

# Product Details and Certifications

Cross Reference RA Part Number: 700-R220A1 B

➔ **Product: 700-R220A1**

Description: 700-R Sealed Contact Industrial Control Relay,  
2 N.O. / 2 N.C., 110V 50 Hz / 120V 60 Hz



Representative Photo Only (actual product may vary based on configuration sections)

## **CONTROL RELAY DATA**

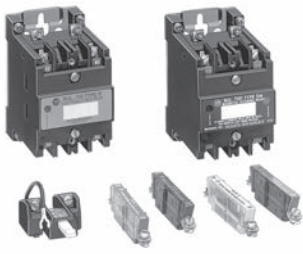
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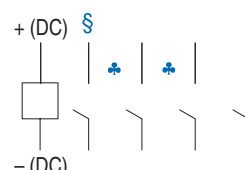
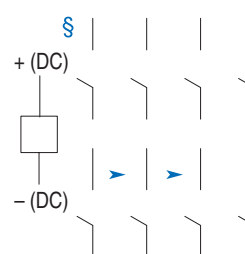
Bulletin Number	700-R ( AC Coil)
Relay Type	Standard Electrically Held Relay
Contact Configuration	2 N.O. / 2 N.C.
Enclosure Type	No Enclosure

## **CERTIFICATIONS AND APPROVALS**

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UL  
CSA  
CE  
For UL Certifications Directory: <http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

	<p><b>Bulletin 700-R, -RM — Sealed Switch Relays</b></p> <ul style="list-style-type: none"> <li>• Sealed contacts</li> <li>• Extremely long mechanical and electrical life</li> <li>• Hazardous locations Class 1, Div 2 Groups A, B, C, D</li> <li>• Harsh environments</li> <li>• Suitable for applications with shock and vibration</li> <li>• High reliability circuit integrity</li> </ul>	<p><b>Table of Contents</b></p> <p>Product Selection ..... 9-137</p> <p>Specifications..... 9-139</p> <p>Approximate Dimensions..... 9-140</p> <p><b>Standards Compliance and Certifications</b></p> <ul style="list-style-type: none"> <li>• UL Listed (File No. E10314) (Guide No. NOIV) per UL 508</li> <li>• CSA Certified (File No. LR11924)</li> <li>• CE Certified</li> </ul>
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No. of Poles	Contacts		Contact Arrangement and Markings*	AC-Operated Relay Only	DC-Operated Relay Only	
	N.O.	N.C.		Open Type	Open Type	
				Cat. No.	Cat. No.	
0	0	0	Relay without Contact	700-R000⊗	700DC-R000⊗	
2	2	0		<b>700-R200⊗</b>	700DC-R200⊗	
	1	1		700-R110⊗	700DC-R110⊗	
	0	2		700-R020⊗	700DC-R020⊗	
	4	0		<b>700-R400⊗</b>	700DC-R400⊗	
4	3	1		700-R310⊗	700DC-R310⊗	
	<b>2</b>	<b>2</b>		<b>700-R220⊗</b>	<b>700DC-R220⊗</b>	
	1	3		700-R130⊗	700DC-R130⊗	
	0	4		700-R040⊗	700DC-R040⊗	
6	6	0			700-R600⊗	700DC-R600⊗
	5	1			700-R510⊗	700DC-R510⊗
	4	2	700-R420⊗		700DC-R420⊗	
	3	3	700-R330⊗		700DC-R330⊗	
	2	4	700-R240⊗		700DC-R240⊗	
	1	5	700-R150⊗		700DC-R150⊗	
8	0	6	700-R060⊗		700DC-R060⊗	
	8	0	700-R800⊗		700DC-R800⊗	
	7	1	700-R710⊗		700DC-R710⊗	
	6	2	700-R620⊗		700DC-R620⊗	
	5	3	700-R530⊗		700DC-R530⊗	
	4	4	700-R440⊗		700DC-R440⊗	
	3	5	700-R350⊗		700DC-R350⊗	
	2	6	700-R260⊗		700DC-R260⊗	
1	7	700-R170⊗	700DC-R170⊗			
0	8	700-R080⊗	700DC-R080⊗			

**⊗ Coil Voltage Code**

The Cat. No. as listed is incomplete. Select a voltage code from the table below to complete the Cat. No. Example: **Cat. No. 700-R000⊗** becomes **Cat. No. 700-R000A24**. For other coil voltages, contact your local Rockwell Automation sales office or Allen-Bradley distributor.

Type of Relay	[V]	Coil Volts							
		24	48	<b>110</b>	115-125	<b>120</b>	220	230-250	240
AC	25 Hz	—	—	C11	—	C1	—	—	C2
	<b>50 Hz</b>	B24	B48	<b>A1</b>	—	—	A2	—	—
	<b>60 Hz</b>	A24	A48	—	—	<b>A1</b>	—	—	A2
DC	—	<b>Z24</b>	Z48	—	Z1	—	—	Z2	—

\* Arrangement displays all N.O. contacts.  
 § Polarity must be observed for DC voltage (700 DC) relays.  
 † Location of contacts in 2-pole relays.  
 > Location of contacts in 6-pole relays.

**Application Data** – Because of the inherent characteristics of this device, the normally open contacts may close before the normally closed contacts open on energization and the normally closed contacts may close before the normally open contacts open on de-energization.

**Note:** For Bul. 700-RM, energizing both the latch and unlatch coil together will cause the relay to be energized and both latch and unlatch coils can be operated together continuously.

**Ratings**

NEMA Rating Designation	AC Voltage				Continuous Carrying Current [A]	DC Voltage			
	Voltage	Make	Break			NEMA Rating Designation	Volts DC	Make/Break	Continuous Carrying Current [A]
B300	Up to 300V AC	120V	30	3	5	NEMA P300	46...300	138 VA	5
		240V	15	1.5					
C600	Above 300V AC	480V	7.5	0.75	2.5		5...46	3 A	5
		600V	6.0	0.60					

**Maximum Allowable Off-State Leakage Current**

Voltage	Maximum Off-State Leakage Current [mA]	
	Type R	Type RM
24V DC	23	8
24V AC	23	8
120V AC	5	2

**Relay Data**

Type	700-R	700-RM	
Contact Arrangement	Up to 8 poles, available in any combination of N.O. or N.C. contacts	Up to 8 poles, available in any combination of N.O. or N.C. contacts	
Contact Material	W (tungsten in a controlled gas atmosphere)	W (tungsten in a controlled gas atmosphere)	
Coil Voltage Range	24...250V AC 24...250V DC	24...250V AC 24...250V DC	
Coil Power	Sealed Voltage Range: -15... +10%	5.5 VA, 50/60 Hz 5.5 W DC	1.7 VA, 50/60 Hz (latch or unlatch) 1.7 W DC
	Inrush	5.5 VA, 50/60 Hz 5.5 W DC	1.7 VA, 50/60 Hz (latch or unlatch) 1.7 W DC
Pickup Time	30 ms	75 ms min. latch pulse	
Dropout Time	30 ms	75 ms min. unlatch pulse	
Operating Temperature	-40...+60 °C (-40...+140 °F)	-40...+60 °C (-40...+140 °F)	
Mounting	Panel mount	Panel mount	

**Bulletin 700-R Operating Coils**



Bulletin 700-R Operating Coil

Coil Volts	Bulletin 700-R 2-...8-Pole AC		Bulletin 700-R 2-...8-Pole DC
	60 Hz	50 Hz	
24	77AB27	77AB27	77D152
48	77AB134	77AB134	77D166
110	77AB86	77AB86	—
115...125	—	—	77D155
120	77AB86	77AB86	—
208	—	—	—
220	77AB83	77AB83	—
240	77AB83	77AB83	—
230...250	—	—	77D156