







Control Modules (For 100-C09...C97 contactors)

	Description	Connection Diagrams	For Use With	Cat. No.	
	Pneumatic Timing Modules • Pneumatic timing element contacts switch after the delay time. The contacts on the main contactor relay continue to operate without delay.	On-Delay 0.3...30 s Range 1.8...180 s Range	100-C or 700-CF with AC or 24V DC electronic coils ‡	100-FPTA30	
		Off-Delay 0.3...30 s Range 1.8...180 s Range		100-FPTB30	
				100-C all, 700-CF all	100-FPTB180
					100-FPTB180
	Electronic Timing Modules — On-Delay Delay of the contactor or control relay solenoid. The contactor or control relay is energized at the end of the delay time.	0.1...3 s Range 1...30 s Range 10...180 s Range	100-C or 700-CF with 110...240V, 50/60 Hz or 110...250V DC coils	100-ETA3	
				100-ETA30	
				100-C or 700-CF with 24...48V DC coils	100-ETAJ3
					100-ETAJ180
	Electronic Timing Modules — Off-Delay Delay of the contactor or control relay solenoid. After interruption of the control signal, the contactor or control relay is deenergized at the end of the delay time.	0.3...3 s Range 1...30 s Range 10...180 s Range	100-C09...C37 or 700-CF with 24V 50/60 Hz coils	100-ETBKJ3	
				100-ETBKJ30	
				100-ETBKJ180	
				100-C or 700-CF with 110...240V 50/60 Hz coils	100-ETB3
					100-ETB30
					100-ETB180
	Electronic Timing Modules • Delay of the contactor solenoid. Contactor K 3 (Y) is de-energized (off) and K 2 (D) is energized (on) at the end of the set Y end time. (Switching delay at 50 ms.) • Continuous adjustment range • High repeat accuracy	Transition Time Y Contactor 1...30 s Range	100-C with 110...240V, 50/60 Hz coils	100-ETY30	
	Mechanical Interlocks • For interlocking of two contactors. • Common interlock for all Bul. 100-C contactor sizes • Interlocking of different sizes possible • Mechanical and electrical interlocking possible in one module by means of integrated auxiliary contacts • 9 mm dovetail connector included	Mechanical only, without auxiliary contacts	100-C (except 100-C40, -C90)	100-MCA00	
		Mechanical/ electrical interlock with 2 N.C. auxiliary contacts	100-C (except 100-C40, -C90)	100-MCA02	
	Mechanical Latch • Following contactor latching, the contactor coil is immediately de-energized (off) by the N.C. auxiliary contact (65-66). • Electrical or manual release • 1 N.O. + 1 N.C. auxiliary contacts • Suitable for all Bul. 100-C contactor sizes, 9...97 A	Maximum command duration 0.03...10 s	100-C with AC or 24V DC electronic coils (except 100-C90)	100-FL11⊗	

‡ Cannot be used with side-mounted auxiliary contacts on 700-CF DC relays.

⊗ **Coil Voltage Code**

The cat. no. as listed is incomplete. Select a voltage suffix code from the table below to complete the cat. no. Example: 120V, 60 Hz: **Cat. No. 100-FL11⊗** becomes **Cat. No. 100-FL11D**.

Voltage* [V]	24	48	100	110	120	230...240	240	277	380...400	400...415	440	480
50 Hz	K	Y	KP	D	—	VA	KA	—	N	G	B	—
60 Hz	J	—	—	—	D	—	KA	T	—	—	N	B

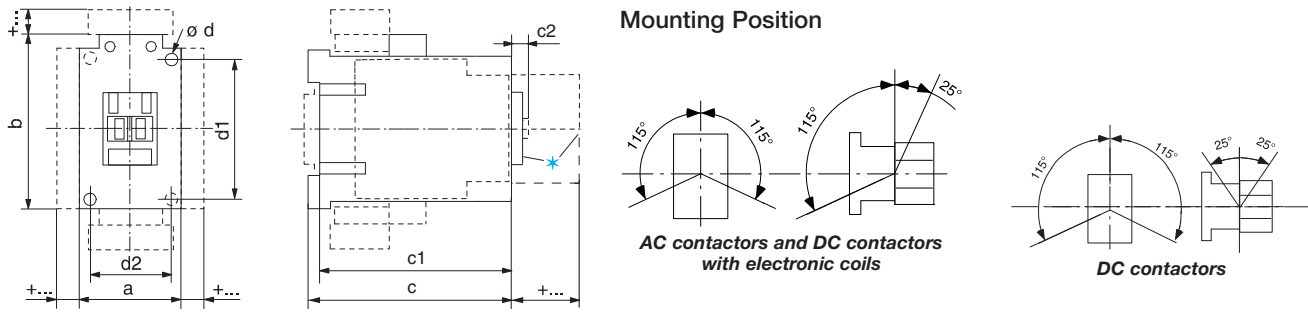
* For special voltages, consult your local Rockwell Automation sales office or Allen-Bradley distributor.



Bulletin 100-C/104-C
IEC Contactors
 Approximate Dimensions

Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.

Bulletin 100-C Contactors and Accessories



AC Contactors and DC Contactors with 12V or 24V Electronic Coils

Cat. No.	a	b	c	c1	c2	Ød	d1	d2
100-C09...100-C23	45 (1-25/32)	81 (3-3/16)	80.5 (3-11/64)	75.5 (2-31/32)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C30, 100-C37	45 (1-25/32)	81 (3-3/16)	97.5 (4)	92.5 (3-41/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C40	59 (2-21/64)	81 (3-3/16)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C43	54 (2-1/8)	81 (3-3/16)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C60...100-C97	72 (2-53/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)
100-C90	95 (3-47/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)

DC Contactors with Conventional Coils

Cat. No.	a	b	c	c1	c2	Ød	d1	d2
100-C09Z...100-C16Z	45 (1-25/32)	81 (3-3/16)	106.5 (4-3/16)	101.5 (4)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C23Z	45 (1-25/32)	81 (3-3/16)	123.5 (4-55/64)	119 (4-43/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C30Z...100-C37Z	45 (1-25/32)	81 (3-3/16)	141.5 (5-37/64)	136.5 (5-3/8)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C40Z	59 (2-21/64)	81 (3-3/16)	144.5 (5-11/16)	139.5 (5-1/2)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C43Z	54 (2-1/8)	81 (3-3/16)	144.5 (5-11/16)	139.5 (5-1/2)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C60D...100-C97D	72 (2-53/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)
100-C90D	95 (3-47/64)	81 (3-3/16)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)



DC Contactors with 110V or 220V DC Electronic Coils

Cat. No.	a	b	c	c1	c2	Ød	d1	d2
100-C09E...100-C23E	45 (1-25/32)	105 (4-1/8)	80.5 (3-11/64)	75.5 (2-31/32)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C30E...100-C37E	45 (1-25/32)	105 (4-1/8)	97.5 (4)	92.5 (3-41/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C40EA...100-C40ED	59 (2-21/64)	105 (4-1/8)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C43EA...100-C43ED	54 (2-1/8)	105 (4-1/8)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)

Accessories

	Contactors with	mm	(inches)
Auxiliary contact block for front mounting	2- or 4-pole	c/c1 + 39	(c/c1 + 1-37/64)
Auxiliary contact block for side mounting	1- or 2-pole	a + 9	(a + 23/64)
Pneumatic Timing Module		c/c1 + 58	(c/c1 + 2-23/64)
Electronic Timing Module	on coil terminal side	b + 24	(b + 15/16)
Mechanical Interlock	on side of contactor	a + 9	(a + 23/64)
Mechanical Latch		c/c1 + 61	(c/c1 + 2-31/64)
Interface Module	on coil terminal side	b + 9	(b + 23/64)
Surge Suppressor	on coil terminal side	b + 3	(b + 1/8)
Labeling with *	label sheet	+ 0	(+ 0)
	marking tag sheet with clear cover	+ 0	(+ 0)
	marking tag adapter for System V4 / V5	+ 5.5	(+ 7/32)
	marking tag adapter for System Bul. 1492W	+ 5.5	(+ 7/32)
Terminal Lug Kit	100-C09...C23	b + 53	(b + 2-3/32)
	100-C30...37	b + 44	(b + 1-47/64)
	100-C43	b + 52	(b + 2-3/64)
	100-C60...C97	b + 99	(b + 3-7/8)
Paralleling Links	100-C09...C23	b + 78	(b + 3-1/16)
	100-C30...C37	c + 9/5	(c + 3/8)
		b + 85	(b + 3-11/32)

Auxiliary Contacts, Auxiliary Contact Blocks, and Pneumatic Timers

	100-K		100-C, 100S-C				100-D, 100S-D			
	Internal	Front-mounted	Internal	Front-mounted	Front-mounted (Bifurcated)	Side-mounted	Side-mounted			
							Convent'l	Bifurcated	Electronically compatible	
Switching of AC Loads										
AC-12 I _{th}	at 40 °C [A]	10	10	20	10	10	10	16	10	0.1
	at 60 °C [A]	6	6	20	6	6	6	12	6	at 250V
AC-15 at rated voltage of										
24V [A]	6	3	10	6	3	6	5.5	3	(1...100 mA) at 3...125V	
42/48V [A]	6	3	10	6	3	6	5.5	3		
120V [A]	6	3	10	6	3	6	5.5	3		
230V [A]	3	2	10	5.5	3	5.5	5.5	3		
240V [A]	3	2	10	5	3	5	5	3		
400V [A]	1.8	1.2	6	3	2	3	3	2		
415V [A]	1.8	1.2	6	3	2	3	2.5	2		
500V [A]	1.4	1.0	2.5	1.6	1.2	1.6	1.6	1.2		
690V [A]	1.0	0.6	1	1	0.7	1	1	0.7		
Switching of DC Loads										
DC-12 L/R < 1 ms resistive loads at										
24V DC [A]	6	—	12	12	6	6	16	16	—	
48V DC [A]	4	—	9	9	3.2	3.2	9	9	—	
110V DC [A]	0.6	—	3.5	3.5	0.45	0.45	3.5	3.5	—	
220V DC [A]	0.2	—	0.55	0.55	0.18	0.18	0.55	0.55	—	
440V DC [A]	0.08	—	0.2	0.2	0.1	0.1	0.2	0.2	—	
DC-14 L/R < 15 ms inductive loads with economy resistor in series at										
24V DC [A]	4	—	9	9	2	2	9	9	—	
48V DC [A]	2.5	—	5	5	1.6	1.6	5	5	—	
110V DC [A]	0.4	—	2	2	0.3	0.3	2	2	—	
220V DC [A]	0.12	—	0.4	0.4	0.12	0.12	0.4	0.4	—	
440V DC [A]	0.05	—	0.16	0.16	0.05	0.05	0.16	0.1	—	
DC-13 switching electromagnets at										
24V DC [A]	2.8	2.3	5	5	2.5	5	5	5	(1...100 mA) at 3...125V	
48V DC [A]	1.2	1	3	3	1.5	2.5	2	2		
110V DC [A]	0.55	0.55	1.2	1.2	0.6	0.68	0.7	0.7		
220V DC [A]	0.27	0.27	0.6	0.6	0.3	0.32	0.25	0.25		
440V DC [A]	0.15	0.15	0.3	0.15	0.15	0.15	0.12	0.12		
Fuse gG										
Short-circuit protection with no welding of contacts per IEC 60947-5-1										
 [A]	10	10	20	10	10	10	16	16	—	
 [A]	10	10	20	10	10	10	16	16	—	
Protective Separation per IEC 60947-1, Annex N	—	—	between load and auxiliary circuit 320V	between load and auxiliary circuit 440V	between load and auxiliary circuit 440V					
Min. switching capacity according to IEC 60947-5-4	15V/10 mA	15V/2 mA	17V/10 mA	17V/5 mA	5V/3 mA	17V/10 mA	17V/10 mA	5V/2 mA (1 Mio. ops.)	3V/1 mA	
Failure rate	—	—	—	—	—	—	—	<10-8 (less than 1 failure to 100 Mio. operations)	—	
Load Carrying Capacity per UL/CSA										
Rated voltage AC [V]	max. 600		max. 600				max. 600		max. 250	
Continuous rating 40 °C [A]	10		10	10	10	10	10 General purpose		0.1	
Switching capacity AC [A]	A 600	B 600	A 600				Heavy pilot duty (A 600)		0.1	
Rated voltage DC [V]	max. 600		max. 600				max. 600		max. 250	
Switching capacity DC [A]	Q 600		P 600	Q 600	Q 600		Standard pilot duty (P 600)	Standard pilot duty (Q 600)	0.1	