

# Low Consumption 100-C Contactors and 700-CF Control Relays with Electronic DC Control

Contactors and Control Relays with Unmatched Low Holding Power

Rockwell Automation has expanded its successful line of industrial contactors and control relays with a new low-consumption coil. The electronic coil with low power consumption is integrated in a small contactor body and draws 1.7 W/70 mA holding power on smallest frame sizes. This new design results in a lighter, lower-depth and more energy-efficient contactor, which simplifies wiring and provides a more uniform panel appearance.

## Features

- Low-consumption 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



## Applications

### Direct control from PLC

The low power consumption contactor and control relay 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 PLCs without the need for interposing relays. Power dissipation is greatly reduced, limiting the heat effect in control panels.

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## Product Selection and Ordering Information

The low-consumption coil is available as from 12...250V DC for Bulletin 100-C contactors from 9 through 55 A and for 700-CF control relays. Existing catalog numbers may be used with the new coil voltage code  $\otimes$ .

**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, Coil Voltage

$I_e$ [A]	$I_{th}$ [A]	Ratings for Switching AC Motors – AC-2, AC-3, AC-4										Aux. Contacts		Cat. No.			
		3-phase kW (50 Hz)				Hp (60 Hz)											
		1-phase		3-phase				N.O.	N.C.								
AC-3	AC-1	230V	400V/415V	500V	690V	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-C09 $\otimes$ 10			
												0	1	100-C09 $\otimes$ 01			
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	1	0	100-C12 $\otimes$ 10			
												0	1	100-C12 $\otimes$ 01			
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	1	0	100-C16 $\otimes$ 10			
												0	1	100-C16 $\otimes$ 01			
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	1	0	100-C23 $\otimes$ 10			
												0	1	100-C23 $\otimes$ 01			
30	65	10	15	15	15	2	5	7-1/2	10	20	25	0	0	100-C30 $\otimes$ 00			
37	65	11	18.5/20	20	18.5	3	5	10	10	25	30	0	0	100-C37 $\otimes$ 00			
43	85	13	22	20	22	3	7-1/2	10	15	30	30	0	0	100-C43 $\otimes$ 00			
55	85	15	30	30	30	5	10	15	20	40	40	0	0	100-C55 $\otimes$ 00			

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

AC-12		AC-15								Contacts		Standard Contacts Cat. No.	Gold Plated Bifurcated Contacts* Cat. No.	Master Contacts* Cat. No.
$I_{th}$ [A]	$I_{th}$ [A]	Connection Diagrams								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-CF220 $\otimes$	700-CFB220 $\otimes$	700-CFB220 $\otimes$
												700-CF310 $\otimes$	700-CFB310 $\otimes$	700-CFB310 $\otimes$
												700-CF400 $\otimes$	700-CFB400 $\otimes$	700-CFB400 $\otimes$

Also available with low consumption coil: Bulletin 104-C reversing contactors and 100S-C safety contactors from 9 through 55 A. To order, simply insert the coil code for low consumption coil at the coil voltage placeholder  $\otimes$ .

## Coil Voltage Code

The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No.  
Example: 24V DC: Cat. No. 100-C09 $\otimes$ 10 becomes Cat. No. 100-C09EJ10.

DC Voltages [V]	12	24	36...48	48...72	110...125	220...250
100-C09...C43 Electronic with integrated diode	EQ	EJ	EW	EY	ED	EA

**Note:** For approximate dimensions and ratings for other products, please see the Industrial Control catalog at [ab.com/catalogs](http://ab.com/catalogs).

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