

Catalogue Numbering System

This information is presented only as an aid to understanding Catalogue numbers.

For Basic Assembled Enclosed Thermal Magnetic Circuit Breakers with Standard Line and Load Terminals

Enclosure Type	Option	Breaker Type	Number of Poles	Amperage	Suffix
R	N	HLD	3	500	L
S	N	FD	3	125	
W	N	JD	3	250	
F - Flush, EEMAC 1A S - Surface, EEMAC 1 R - Rain Tight, EEMAC 3R J - Dust Tight, EEMAC 12 W - Water Tight, EEMAC 4/4X, 5	N: Neutral Assembly Specify when Neutral Assembly is required	GHC, GCH, GD ED, EHD, EDC EHD FDB, FD, HFD, FDC JD, HJD, JDC DK KD, HKD, KDC LD, HLD LGE, LGS, LGH MDL, HMDL	2, 3 2, 3 2, 3 2, 3 2, 3 2, 3 2, 3 2, 3 2, 3	15 - 100 100 - 225 15 - 100 15 - 225 70 - 250 100 - 400 100 - 400 300 - 600 250 - 600 300 - 800	L: Line and Load Terminals. Must be specified for F-Frame enclosed circuit breaker to form a complete catalogue number. (Not required for other breaker frames)

For specifying Enclosed Circuit Breakers with a complex catalogue number, such as the thermal magnetic breaker c/w optional terminals and internal accessories or the electronics breakers c/w Digitrip 310 trip unit/Digitrip Optim trip unit, please utilize the Cutler-Hammer's Bid Manager pricing and configuration software.

By using the Standard products' Enclosed Circuit Breaker Takeoff and make selection according to the following parameter, the program will configure and generate a detailed product catalogue number base on the user's specification.

Service Voltage
Continuous Ampere Rating
Required KA Rating
Number of Poles
Type of Circuit Breaker Frame
Type of Trip Unit (Thermal Magnetic, Digitrip 310 / Digitrip Optim 550)
Fix or Adjustable Rating Plug
Standard or Optional Line / Load Terminals
Type of Internal Accessory (Left Pole)
Type of Internal Accessory (Right Pole)
Type of Enclosure
Neutral Assembly
Type of Rain Tight Hub and Size (EEMAC 3R Enclosure)

Example: Catalogue Number RNHKD3400FZ15K09P24A13S10

This catalogue number specifies a Factory Assembled Enclosed 400A HKD Electronic circuit breaker in an EEMAC 3R enclosure. This enclosed circuit breaker includes the 3 Pole 400A HKD breaker frame, KES 400A Digitrip RMS 310 LSI trip unit, 400A fixed rating plug, standard Line/Load terminals, 2a/2b auxiliary switches mounted in right pole with pigtail leads exit to rear, a 120Vac shunt trip mounted in left pole with pigtail leads exit to rear and the 400A Neutral kit N400.

The assembled enclosed circuit breakers are completely factory assembled and packaged in single shipping cartons. Each enclosed circuit breaker assembly includes the enclosure, breaker frame, trip unit and rating plug (where applicable), standard or optional line and load pressure terminals. Customer specified optional breaker accessories and neutral assembly will also be factory installed.

The assembled enclosed circuit breakers are CSA approved for use as Service Entrance Equipment when optional neutral assembly is installed.

Circuit Breaker Selection and Interrupting Ratings

Industrial Circuit Breakers

Circuit Breaker Type	Cont. Amp. Rating @ 40°C	No. Poles	Volts		Type of Trip ^①	CSA/UL Listed Interrupting Ratings rms Symmetrical Amperes (kA)											
			AC	DC		AC Ratings Volts									DC ^②		
						120	120/240	240	277	347	480Y/277	480	600Y/347	600	125	250	125/250
G-Frame																	
GHC	15 - 100	1	277	125	N.I.T.	65	—	—	14	—	—	—	—	—	14	—	—
GHC	15 - 100	2, 3	480Y/277	125/250	N.I.T.	—	—	65	—	—	14	—	—	—	—	—	14
GCH ^④	15 - 100	1	347	125	N.I.T.	65	—	—	14	10	—	—	—	—	14	—	—
GCH ^④	15 - 100	2, 3	600Y/347	125/250	N.I.T.	—	—	65	—	—	14	—	10	—	—	—	14
GD	15 - 50	2	480	125/250	N.I.T.	—	—	65	—	—	—	—	14	—	—	—	10
GD	15 - 100	3	480	250	N.I.T.	—	—	65	—	—	—	22	—	—	—	10	—
F-Frame																	
ED	100 - 225	2, 3	240	125	N.I.T.	—	—	65	—	—	—	—	—	—	10	—	—
EDH	100 - 225	2, 3	240	125	N.I.T.	—	—	100	—	—	—	—	—	—	10	—	—
EDC	100 - 225	2, 3	240	125	N.I.T.	—	—	200	—	—	—	—	—	—	10	—	—
EHD	15 - 100	1	277	125	N.I.T.	—	—	—	14	—	—	—	—	—	10	—	—
EHD	15 - 100	2, 3	480	250	N.I.T.	—	—	18	—	—	—	14	—	—	—	10	—
FDB	15 - 150	1	347	125	N.I.T.	—	—	—	—	14	—	—	—	—	10	—	—
FDB	15 - 225	2, 3	600	250	N.I.T.	—	—	18	—	—	—	14	—	14	—	10	—
FD	15 - 150	1	347	125	N.I.T.	—	—	—	25	18	—	—	—	—	10	—	—
FD	15 - 225	2, 3	600	250	N.I.T.	—	—	65	—	—	—	25	—	18	—	10	—
HFD ^③	15 - 30	1	347	125	N.I.T.	—	—	—	65	25	—	—	—	—	10	—	—
HFD	15 - 225	2,3	600	250	N.I.T.	—	—	100	—	—	—	65	—	25	—	22	—
FDC ^③	15 - 30	1	347	125	N.I.T.	—	—	—	—	30	—	—	—	—	10	—	—
FDC	15 - 225	2, 3	600	250	N.I.T.	—	—	200	—	—	—	100	—	35	—	22	—
J-Frame																	
JD	70 - 250	2, 3	600	250	I.T.	—	—	65	—	—	—	—	—	18	—	10	—
HJD	70 - 250	2, 3	600	250	I.T.	—	—	100	—	—	—	—	—	25	—	22	—
JDC	70 - 250	2, 3	600	250	I.T.	—	—	200	—	—	—	100	—	35	—	22	—
K-Frame																	
DK	250 - 400	2, 3	240	250	I.T.	—	—	65	—	—	—	—	—	—	10	—	—
KD	100 - 400	2, 3	600	250	I.T.	—	—	65	—	—	—	35	—	25	—	10	—
CKD	100 - 400	2, 3	600	250	I.T.	—	—	65	—	—	—	35	—	25	—	10	—
HKD	100 - 400	2, 3	600	250	I.T.	—	—	100	—	—	—	65	—	35	—	22	—
CHKD	100 - 400	2, 3	600	250	I.T.	—	—	100	—	—	—	65	—	35	—	22	—
KDC	100 - 400	2, 3	600	250	I.T.	—	—	200	—	—	—	100	—	50	—	22	—
LG-Frame																	
LGE	250 - 600	3, 4	600	250	I.T.	—	—	65	—	—	—	35	—	18	—	22	—
LGS	250 - 600	3, 4	600	250	I.T.	—	—	85	—	—	—	50	—	25	—	22	—
LGH	250 - 600	3, 4	600	250	I.T.	—	—	100	—	—	—	65	—	35	—	42	—
L-Frame																	
LD	300 - 600	2, 3	600	250	I.T.	—	—	65	—	—	—	35	—	25	—	22	—
HLD	300 - 600	2, 3	600	250	I.T.	—	—	100	—	—	—	65	—	35	—	25	—
MDL-Frame																	
MDL	300 - 800	2, 3	600	250	I.T.	—	—	65	—	—	—	50	—	25	—	22	—
HMDL	300 - 800	2, 3	600	250	I.T.	—	—	100	—	—	—	65	—	35	—	25	—
N-Frame																	
ND (800A Frame)	400 - 800	3	600	—	N.I.T.	—	—	65	—	—	—	50	—	25	—	—	—
ND (1200A Frame)	600 - 1200	3	600	—	N.I.T.	—	—	65	—	—	—	50	—	25	—	—	—
CND (800A Frame)	400 - 800	3	600	—	N.I.T.	—	—	65	—	—	—	50	—	25	—	—	—
HND (800A Frame)	400 - 800	3	600	—	N.I.T.	—	—	100	—	—	—	65	—	35	—	—	—
HND (1200A Frame)	600 - 1200	3	600	—	N.I.T.	—	—	100	—	—	—	65	—	35	—	—	—
CHND (800A Frame)	400 - 800	3	600	—	N.I.T.	—	—	100	—	—	—	65	—	35	—	—	—

- ① N.I.T. is non-interchangeable trip unit and I.T. is interchangeable trip unit.
- ② Two-pole circuit breaker, or two poles of three-pole circuit breaker at 250V DC.
- ③ Interrupting rating @ 347V AC are listed with CSA only. Not UL listed.
- ④ CSA listed only, Not UL listed.

Enclosure Only Catalogue Numbers Selection Guide

Enclosure Only Catalogue Numbers Selection Guide

Breaker Frame	Breaker Ampere Range	Enclosure	
		EEMAC Class	Catalogue Number
Series C Breakers			
GHC, GCH, GD (2- and 3-Pole only) GHCGFEP (1-Pole Only)	15 – 100	1 Surface 3R 12 4/4X, 5 St. Steel	SGDN100 ^① RGDN100 JGDN100 WGDN100
ED, EDH, EDC (100A only) EHD, FDB, FD, HFD	15 – 100	1 Surface 1 Flush 3R 12 4/4X, 5 St. Steel	SFDN100 ^② FFDN100 RFDN100 ^③ JFDN100 WFDN100
ED, EDH, EDC, FD, FDB, HFD	110 – 225	1 Surface 1 Flush 3R 12 4/4X, 5 St. Steel	SFDN225 FFDN225 RFDN225 JFDN225 WFDN225
FDC	15 - 225	1 Surface 1 Flush 3R 12 4/4X, 5 St. Steel	SFDN225 FFDN225 RFDN225 JFDN225 WFDN225
EHD, FD, FDB, HFD, FDC	15 – 50	7/9 Cast Alum.	XFDN050B
	60 – 225 ^④	7/9 Cast Alum.	XFDN225B
JD, HJD, JDC	125 – 250	1 Surface 1 Flush 3R 12 4/4X, 5 St. Steel	SJDN250 FJDN250 RJDN250 JJDN250 WJDN250
JD, HJD, JDC	125 – 250	7/9 Cast Alum.	XJDN250B
DK KD, CKD, HKD, CHKD, KDC	125 – 400	1 Surface 1 Flush 3R 12 4/4X, 5 St. Steel	SKDN400 FKDN400 RKDN400 JKDN400 WKDN400
KD, HKD, KDC, DK	125 – 400	7/9 Cast Alum.	XKDN400B
LGE, LGS, LGH	250 – 600	1 Surface 3R 12 4/4X, 5 St. Steel	SLG630 RLG630 JLG630 WLG630
LD, HLD	300 – 600	1 Surface 3R 12 4/4X, 5 St. Steel	SLDN600 RLDN600 JLDN600 WLDN600
LD, HLD	300 – 600	7/9 Cast Alum.	XMCN800B
MDL, HMDL ND, HND CND (800A frame only) CHND (800A frame only)	400 – 800 400 – 1200 400 – 800 400 – 800	1 Surface 3R 12 4/4X, 5 St. Steel	SNDN1200 RNDN1200 JNDN1200 WNDN1200
MDL, HMDL	400 – 800	7/9 Cast Alum.	XMCN800B
ND, HND	400 – 1200	7/9 Cast Alum.	XNDN1200B

① SGDN100 enclosure is suitable for use with one-pole GHC and GCH breaker. Base mounting plate kit is required. (Cat. # QC6BP)

② SFDN100 Series "B" released 9/15/01.

③ RFDN100 Series "B" released 9/15/01.

④ Maximum wire size: 4/0.

Enclosure Only Catalogue Numbers Selection Guide (Continued)

Breaker Frame	Breaker Ampere Range	Enclosure	
		EEMAC Class	Catalogue Number
Earth Leakage Breakers			
ELFD, ELHFD & ELFDC (3-Pole Only)	15 – 100	1 Surface 1 Flush 3R 12 4/4X	SFD100E FFD100E RFDN100E JFDN100E WFDN100E
LGE, LGS, LGH used with ELLBN	250 – 600	1 Surface 3R 12 4/4X, 5 St. Steel	SLG630E RLG630 JLG630 WLG630

Note: For availability or pricing information in regards to the following special assembled enclosed circuit breakers in EEMAC 1, 3R, 12 or 4X rated enclosures, please contact your local Cutler-Hammer Satellite Service Centre.

1. LDC
2. CLD, CHLD, CLDC
3. CMDL, CHMDL
4. NDC
5. CND, CHND (1200A frame only)
6. RD
7. PB
8. PC
9. Current Limit-R Breakers (FCL, LCL)
10. TRI-PAC Breakers (FB, LA, NB, PB)
11. Combination of Series-C F Frame circuit breaker with the LFD Current Limiter

NEMA 4/4X, 5, 7/9

Note: Not to be used for construction purposes unless approved.

NEMA 4/4X, 5 Stainless Steel (See Figure 8)

Frame	Maximum Amperes	Dimensions in Inches (mm)					Approximate Weight in Lbs. (kg)
		A	B	C	D	E	
G, F	100	19.91 (505.7)	8.84 (224.5)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	16 (7)
Earth Leakage (F)	100	19.91 (505.7)	8.84 (224.5)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	20 (9)
F ^①	225	25.66 (651.8)	8.84 (224.5)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	20 (9)
J	250	37.50 (952.5)	11.56 (293.6)	10.22 (259.6)	35.77 (908.6)	1.94 (49.3)	39 (18)
K ^②	400	41.69 (1058.9)	11.75 (298.5)	14.06 (357.1)	39.94 (1014.5)	1.97 (50.0)	60 (27)
LG	600	53.38 (1355.9)	23.06 (585.7)	14.11 (358.4)	51.64 (1311.7)	1.94 (49.3)	96 (44)
Earth Leakage (LG)	600	53.38 (1355.9)	23.06 (585.7)	14.11 (358.4)	51.64 (1311.7)	1.94 (49.3)	96 (44)
L	600	48.31 (1227.1)	14.91 (378.7)	15.50 (393.7)	46.56 (1182.6)	1.92 (48.8)	88 (40)
M, N	1200	63.59 (1615.2)	22.00 (558.8)	17.63 (447.8)	61.84 (1570.7)	1.97 (50.0)	185 (84)

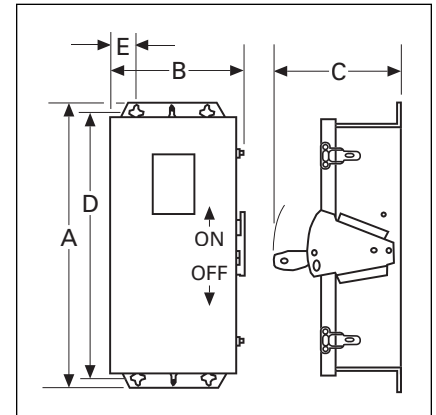


Figure 8. NEMA 4/4X, 5 Stainless Steel

① Maximum wire size: 4/0.
 ② Maximum wire size: 500 kcmil.

NEMA 7/9 Cast Aluminum with Weather-Resistant Seals — 15 – 250 Amperes (See Figure 7)

Breaker Frame	Breaker Size Amperes	Number of Outlets	Dimensions in Inches (mm)										Approximate Weight in Lbs. (kg)	
			Mounting ^③			Inside ^③			Outside ^③			K ^③ Dim		Standard Conduit Size ^③
			A	B	J	C	D	E	F	G	H			
F XFDN050B	15 – 50	4	5.50 (139.7)	13.13 (333.5)	14.13 (358.9)	6.13 (155.7)	10.75 (273.1)	5.25 (133.4)	10.63 (270.0)	15.25 (387.4)	8.88 (225.6)	2.00 (50.8)	1.50 (38.1)	38 (17)
F ^③ XFDN100B	60 – 100	4	6.00 (152.4)	18.00 (457.2)	19.00 (482.6)	6.50 (165.1)	16.00 (406.4)	5.50 (139.7)	11.00 (279.4)	20.50 (520.7)	9.00 (228.6)	2.31 (58.7)	2.00 (50.8)	57 (26)
F ^③ XFDN225B	125 – 225	4	10.25 (260.4)	22.63 (574.8)	—	11.38 (289.1)	20.00 (508.0)	6.38 (162.1)	16.38 (416.1)	25.13 (638.3)	9.63 (244.6)	3.50 (88.9)	2.50 (63.5)	104 (47)
J XJDN225B	70 – 225	4	8.50 (215.9)	27.13 (689.1)	—	11.25 (285.8)	29.88 (759.0)	7.38 (187.5)	16.00 (406.4)	29.50 (749.3)	12.31 (312.7)	4.00 (101.6)	3.00 (76.2)	145 (66)
J XJDN250B	250	4	9.50 (241.3)	27.25 (692.2)	—	11.25 (285.8)	29.88 (759.0)	8.06 (204.7)	16.38 (416.1)	35.00 (889.0)	12.38 (314.5)	4.19 (106.4)	4.00 (101.6)	170 (77)

③ Maximum wire size: 4/0.

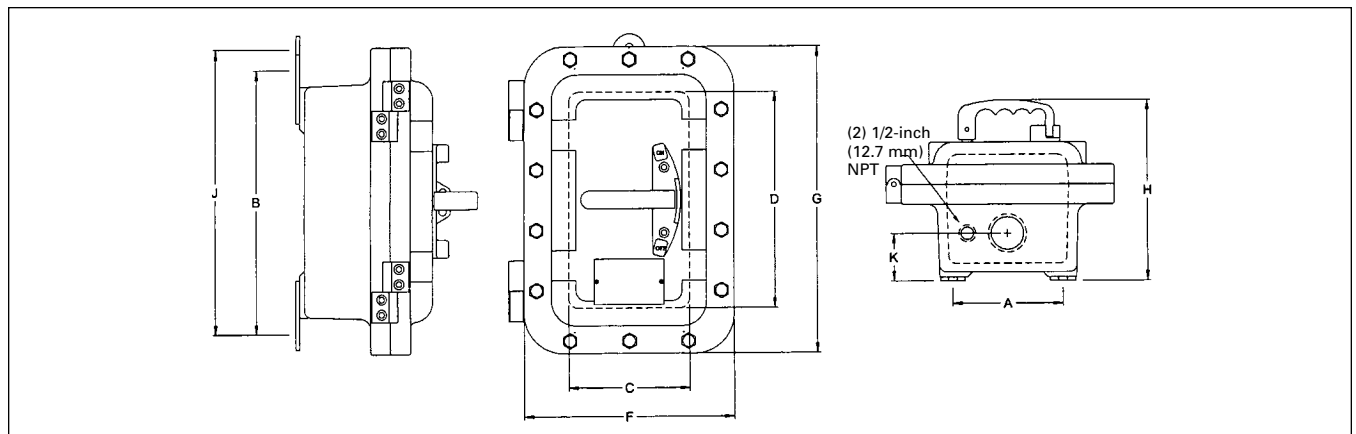


Figure 7. NEMA 7/9 Cast Aluminum with Weather-Resistant Seals — Dual 3 and 4 Point Mounting Available as Standard on F Frame 100 Amperes and Below