

PRODUCT PROFILE

LOW CONSUMPTION 100-C CONTACTORS WITH 24V DC CONTROL

Rockwell Automation has expanded its successful line of MCS-C industrial contactors with a new low consumption coil. The 24V DC coil with low power consumption is integrated in a small contactor body and draws 1.5 W / 60 mA holding power on smallest frame sizes. This new design results in a lighter, lower depth and more energy efficient contactor, eases wiring and uniform panel appearance.

FEATURES

- Low consumption 24V DC coil
- Low contactor depth, same dimensions as AC coil devices
- Meets IEC, UL and CSA standards requirements
- Common accessories for all contactor sizes
- Same accessories as AC coil devices except electronic timers
- Reversible coil terminations (line or load side)
- DIN rail or screw mount
- IP2X finger protection
- Environmentally friendly materials
- RoHs compliant
- Built-in surge suppression

100-C CONTACTORS WITH UNMATCHED LOW HOLDING POWER



APPLICATIONS

Direct control from PLC:

The low power consumption contactor designed to control motors and other loads is especially aligned to the specific requirement of electronic control circuits. The low power consumption allows direct control through PLC's without the need for interposing relays.

Power dissipation is greatly reduced limiting the heat effect in control panels.

ESSENTIAL COMPONENTS.
EXCEPTIONAL VALUE.

Product Selection and Ordering Information

The low consumption coil is available as coil voltage code EJ for Bulletin 100-C contactors from 9 through 43 A and for 700-C control relays. Existing catalog numbers may be used with the new coil voltage code EJ.

Note: Standard AC or DC contactors can not be outfitted with low consumption coil through coil exchange. Technical data applies as published in Allen-Bradley catalogs except Control Circuit Technical Data.

Contactor Selection, 24V DC Coil Voltage

I_s [A]		Ratings for Switching AC Motors — AC-2, AC-3, AC-4										Aux. Contacts		Cat. No.
		3Ø kW (50 Hz)				Hp (60 Hz)						N.O.	N.C.	
		AC-3	AC-1	230V	400V/415V	500V	690V	1Ø		3Ø				
						115V	230V	200V	230V	460V	575V			
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	1	0	100-C09EJ10
												0	1	100-C09EJ01
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	1	0	100-C12EJ10
												0	1	100-C12EJ01
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	1	0	100-C16EJ10
												0	1	100-C16EJ01
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	1	0	100-C23EJ10
												0	1	100-C23EJ01
30	65	10	15	15	15	2	5	7-1/2	10	20	25	0	0	100-C30EJ00
37	65	11	18.5/20	20	18.5	3	5	10	10	25	30	0	0	100-C37EJ00
43	85	13	22	25	22	3	7-1/2	10	15	30	30	0	0	100-C43EJ00

Control Relay Selection, 24V DC Coil Voltage (Ratings for 700-CF with standard contacts)

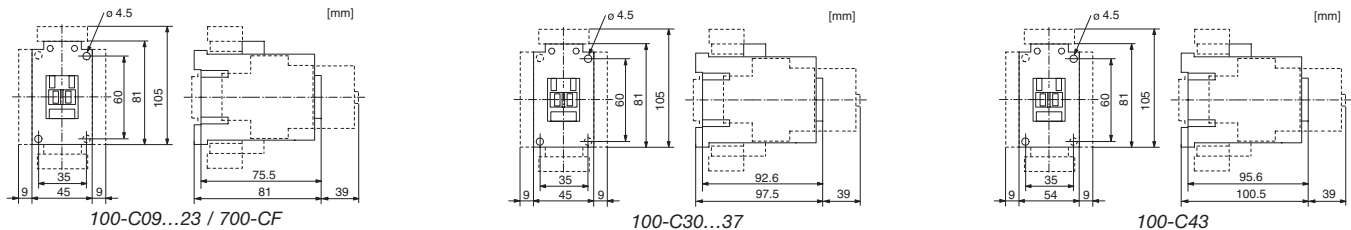
AC-12		AC-15							Connection Diagrams	Contacts		Standard Contacts Cat. No.	Gold Plated Bifurcated Contacts* Cat. No.	Master Contacts* Cat. No.
I_{th} [A]		I_{th} [A]								N.O.	N.C.			
40 °C	60 °C	24/48V	120V	240V	400V	500V	600V	690V						
20	20	10	10	10	6	2.5	1	1		2	2	700-CF220EJ	700-CFB220EJ	700-CFM220EJ
										3	1	700-CF310EJ	700-CFB310EJ	700-CFM310EJ
										4	0	700-CF400EJ	700-CFB400EJ	700-CFM400EJ

Also available with low consumption coil: Bulletin 104-C reversing contactors and 100S-C safety contactors from 9 through 43 A. To order, simply insert the code EJ for low consumption coil at the coil voltage placeholder Ø.

* Ratings for 700-CFB and 700-CFM see Allen-Bradley main catalog.

Guideline for control power dimensioning in case of parallel switching of contactors:

Multiply number of parallel switched contactors with pick-up peak value of contactors for minimal control power rating as indication.



Control Circuit Technical Data

			C09...C23 / 700-CF	100-C30, -C37	100-C40, -C43
Coil Consumption					
DC	Pick-up (Average/Peak)	[W]	10 / 22	10 / 22	12 / 28
	Hold-in (Average)	[W]	1.5	1.5	2.5
Operating Times					
DC	Closing delay	[ms]		20...40	
	Opening delay	[ms]		20...40	
Operating Limits					
DC	Pick-up	[x U_s]		0.7...1.25	
	Drop-out	[x U_s]		0.1...0.5	
Max. Ripple		[%]		±15	

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