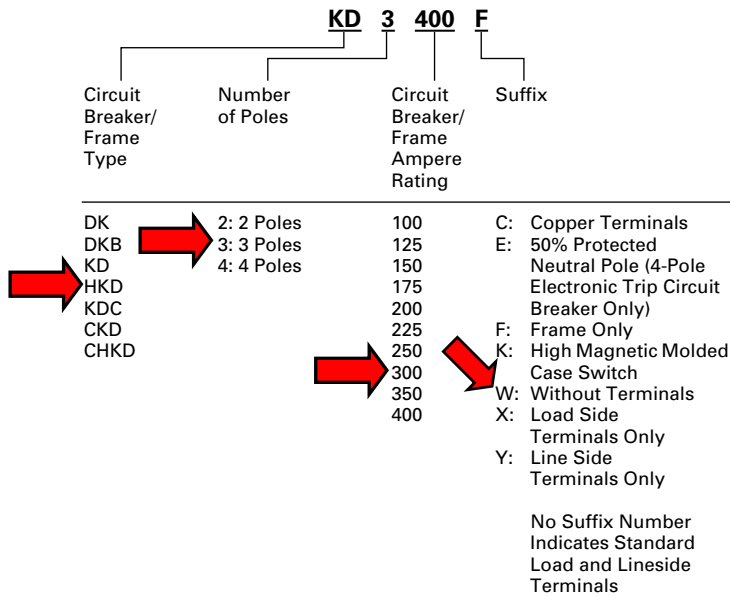
- ① Individually packed.
- ② Terminal kits contain one terminal for each pole and one terminal cover.
- ③ Terminal kits contain one terminal for each pole and three interphase barriers.

- ④ 2-Pole Kit.
- ⑤ 3-Pole Kit.
- ⑥ 4-Pole Kit.

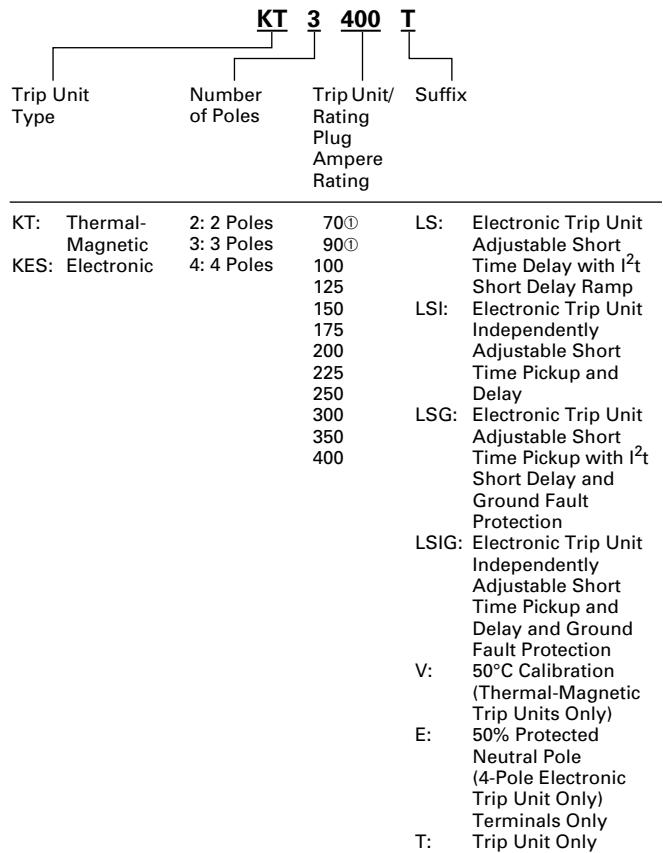
Catalog Numbering System

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.

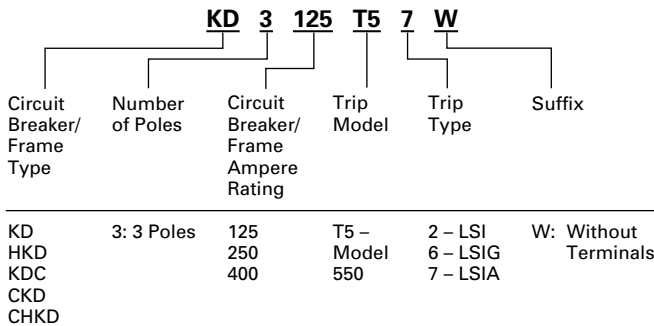
Circuit Breaker/Frame Catalog Number



Trip Unit Catalog Number



OPTIM Circuit Breaker/Frame Catalog Number



Dimensions/Weights

Dimensions, Inches (mm)

Number of Poles	Width	Height	Depth
2, 3	5.5 (140)	10.125 (257)	4.063 (103)
4	7.219 (183)	10.125 (257)	4.063 (103)

Approximate Shipping Weight, Lbs. (kg)

Breaker Type	Complete Breaker		Frame Only		Trip Unit①	
	Number of Poles					
	2	3	2	3	2	3
DK	10 (4.536)	11.5 (5.216)	–	–	–	–
KDB	10 (4.536)	11.5 (5.216)	–	–	–	–
KD	10 (4.536)	11.5 (5.216)	7.5 (3.402)	8.5 (3.856)	1.5 (.680)	1.5 (.680)
HKD	10 (4.536)	11.5 (5.216)	7.5 (3.402)	8.5 (3.856)	1.5 (.680)	1.5 (.680)
KDC	10 (4.536)	11.5 (5.216)	7.5 (3.402)	8.5 (3.856)	1.5 (.680)	1.5 (.680)

① Ampere rating available with electronic trip unit only.

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.

	Reference Page	2-Pole ^①		3-Pole			4-Pole				
		Left	Right	Left	Center	Right	Left	Center	Right	Neu.	
Internal Accessories (Only One Internal Accessory Per Pole)											
Alarm Lockout (Make/Break)	140		■	□		□		■			
Alarm Lockout (2Make/2Break)	140			□		□		■			
Auxiliary Switch (1A, 1B)	143		■	■		■		■		■	
Auxiliary Switch (2A, 2B)	143			■		■		■		■	
Auxiliary Switch (3A, 3B)	143			■		■		■		■	
Auxiliary Switch and Alarm Switch Combination	145			□		□		□		□	
Shunt Trip – Standard	149		■	■		■		■		■	
Shunt Trip – Low Energy	152			■		■		■			
Undervoltage Release Mechanism	156		■	■		■		■			
Cutler-Hammer PowerNet Communications Kit (OPTIM 550)	160					■					

External Accessories

End Cap Kit	161		●			●				●	
Keeper Nut	161		●			●				●	
Control Wire Terminal Kit	162		●			●				●	
Multewire Connectors	162		●			●				●	
Base Mounting Hardware	163		●			●				●	
Terminal Shields	165		●			●				●	
Interphase Barriers	166		●			●				●	
Non-Padlockable Handle Block	168	■				■				■	
Padlockable Handle Block	168					■					
Padlockable Handle Lock Hasp	169		■	□		□		□		□	
Cylinder Lock	169	□	□	□		□					
Key Interlock Kit	170	■	□	□		□		□		□	
Sliding Bar Interlock – Requires Two Breakers	171					●					
Walking Beam Interlock – Requires Two Breakers	171					●					●
Electrical (Solenoid) Operator	172					●					●
Plug-in Adapters	174		●			●					●
Rear Connecting Studs	176		●			●					●
Panelboard Connecting Straps	177		●			●					●
Handle Mechanisms	178		●			●					●
Door Hardware/Accessories	182		●			●					●
Handle Extension	182		●			●					●
IQ Energy Sentinel	184					●					●
Solid-State (Electronic) Portable Test Kit	184		●			●					●

OPTIM System Components 3-Poles

Breaker Interface Module (BIM)	185										
Digitrip OPTImizer	185										
Auxiliary Power Module	185										
Cutler-Hammer PowerNet Software	185										

Modifications (Refer to Cutler-Hammer)

Special Calibration	186		●			●					●
Moisture Fungus Treatment	186		●			●					●
Freeze-Tested Circuit Breakers	186		●			●					●
Marine Application	186		●			●					●

■ Applicable in indicated pole position

□ May be mounted on left or right pole – not both

● Accessory available/Modification available

① 2-pole breaker supplied in 3-pole frame. Current carrying parts omitted from center pole.



AB DE-ION Circuit Breakers

Types KDB, KD, HKD Equipped with Type KT Thermal-Magnetic Trip Unit

