

# PRODUCT PROFILE

## 100-C CONTACTORS/700-CF CONTROL RELAYS

### DOUBLE WINDING COIL DEVICES

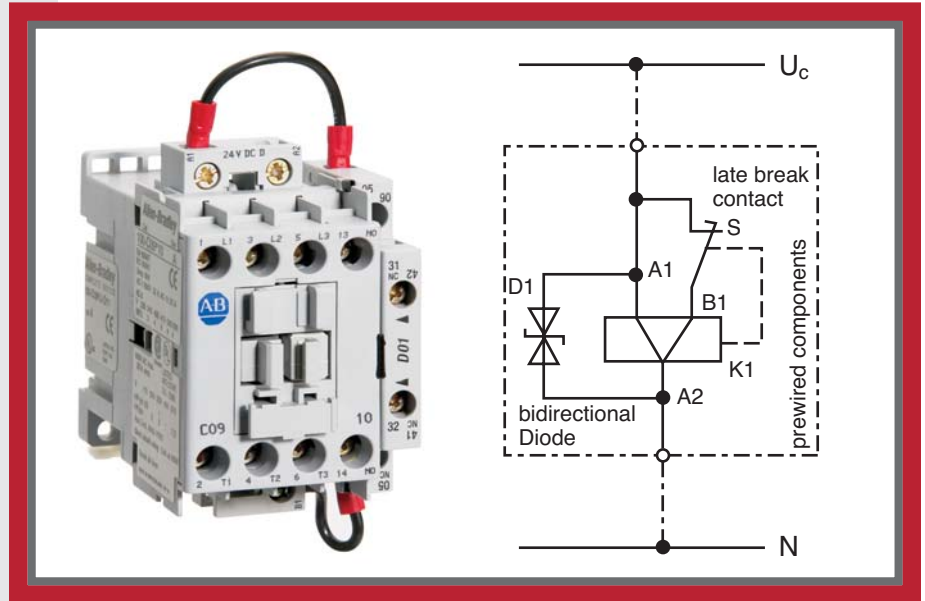
In DC control circuits, lower coil power consumption is often required.

The 100-C line of MCS contactors and control relays with double-winding coils exhibit low sealed power consumption through a high impedance holding coil. Pickup is reliably achieved by means of a low impedance pickup coil which is switched off after pull-in of the devices by a pre-wired N.C. late-break auxiliary contact.

### Features

- Low consumption DC coil
- Late-break N.C. contact pre-wired
- Additional auxiliary contact for free use
- Suppressor module pre-wired for 100-C30...C43 on coil voltages 60V DC and higher
- Full use of MCS accessories
- IP2X finger protection
- Meets IEC, UL and CSA standards requirements
- Same depth as AC coil devices

FOR DC LOW POWER COIL CONSUMPTION WITH DOUBLE WINDING COILS



3-POLE CONTACTOR RANGE FROM 9-43A

in three frame sizes

- 100-C09...C23
- 100-C30...C37
- 100-C43

4-POLE CONTACTOR RANGE FROM 9-37A

in two frame sizes

- 100-C09...C23
- 100-C40

CONTROL RELAY

- 700-CF

### Applications

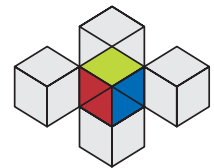
- Contactors and control relays with double winding coils are ideal for applications in DC control circuits where low hold-in power consumption is required.
- 100-C09...C43 and 700-CF with double winding coils have a lower depth than standard DC coils.
- 100-C60...C85 and 100-C90 for DC are available with double winding coils as standard. For these devices, please refer to the IC catalog.

ESSENTIAL COMPONENTS.  
EXCEPTIONAL VALUE.

# Allen-Bradley

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**Rockwell**  
Automation



**MCS**  
PLUS

# PRODUCT SELECTION

## 3-pole contactors

I <sub>e</sub> [A]		Ratings for switching AC Motors – AC-2, AC-3, AC-4										Aux. Contacts					Cat. No. 2) 3)
												Contactor		Contact block			
		3-phase kW (50Hz)				HP (60Hz)						1	2	1	2	3 1)	
AC-3	AC-1	230V	400/415V	500V	690V	1-phase		3-phase				N.O.	N.C.	N.O.	N.C.	N.C.L.B.	
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	1	0	0	1	1	100-C09⊗-D11
												0	1	0	1	1	100-C09⊗-D02
												1	0	1	0	1	100-C09⊗-D20
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	1	0	0	1	1	100-C12⊗-D11
												0	1	0	1	1	100-C12⊗-D02
												1	0	1	0	1	100-C12⊗-D20
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	1	0	0	1	1	100-C16⊗-D11
												0	1	0	1	1	100-C16⊗-D02
												1	0	1	0	1	100-C16⊗-D20
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	1	0	0	1	1	100-C23⊗-D11
												0	1	0	1	1	100-C23⊗-D02
												1	0	1	0	1	100-C23⊗-D20
30	65	10	15	15	15	2	5	7-1/2	10	20	25	–	–	1	0	1	100-C30⊗-E10
												–	–	0	1	1	100-C30⊗-E01
												–	–	1	0	1	100-C30⊗-E10
37	65	11	18.5/20	20	18.5	3	5	10	10	25	30	–	–	0	1	1	100-C37⊗-E10
												–	–	1	0	1	100-C37⊗-E01
												–	–	1	0	1	100-C37⊗-E10
43	85	13	22	25	22	3	7-1/2	10	15	30	30	–	–	1	0	1	100-C43⊗-E10
												–	–	0	1	1	100-C43⊗-E01
												–	–	0	1	1	100-C43⊗-E10

## 4-pole contactors

I <sub>e</sub> [A]		Ratings for switching AC Motors – AC-2, AC-3, AC-4										Aux. Contacts					Cat. No. 2) 3)
												Contactor		Contact block			
		3-phase kW (50Hz) 4)				HP (60Hz)						1	2	1	2	3 1)	
AC-3	AC-1	230V	400/415V	500V	690V	1-phase		3-phase 4)				N.O.	N.C.	N.O.	N.C.	N.C.L.B.	
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	–	–	1	0	1	100-C09⊗Δ-D10
												–	–	0	1	1	100-C09⊗Δ-D01
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	–	–	1	0	1	100-C12⊗Δ-D10
												–	–	0	1	1	100-C12⊗Δ-D01
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	–	–	1	0	1	100-C16⊗Δ-D10
												–	–	0	1	1	100-C16⊗Δ-D01
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	–	–	1	0	1	100-C23⊗Δ-D10
												–	–	0	1	1	100-C23⊗Δ-D01
37	75	11	18.5/20	20	18.5	3	5	10	10	25	30	–	–	1	0	1	100-C40⊗Δ-E10
												–	–	0	1	1	100-C40⊗Δ-E01

## Control Relays

AC-12		AC-15								Aux. Contacts					Cat.No. 2) 3)
I <sub>e</sub> [A]		I <sub>e</sub> [A]								Contactor		Contact block			
40°C	60°C	24/48V	120V	240V	400V	500V	600V	690V	N.O.	N.C.	N.O.	N.C.	N.C.L.B.		
20	20	10	10	10	6	2.5	1	1	–	–	1	0	1	700-CF⊗-D10	
									–	–	0	1	1	700-CF⊗-D01	

⊗ Coil voltage code

DC Voltages [V]		9	12	24	36	48	60	64	72	80	110	110
coil code for 100-C09...100-C43, 700-CF	with integrated or side mounted Diode	YR	YQ	YJ	YW	YY	YZ	YB	YG	YE	YD	YH 5)

Contact Configuration	Cat. No. Suffix	Description
Δ contact configuration of 4 pole contactors	200	2 N.O. + 2 N.C. power contacts
	300	3 N.O. + 1 N.C. power contacts (not available for 100-C40)
	400	4 N.O. power contacts
⊗ contact configuration of control relays	220	2 N.O. + 2 N.C.
	310	3 N.O. + 1 N.C.
	400	4 N.O.
	130	1 N.O. + 3 N.C.
	040	4 N.C.

1) Pre-wired N.C. late break contact for disconnecting the pick-up winding

2) Aux. contact block is permanently mounted on the right-hand side. For left-hand mounted contact block, add the letter "G" to the end of the catalog number. Ex. 100-C09YJ-D11G

3) Coil terminals are located on the line side of the contactor or relay. For load side coil terminations, insert the letter "U" before the coil voltage code. Ex. 100-C09UYJ-D11

4) Three-phase ratings apply only to contactors with at least three N.O. power poles

5) Wide range coil for railway applications. Control voltage range: 70%...125% of nominal

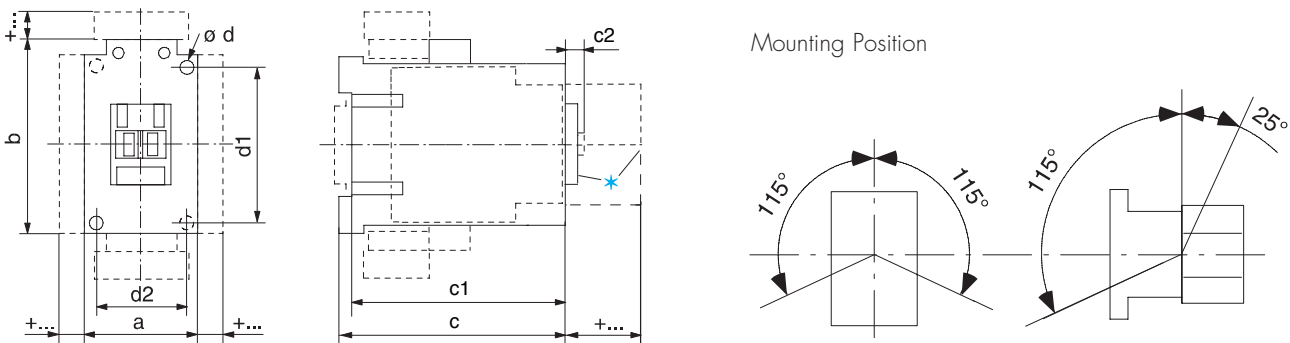
## Coil Data

Cat.No.	700-CF	100-C09...C16	100-C23...C37	100-C40	100-C43
<b>Pickup and Sealed Power</b>					
DC double-winding coils	Pick-up [W]	120	200	200	200
	Sealed [W]	1.1	1.2	1.2	1.3
<b>Operating Times – Switching Delay</b>					
DC double-winding coils	Closing delay [ms]	17...26		15...27	
	Opening delay [ms]	9...20		14...24	

Same data for 3 or 4 pole versions. For other characteristics, see IC catalog data.

## DIMENSIONS

DC contactors and control relays with double winding coils – Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.



Type	a 1)	b	c	c1	c2	Ød	d1	d2
100-C09...100-C23, 700-CF	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)

• Mountable on 35 mm DIN Rail EN 50 022.

1) The "a" dimension is for the base contactor only. The L.H. or R.H. side mounted N.C.L.B. auxiliary contact supplied on all contactors adds 9 mm to the width.

## ACCESSORIES

Miniature Control Relay with	[mm]
Auxiliary contact block for front-mounting – 2- or 4-pole	c/c1 + 39
Auxiliary contact block for side-mounting – 1- or 2-pole	a + 9
Pneumatic timing module	c/c1 + 58
Solid-State timing module – on coil connection side	b + 24
Mechanical interlock – lateral on contactor	a + 9
Mechanical latch	c/c1 + 61
Suppressor module – on coil connection side	b + 3
*Marking with – Labeling sheet	+0
Labeling sheet with cover	+0
Legend plate for V4/V5 system	+5.5
Legend plate for Bul. 1492W system	+5.5

# Allen-Bradley

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