

Product Selection
Non-reversing Contactors

EATON Contactors / Moeller Series

KMParts.com



(866)595-9616

34



Frame B



Frame C



Frame D



Frame F

Table 34-49. Full Voltage Non-reversing 3-Pole Contactors, Frame B – Frame G

UL/CSA Ratings								IEC Ratings				Aux. Contacts				Catalog Number — Screw Terminals ①②		Price U.S. \$	
UL General Purpose Amp Rating	1-Phase hp Ratings			3-Phase hp Ratings				AC-3 I _e (A)	AC-1 (40°C) I _e = I _{th} (A)	Maximum kW Ratings AC-3 3-Phase Motors 50 – 60 Hz				1NO	1NC	1NO-1NC	—	AC Coil	DC Coil
	115V	200V	230V	200V	230V	460V	575V			220/230V	380/400V	415V	660/690V						
Frame B																			
20	1/4	3/4	1	1-1/2	2	3	5	7	22	2.2	3	4	3.5	1NO	—	—	—	—	—
20	1/4	3/4	1	1-1/2	2	3	5	7	22	2.2	3	4	3.5	1NC	—	—	—	—	—
20	1/2	1	1-1/2	3	3	5	7-1/2	9	22	2.5	4	5.5	4.5	1NO	—	—	—	—	—
20	1/2	1	1-1/2	3	3	5	7-1/2	9	22	2.5	4	5.5	4.5	1NC	—	—	—	—	—
20	1	2	3	5	5	10 ^③	10	12	22	3.5	5.5	7	6.5	1NO	—	—	—	—	—
20	1	2	3	5	5	10 ^③	10	12	22	3.5	5.5	7	6.5	1NC	—	—	—	—	—
20	1	2	3	5	5	10 ^③	10	15.5	22	4	7.5	8	7	1NO	—	—	—	—	—
20	1	2	3	5	5	10 ^③	10	15.5	22	4	7.5	8	7	1NC	—	—	—	—	—
Frame C																			
40	2	2	3	5	5	10 ^③	15	18	40	5	7.5	10	11	1NO	—	—	—	—	—
40	2	2	3	5	5	10 ^③	15	18	40	5	7.5	10	11	1NC	—	—	—	—	—
40	2	3	5	7-1/2	10	15	20	25	45	7.5	11	14.5	14	1NO	—	—	—	—	—
40	2	3	5	7-1/2	10	15	20	25	45	7.5	11	14.5	14	1NC	—	—	—	—	—
40	3	5	5	10	10	20	25	32	45	10	15	18	17	1NO	—	—	—	—	—
40	3	5	5	10	10	20	25	32	45	10	15	18	17	1NC	—	—	—	—	—
Frame D																			
63	3	5	7-1/2	10	15	30	40	40	60	12.5	18.5	24	23	—	—	—	—	—	—
63	3	5	7-1/2	10	15	30	40	40	60	12.5	18.5	24	23	1NO-1NC	—	—	—	—	—
80	3	7-1/2	10	15	20	40	50	50	80	15.5	22	30	30	—	—	—	—	—	—
80	3	7-1/2	10	15	20	40	50	50	80	15.5	22	30	30	1NO-1NC	—	—	—	—	—
88	5	10	15	20	25	50	60	65	98	20	30	39	35	—	—	—	—	—	—
88	5	10	15	20	25	50	60	65	98	20	30	39	35	1NO-1NC	—	—	—	—	—
88	5	10	15	20	25	50	60	72	98	22	37	41	35	—	—	—	—	—	—
88	5	10	15	20	25	50	60	72	98	22	37	41	35	1NO-1NC	—	—	—	—	—
Frame F																			
125	7-1/2	15	15	25	30	60	75	80	110	25	37	48	63	—	—	—	—	—	—
125	7-1/2	15	15	25	30	60	75	80	110	25	37	48	63	1NO-1NC	—	—	—	—	—
125	7-1/2	15	15	25	40	75	100	95	130	30	45	57	75	—	—	—	—	—	—
125	7-1/2	15	15	25	40	75	100	95	130	30	45	57	75	1NO-1NC	—	—	—	—	—
Frame G																			
160	10	25	25	40	50	100	100	115	160	37	55	70	90	—	—	—	—	—	—
160	10	25	25	40	50	100	100	115	160	37	55	70	90	1NO-1NC	—	—	—	—	—
180	10	25	30	40	60	125	125	150	190	48	75	91	96	—	—	—	—	—	—
180	10	25	30	40	60	125	125	150	190	48	75	91	96	1NO-1NC	—	—	—	—	—
225 ^④	10	25	30	40	60	125	125	170	275 ^⑤	52	90	100	96	—	—	—	—	—	—
225 ^④	10	25	30	40	60	125	125	170	275 ^⑤	52	90	100	96	1NO-1NC	—	—	—	—	—

① Underscore (_) indicates magnet coil suffix required. See Table 34-58, Page 34-38.
 ② For Spring Cage Terminals, insert **C** after the fourth digit of the Catalog Number. Example: XTCEC007B10A. For 7 – 12A XTCEC Contactors, the power, auxiliary and coil terminals are spring cage. For 18 – 32A XTCEC Contactors, the auxiliary and coil terminals are spring cage. For 40 – 150A XTCEC Contactors, the coil terminals only are spring cage.
 ③ For electrical life contactor application data, see Table 34-51, Page 34-35.
 ④ For 180 – 225A, use 2 x 3/0 AWG wire.
 ⑤ For 225 – 275A, use 2 x 70 mm² wire.

Notes:
 The 7 – 32A XTCE Contactors have positively driven contacts between the integrated auxiliary contact and the auxiliary contact module as well as within the auxiliary contact modules.
 The 40 – 65A XTCE Contactors have positively driven contacts within the auxiliary contact module. 6 auxiliary contacts are possible with a combination of side mounted and front mount auxiliary contacts.
 DC operated contactors (Frames B – G, 7 – 150A) have a built-in suppressor circuit.

Frame B – C contactors with 1NC built-in auxiliary are mirror contacts (XTCE...B01_ – XTCE...C01_).

Contact Sequence (Circuit Symbols) Page 34-35
 Coil Voltage Chart Page 34-38
 Accessories Page 34-49
 Dimensions Page 34-91
 Overload Relays Page 34-104
 Discount Symbol 1CD7

Contactors and Starters

34

Table 34-58. Magnet Coil Suffix

Coil Voltage	Suffix Code
Frame A – B	
110V 50 Hz, 120V 60 Hz	A
220V 50 Hz, 240V 60 Hz	B
230V 50 Hz	F
24V 50/60 Hz	T
24V DC	TD
415V 50 Hz, 480V 60 Hz	C
550V 50 Hz, 600V 60 Hz	D
208V 60 Hz	E
190V 50 Hz, 220V 60 Hz	G
240V 50 Hz, 277V 60 Hz	H
380V 50 Hz, 440V 60 Hz	L
400V 50 Hz	N
380V 60 Hz	P
12V 50/60 Hz	R
24V 50 Hz	U
42V 50 Hz, 48V 60 Hz	W
48V 50 Hz	Y
120V DC	AD
220V DC	BD
12V DC	RD
48V DC	WD

Coil Voltage	Suffix Code
Frame C – F	
110V 50 Hz, 120V 60 Hz	A
220V 50 Hz, 240V 60 Hz	B
230V 50 Hz	F
24V 50/60 Hz	T
24 – 27V DC	TD
415V 50 Hz, 480V 60 Hz	C
550V 50 Hz, 600V 60 Hz	D
208V 60 Hz	E
190V 50 Hz, 220V 60 Hz	G
240V 50 Hz, 277V 60 Hz	H
380V 50 Hz, 440V 60 Hz	L
400V 50 Hz	N
380V 60 Hz	P
12V 50/60 Hz	R
24V 50 Hz	U
42V 50 Hz, 48V 60 Hz	W
48V 50 Hz	Y
110 – 130V DC	AD
200 – 240V DC	BD
12 – 14V DC	RD ^①
48 – 60V DC	WD

Coil Voltage	Suffix Code
Frame G	
100 – 120V 50/60 Hz	A
190 – 240V 50/60 Hz	B
24V 50/60 Hz	T
24 – 27V DC	TD
480 – 500V 50/60 Hz	C
380 – 440V 50/60 Hz	L
42 – 48V 50/60 Hz	W
110 – 130V DC	AD
200 – 240V DC	BD
48 – 60V DC	WD
Frame L – N	
110 – 250V 40 – 60 Hz/DC	A
250 – 500V 40 – 60 Hz	C
48 – 110V 40 – 60 Hz/DC	Y
24 – 48V DC	TD ^②
Frame L – M, S-Series	
110 – 120V 50/60 Hz	A
220 – 240V 50/60 Hz	B
Frame P – R	
220 – 250V 50 – 60 Hz/DC	B

① Frame C – D only.
② Frame L – M only.

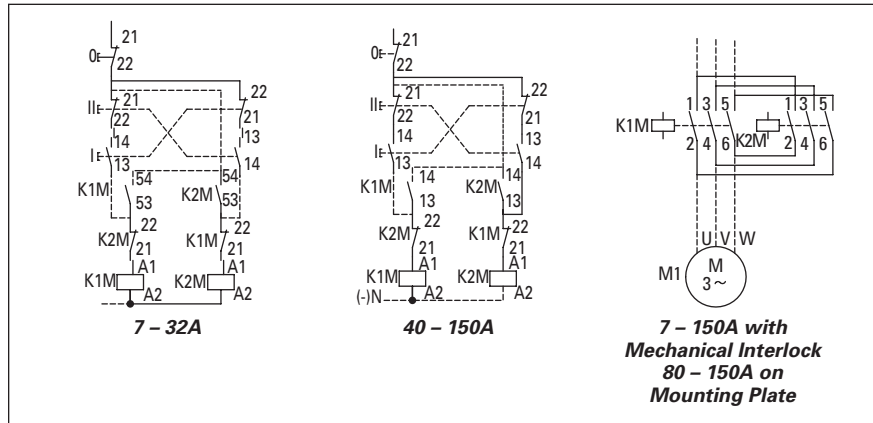


Figure 34-34. 7 – 150A XTGR Reversing Contactor Wiring Diagram



KMParts.com



(866)595-9616

Accessories Page 34-49
Dimensions Page 34-91
Overload Relays Page 34-104

Catalog Number Selection

Table 34-48. XTIEC Contactors & Starters — Catalog Numbering System

XT CE C 007 B 01 AD P16																																			
<table border="1"> <tr> <td>Designation</td> </tr> <tr> <td>XT = XT Line of IEC Control</td> </tr> </table>			Designation	XT = XT Line of IEC Control																															
Designation																																			
XT = XT Line of IEC Control																																			
<table border="1"> <tr> <td>Type</td> </tr> <tr> <td> CE = 3-Pole FVNR IEC Contactor CS = 3-Pole FVNR S Series IEC Contactor CF = 4-Pole FVNR IEC Contactor CR = 3-Pole FVR IEC Contactor CC = IEC Capacitor Contactor AE = FVNR IEC Starter AS = FVNR S-Series IEC Starter AR = FVR IEC Starter </td> </tr> </table>			Type	CE = 3-Pole FVNR IEC Contactor CS = 3-Pole FVNR S Series IEC Contactor CF = 4-Pole FVNR IEC Contactor CR = 3-Pole FVR IEC Contactor CC = IEC Capacitor Contactor AE = FVNR IEC Starter AS = FVNR S-Series IEC Starter AR = FVR IEC Starter																															
Type																																			
CE = 3-Pole FVNR IEC Contactor CS = 3-Pole FVNR S Series IEC Contactor CF = 4-Pole FVNR IEC Contactor CR = 3-Pole FVR IEC Contactor CC = IEC Capacitor Contactor AE = FVNR IEC Starter AS = FVNR S-Series IEC Starter AR = FVR IEC Starter																																			
<table border="1"> <tr> <td>Terminations</td> </tr> <tr> <td> Blank = Screw Terminals (6 – 65A); 5 mm (80 – 150A); No Lugs (185 – 2000A) Spring Cage Terminals C = (6 – 32A); Spring Cage Coil Terminals Only (185 – 500A) </td> </tr> </table>			Terminations	Blank = Screw Terminals (6 – 65A); 5 mm (80 – 150A); No Lugs (185 – 2000A) Spring Cage Terminals C = (6 – 32A); Spring Cage Coil Terminals Only (185 – 500A)																															
Terminations																																			
Blank = Screw Terminals (6 – 65A); 5 mm (80 – 150A); No Lugs (185 – 2000A) Spring Cage Terminals C = (6 – 32A); Spring Cage Coil Terminals Only (185 – 500A)																																			
<table border="1"> <tr> <td>Current Ratings, AC-3</td> <td>Frame Size Designation</td> <td>Built-In Auxiliary Contact</td> </tr> <tr> <td>007 = 7A 009 = 9A 012 = 12A 015 = 15A</td> <td>B = 45 mm</td> <td>01 = 1NC 10 = 1NO</td> </tr> <tr> <td>018 = 18A 025 = 25A 032 = 32A</td> <td>C = 45 mm</td> <td></td> </tr> <tr> <td>040 = 40A 050 = 50A 065 = 65A 072 = 72A</td> <td>D = 55 mm</td> <td>00 = 0NO-0NC S1 = 1NO-1NC Side-mount Auxiliary</td> </tr> <tr> <td>080 = 80A 095 = 95A</td> <td>F = 90 mm</td> <td>S2 = 2NO-2NC Side-mount Auxiliary</td> </tr> <tr> <td>115 = 115A 150 = 150A 170 = 170A</td> <td>G = 90 mm</td> <td>11 = 1NO-1NC Top-mount Auxiliary</td> </tr> <tr> <td>185 = 185A 225 = 225A 250 = 250A</td> <td>L = 140 mm</td> <td>22 = 2NO-2NC</td> </tr> <tr> <td>300 = 300A 400 = 400A 500 = 500A 570 = 580A</td> <td>M = 160 mm</td> <td></td> </tr> <tr> <td>580 = 580A 650 = 650A 750 = 750A 820 = 820A C10 = 1000A</td> <td>N = 250 mm</td> <td></td> </tr> <tr> <td>C14 = 1400A, AC-1</td> <td>P = 260 mm</td> <td></td> </tr> <tr> <td>C16 = 1600A, AC-3 C20 = 2000A, AC-1</td> <td>R = 515 mm</td> <td></td> </tr> </table>			Current Ratings, AC-3	Frame Size Designation	Built-In Auxiliary Contact	007 = 7A 009 = 9A 012 = 12A 015 = 15A	B = 45 mm	01 = 1NC 10 = 1NO	018 = 18A 025 = 25A 032 = 32A	C = 45 mm		040 = 40A 050 = 50A 065 = 65A 072 = 72A	D = 55 mm	00 = 0NO-0NC S1 = 1NO-1NC Side-mount Auxiliary	080 = 80A 095 = 95A	F = 90 mm	S2 = 2NO-2NC Side-mount Auxiliary	115 = 115A 150 = 150A 170 = 170A	G = 90 mm	11 = 1NO-1NC Top-mount Auxiliary	185 = 185A 225 = 225A 250 = 250A	L = 140 mm	22 = 2NO-2NC	300 = 300A 400 = 400A 500 = 500A 570 = 580A	M = 160 mm		580 = 580A 650 = 650A 750 = 750A 820 = 820A C10 = 1000A	N = 250 mm		C14 = 1400A, AC-1	P = 260 mm		C16 = 1600A, AC-3 C20 = 2000A, AC-1	R = 515 mm	
Current Ratings, AC-3	Frame Size Designation	Built-In Auxiliary Contact																																	
007 = 7A 009 = 9A 012 = 12A 015 = 15A	B = 45 mm	01 = 1NC 10 = 1NO																																	
018 = 18A 025 = 25A 032 = 32A	C = 45 mm																																		
040 = 40A 050 = 50A 065 = 65A 072 = 72A	D = 55 mm	00 = 0NO-0NC S1 = 1NO-1NC Side-mount Auxiliary																																	
080 = 80A 095 = 95A	F = 90 mm	S2 = 2NO-2NC Side-mount Auxiliary																																	
115 = 115A 150 = 150A 170 = 170A	G = 90 mm	11 = 1NO-1NC Top-mount Auxiliary																																	
185 = 185A 225 = 225A 250 = 250A	L = 140 mm	22 = 2NO-2NC																																	
300 = 300A 400 = 400A 500 = 500A 570 = 580A	M = 160 mm																																		
580 = 580A 650 = 650A 750 = 750A 820 = 820A C10 = 1000A	N = 250 mm																																		
C14 = 1400A, AC-1	P = 260 mm																																		
C16 = 1600A, AC-3 C20 = 2000A, AC-1	R = 515 mm																																		
<table border="1"> <tr> <td colspan="2">XTAE, XTAS and XTAR Starters Only — Maximum Overload Relay</td> </tr> <tr> <td colspan="2">XTOB Maximum Overload Rating</td> </tr> <tr> <td> Frame B P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 012 = 9 – 12A 016 = 12 – 16A </td> <td> Frame D 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 040 = 24 – 40A 057 = 40 – 57A 065 = 50 – 65A 075 = 65 – 75A </td> </tr> <tr> <td> Frame C P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 032 = 24 – 32A </td> <td> Frame F 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A </td> </tr> <tr> <td></td> <td> Frame G 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 150 = 120 – 150A 175 = 145 – 175A </td> </tr> <tr> <td></td> <td> Frame L 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 160 = 120 – 160A 220 = 160 – 220A 250 = 200 – 250A </td> </tr> </table>			XTAE, XTAS and XTAR Starters Only — Maximum Overload Relay		XTOB Maximum Overload Rating		Frame B P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 012 = 9 – 12A 016 = 12 – 16A	Frame D 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 040 = 24 – 40A 057 = 40 – 57A 065 = 50 – 65A 075 = 65 – 75A	Frame C P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 032 = 24 – 32A	Frame F 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A		Frame G 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 150 = 120 – 150A 175 = 145 – 175A		Frame L 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 160 = 120 – 160A 220 = 160 – 220A 250 = 200 – 250A																					
XTAE, XTAS and XTAR Starters Only — Maximum Overload Relay																																			
XTOB Maximum Overload Rating																																			
Frame B P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 012 = 9 – 12A 016 = 12 – 16A	Frame D 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 040 = 24 – 40A 057 = 40 – 57A 065 = 50 – 65A 075 = 65 – 75A																																		
Frame C P16 = 0.1 – 0.16A P24 = 0.16 – 0.24A P40 = 0.24 – 0.4A P60 = 0.4 – 0.6A 001 = 0.6 – 1A 1P6 = 1.0 – 1.6A 2P4 = 1.6 – 2.4A 004 = 2.4 – 4A 006 = 4 – 6A 010 = 6 – 10A 016 = 10 – 16A 024 = 16 – 24A 032 = 24 – 32A	Frame F 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A																																		
	Frame G 035 = 25 – 35A 050 = 35 – 50A 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 150 = 120 – 150A 175 = 145 – 175A																																		
	Frame L 070 = 50 – 70A 100 = 70 – 100A 125 = 95 – 125A 160 = 120 – 160A 220 = 160 – 220A 250 = 200 – 250A																																		
<table border="1"> <tr> <td colspan="2">C396 Maximum Overload Rating</td> </tr> <tr> <td colspan="2">Suffix</td> </tr> <tr> <td colspan="2">Std. Class 5/10/20/30</td> </tr> <tr> <td> Frame B 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32 = </td> <td> 3EP05 3E002 3E005 3E008 3E032 </td> </tr> <tr> <td> Frame C 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32A = </td> <td> 3EP05 3E002 3E005 3E008 3E032 </td> </tr> <tr> <td> Frame D 6.4 – 32A = 9 – 45A = 15 – 75A = </td> <td> 3E032 3E045 3E075 </td> </tr> <tr> <td> Frame F 22 – 110A = </td> <td> 3E110 </td> </tr> <tr> <td> Frame G 30 – 150A = </td> <td> 3E150 </td> </tr> </table>			C396 Maximum Overload Rating		Suffix		Std. Class 5/10/20/30		Frame B 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32 =	3EP05 3E002 3E005 3E008 3E032	Frame C 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32A =	3EP05 3E002 3E005 3E008 3E032	Frame D 6.4 – 32A = 9 – 45A = 15 – 75A =	3E032 3E045 3E075	Frame F 22 – 110A =	3E110	Frame G 30 – 150A =	3E150																	
C396 Maximum Overload Rating																																			
Suffix																																			
Std. Class 5/10/20/30																																			
Frame B 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32 =	3EP05 3E002 3E005 3E008 3E032																																		
Frame C 0.1 – 0.5A = 0.4 – 2.0A = 1 – 5A = 1.6 – 8A = 6.4 – 32A =	3EP05 3E002 3E005 3E008 3E032																																		
Frame D 6.4 – 32A = 9 – 45A = 15 – 75A =	3E032 3E045 3E075																																		
Frame F 22 – 110A =	3E110																																		
Frame G 30 – 150A =	3E150																																		
<table border="1"> <tr> <td>Coil Codes</td> </tr> <tr> <td>See Table 34-58.</td> </tr> </table>			Coil Codes	See Table 34-58.																															
Coil Codes																																			
See Table 34-58.																																			

Dimensions

XTCE Contactors (3-Pole)

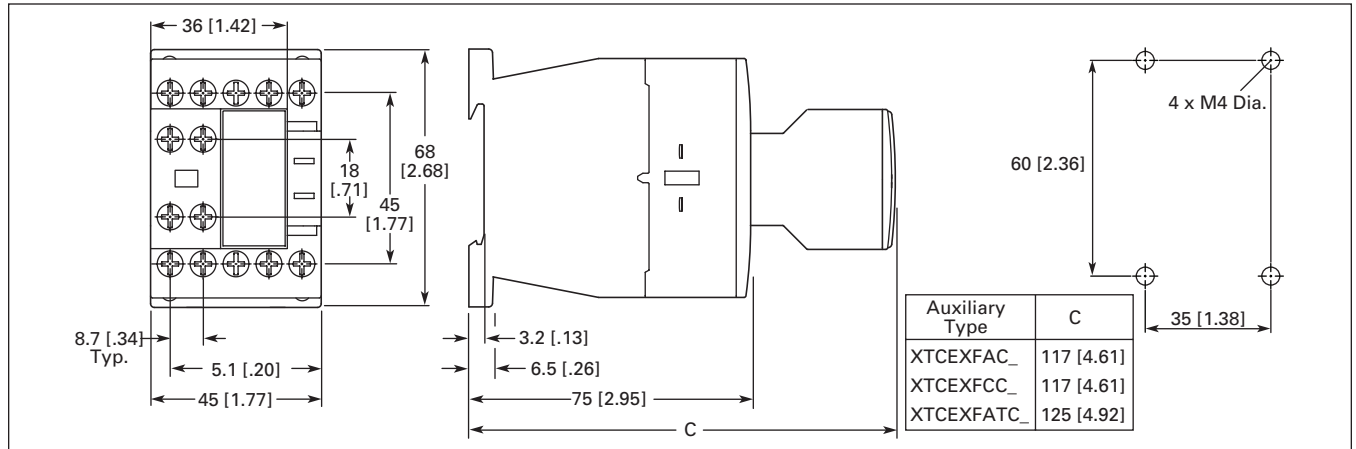


Figure 34-46. Frame B, XTCE007B and XTCE015B Contactors with Screw Terminals (7 – 15A) XTCE020B — Approximate Dimensions in mm [in]

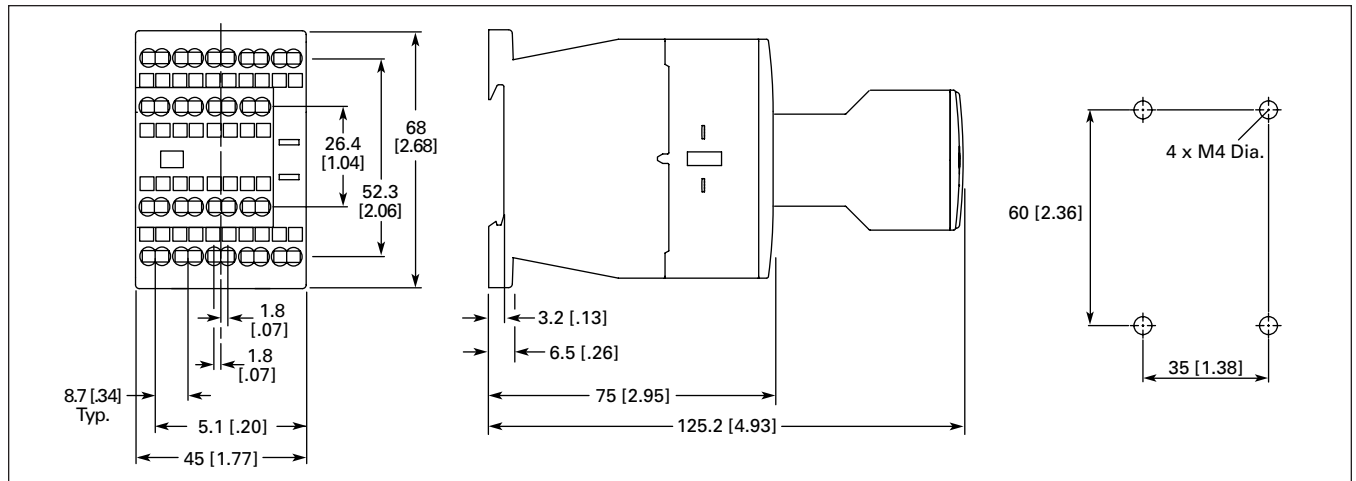


Figure 34-47. Frame B, XTCEC007B – XTCEC012B Contactors with Spring Cage Terminals (7 – 12A) — Approximate Dimensions in mm [in]

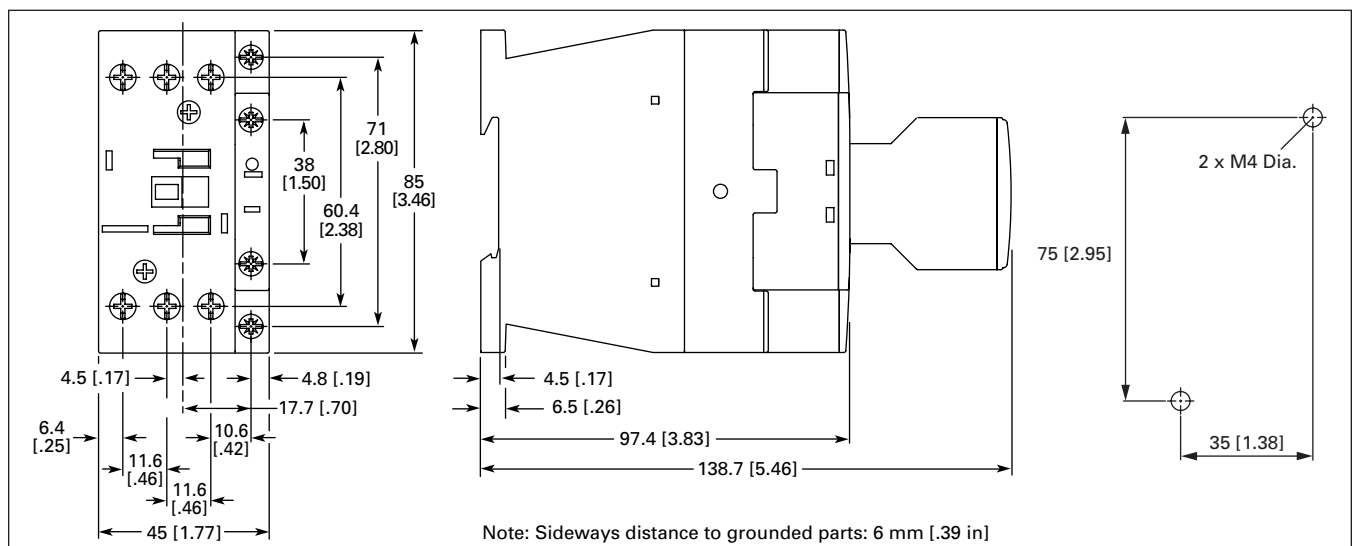


Figure 34-48. Frame C, XTCE018C – XTCE032C Contactors (18 – 32A) — Approximate Dimensions in mm [in]