


 Cross Reference RA Part Number 25103-408-02

Series C

 Mfr Part Number CHLDB3600FT33W


**J-Frame**

Circuit Breaker Type	Continuous Ampere Rating at 40°C	No. of Poles	Volts		Type of Trip ①	Federal Specification W-C-375b	UL Listed Interrupting Ratings (rms Symmetrical Amperes)								Page Number
			AC	DC			AC (kA)				DC (kA) ②				
							120	120/240	240	277	480	600	125	250	
JDB	70–250	2, 3	600	250	N.I.T.U.	22a	—	—	65	—	35	18	—	10	V4-T2-163
JD	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	65	—	35	18	—	10	V4-T2-162
HJD	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	100	—	65	25	—	22	V4-T2-162
JDC ③	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	200	—	100	35	—	22	V4-T2-162

**K-Frame**

Circuit Breaker Type	Continuous Ampere Rating at 40°C	No. of Poles	Volts		Type of Trip ①	Federal Specification W-C-375b	UL Listed Interrupting Ratings (rms Symmetrical Amperes)								Page Number
			AC	DC			AC (kA)				DC (kA) ②				
							120	120/240	240	277	480	600	125	250	
DK	250–400	2, 3	240	250	N.I.T.U.	14b	—	—	65	—	—	—	—	10	V4-T2-176
KDB	100–400	2, 3	600	250	N.I.T.U.	23a	—	—	65	—	35	25	—	10	V4-T2-176
KD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	65	—	35	25	—	10	V4-T2-170, V4-T2-172, V4-T2-179, V4-T2-182
CKD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	65	—	35	25	—	—	V4-T2-178, V4-T2-185, V4-T2-187
HKD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	100	—	65	35	—	22	V4-T2-170, V4-T2-172, V4-T2-179, V4-T2-182
CHKD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	100	—	65	35	—	—	V4-T2-178, V4-T2-185, V4-T2-187
KDC ③	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	200	—	100	65	—	22	V4-T2-170, V4-T2-172, V4-T2-179, V4-T2-182

**L-Frame**

Circuit Breaker Type	Continuous Ampere Rating at 40°C	No. of Poles	Volts		Type of Trip ①	Federal Specification W-C-375b	UL Listed Interrupting Ratings (rms Symmetrical Amperes)								Page Number
			AC	DC			AC (kA)				DC (kA) ②				
							120	120/240	240	277	480	600	125	250	
LDB	300–600	2, 3	600	250	N.I.T.U.	23a	—	—	65	—	35	25	—	22	V4-T2-201
LD	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	65	—	35	25	—	22	V4-T2-197, V4-T2-198, V4-T2-205
CLD	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	65	—	35	25	—	—	V4-T2-200, V4-T2-211
HLD	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	100	—	65	35	—	25	V4-T2-197, V4-T2-198, V4-T2-205
 CHLD	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	100	—	65	35	—	—	V4-T2-200, V4-T2-211
LDC ③	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	200	—	100	50	—	30	V4-T2-197, V4-T2-198, V4-T2-207
CLDC ③	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	200	—	100	50	—	30	V4-T2-200, V4-T2-213

**Notes**

- ① N.I.T.U. is non-interchangeable trip unit and I.T.U. is interchangeable trip unit.
- ② Two-pole circuit breaker, or two poles of three-pole circuit breaker at 250 Vdc.
- ③ Current limiting.

## Technical Data and Specifications

### UL 489 Interrupting Capacity Ratings <sup>①</sup>

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA rms Symmetrical Amperes)					
		Volts AC (50/60 Hz)				Volts DC	
		240	277	480	600	125	250 <sup>②③</sup>
LDB	2, 3	65	—	35	25	—	22
LD	2, 3, 4	65	—	35	25	—	22
CLD <sup>④</sup>	2, 3, 4	65	—	35	25	—	—
HLD, HLDB	2, 3, 4	100	—	65	35	—	25
CHLD <sup>④</sup>	2, 3, 4	100	—	65	35	—	—
LDC, LDCB <sup>⑤</sup>	2, 3, 4	200	—	100	50	—	30
CLDC <sup>④⑤</sup>	2, 3, 4	200	—	100	50	—	—

### IEC 947-2 Interrupting Capacity Ratings <sup>①</sup>

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)							
		Volts AC (50/60 Hz)				Volts DC			
		240		415		690		250 <sup>②③</sup>	
		$I_{cu}$	$I_{cs}$	$I_{cu}$	$I_{cs}$	$I_{cu}$	$I_{cs}$	$I_{cu}$	$I_{cs}$
LDB	2, 3	85	85	45	45	20	10	20	10
LD	2, 3, 4	85	85	45	45	20	10	20	10
CLD <sup>④</sup>	2, 3, 4	85	85	45	45	20	10	—	—
HLD, HLDB	2, 3, 4	100	100	70	70	25	13	20	10
CHLD <sup>④</sup>	2, 3, 4	100	100	70	70	25	13	—	—
LDC, LDCB	2, 3, 4	200	100	100	75	35	18	20	10
CLDC <sup>④</sup>	2, 3, 4	200	100	100	75	35	18	—	—

#### Notes

- ① Utilization Category A circuit breakers.
- ② L/R = 8 milliseconds minimum.
- ③ Two-pole circuit breaker or two poles of three-pole circuit breaker. Incorporating thermal-magnetic trip unit only.
- ④ 100% rated breakers.
- ⑤ Current limiting.

## Specifications

Trip Unit Type	Digitrip RMS 310		Digitrip OPTIM 550	Digitrip OPTIM 1050
rms sensing	Yes	Yes	Yes	Yes
<b>Breaker Type</b>				
Frame	L	L	L	L
Ampere range	300–600A	300–600A	200–600A	200–600A
Interrupting rating at 480 volts	35, 65, 100 (kA)	35, 65, 100 (kA)	35, 65, 100 (kA)	35, 65, 100 (kA)
<b>Protection</b>				
Ordering options	LS, LSG	LSI, LSIG	LSI, LSI(A), LSIG	LSI(A), LSIG
Fixed rated plug ( $I_n$ )	Yes	Yes	Yes	Yes
Overtemperature trip	Yes	Yes	Yes	Yes
<b>Long Delay Protection (L)</b>				
Adjustable rating plug ( $I_n$ )	Yes	Yes	No	No
Long delay pickup	0.5–1.0 ( $I_n$ ) <sup>①</sup>	0.5–1.0 ( $I_n$ ) <sup>①</sup>	0.4–1.0 ( $I_n$ )	0.4–1.0 ( $I_n$ )
Long delay time $I^2t$	12 seconds	12 seconds	2–24 seconds	2–24 seconds
Long delay time $I^4t$	No	No	1–5 seconds	1–5 seconds
Long delay thermal memory	Yes	Yes	Yes	Yes
High load alarm	No	No	0.5–1.0 $x I_r$	0.5–1.0 $x I_r$
<b>Short Delay Protection (S)</b>				
Short delay pickup	200–800% $x (I_n)$	200–800% $x (I_n)$	150–800% $x (I_r)$	150–800% $x (I_r)$
Short delay time $I^2t$	100 ms	No	100–500 ms	100–500 ms
Short delay time flat	No	Inst–300 ms	100–500 ms	100–500 ms
Short delay time zone selective interlocking	No	No	Yes <sup>④</sup>	Yes
<b>Instantaneous Protection (I)</b>				
Instantaneous pickup	No	200–800% $x (I_n)$	200–800% $x (I_n)$	200–800% $x (I_n)$
Discriminator	No	No	Yes	Yes
Instantaneous override	Yes	Yes	Yes	Yes
<b>Ground Fault Protection (G)</b>				
Ground fault alarm	No	No	20–100% $x (I_g)$	20–100% $x (I_g)$
Ground fault pickup	1–5 $x I_g$ (120A)	1–5 $x I_g$ (120A)	20–100% $x (I_g)$	20–100% $x (I_g)$
Ground fault delay $I^2t$	No	No	100–500 ms	100–500 ms
Ground fault delay flat	Inst–500 ms	Inst–500 ms	100–500 ms	100–500 ms
Ground fault zone selective interlocking	No	No	Yes <sup>④</sup>	Yes
Ground fault thermal memory	Yes	Yes	Yes	Yes
<b>System Diagnostics</b>				
Status LEDs	Yes	Yes	Yes	Yes
Cause of trip LEDs	No	No	Yes	Yes
Magnitude of trip information	No	No	Yes	Yes
Remote signal contact—ground alarm	Yes <sup>⑤</sup>	Yes <sup>⑤</sup>	Yes <sup>④</sup>	Yes
Local auxiliary and bell alarm contact	Optional	Optional	Optional	Included

## Legend

BIM = Breaker Interface Module  
 (A) = GF Alarm  
 $I_g$  = Sensor Rating  
 $I_n$  = Rating Plug  
 $I_r$  = Long Delay Pickup Setting

## Notes

- ① Adjust by rating plug.
- ② By OPTIMizer/BIM.
- ③ Eaton's PowerNet kit.
- ④ Zone interlock kit.
- ⑤ With separate ground fault alarm unit (GFAU).

## Specifications, continued

Trip Unit Type	Digitrip RMS 310		Digitrip OPTIM 550	Digitrip OPTIM 1050
<b>System Monitoring</b>				
Digital display	No	No	Yes <sup>①</sup>	Yes <sup>①</sup>
Current	No	No	Yes	Yes
Power and energy	No	No	No	Yes
Power quality—harmonics	No	No	No	Yes
Power factor	No	No	No	Yes
<b>Communications</b>				
PowerNet	No	No	Yes <sup>②</sup>	Yes
<b>Testing</b>				
Testing method	Test set	Test set	OPTIMizer, BIM, PowerNet	OPTIMizer, BIM, PowerNet

**Legend**

BIM = Breaker Interface Module

(A) = GF Alarm

 $I_s$  = Sensor Rating $I_n$  = Rating Plug $I_r$  = Long Delay Pickup Setting**Notes**

① By OPTIMizer/BIM.

② Eaton's PowerNet kit.