

# Bulletin 700P NEMA AC Integral DIN Rail Relays

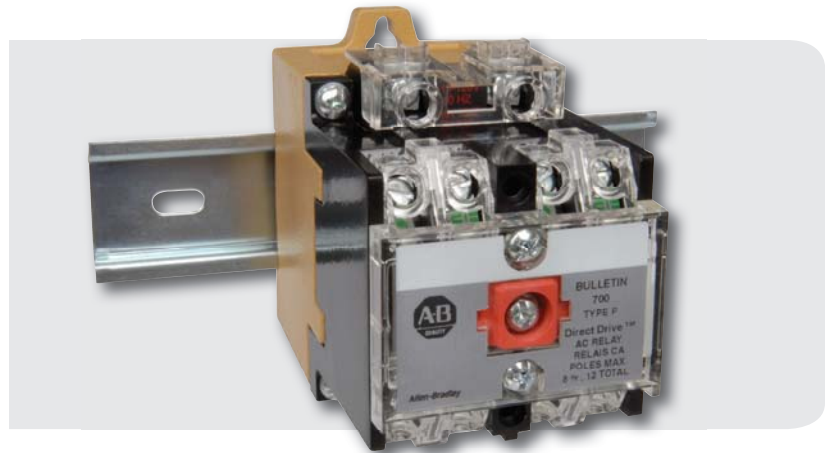
Time-Proven Performance

## Advantages

- No DIN Rail adapter is required on AC relays helping save you time and money
- No tools required for installation
- Quicker release latch can be operated with a standard or Phillips head screwdriver
- Can be used with two 700S-P safety relays and a safety-monitoring relay to create a cost-efficient solution to your safety circuit requirements
- Faster and easier installation

## Bulletin 700-P Relays— Most Extensive Product Offering

- Bulletin 700-P Control Relay (10 A)  
– 700DC-P
- Bulletin 700-PK Master Relay (20 A)  
– 700DC-PK
- Bulletin 700-PH Tandem Relay  
(35 A)
- Bulletin 700S-P Safety Relay (10 A)  
– 700S-DCP
- Bulletin 700S-PK Safety Relay (20 A)  
– 700S-DCPK
- Bulletin 700-PT Timing Relay (10 A)
- Bulletin 700-PT Pneumatic Relay  
Attachment (10 A)
- Bulletin 700-PS Solid-State Timer  
(10 A)
- Bulletin 700-PL Latch Attachment  
(10 A)
- Bulletin 700-P Accessories



## Product Overview

Rockwell Automation introduces an exclusive integral DIN Rail design that allows the Allen-Bradley Bulletin 700 heavy duty AC NEMA relays (up to 12 poles) to be installed on 35 mm DIN Rail. This new feature provides you with easier DIN Rail mounting capabilities to new or existing control panels and helps reduce the need for a DIN Rail adapter helping to save both installation time and money.

Bulletin 700-P Industrial Relays have been driving industrial processes for over 25 years and has a reputation in the industry as the workhorse behind process reliability.

## Additional Bulletin 700-P Features

- Rugged construction
- Broad current range in one relay (10 A, 20 A, 35 A)
- Convertible “swing around” cartridges (N.O. to N.C.)
- Direct Drive™ cross bar design
- UL, CSA, CE ABS (American Bureau of Shipping) certified

## Global Acceptance –

- IP2X finger-safe ratings
- Fully rated to IEC and NEMA standards
- Contact terminal screws are easily accessed for wiring and continuity testing
- Specified wire sizes are easily installed with the protective covers attached
- Finger-safe top cover allows you to activate the mechanical over-ride on standard relays through the access hole in the cover

LISTEN.  
THINK.  
SOLVE.™

## Product Line Comparison

Product	Allen-Bradley	Square D	Cutler-Hammer	Siemens	General Electric
Cartridge-Style 600V	Logic Reed 10 A 20 A 35 A	10 A	10 A	10 A 20 A	10 A
Finger Safe	✓ YES	✗ NO	✗ NO	✗ NO	✗ NO
DIN Rail Mounting	✓ YES	✗ NO	✗ NO	✗ NO	✗ NO
Safety Relay	✓ YES	✗ NO	✗ NO	✗ NO	✗ NO
Sealed Switch	✓ YES	✓ YES	✗ NO	✗ NO	✗ NO

## Bulletin 700P Relay Catalog Number Explanation

700 – P 4 0 0 A1  
*a* *b* *c* *d* *e* *f*



Bulletin Number	Relay Voltage Type
700	AC-Operated Relay
700DC	DC-Operated Relay
700S	Safety Relay

Code	Normally Open Contacts
1...12	Quantity of NO contacts (12 maximum)

Code	Standard Relay Types
P	Standard Relay
PK	Master Control Relay
PH	Tandem Control Relay
PT	Timing Relay
PKT	Master Control Timing Relay
PL	Mechanical Latching Relay
Code	Safety Relay Types
P	AC Safety Relay
DCP	DC Safety Relay
PK	Master Control AC Safety Relay
DCPK	Master Control DC Safety Relay

Code	Normally Closed Contacts
1...8	Quantity of NC contacts (8 maximum)

Code	Enclose Type
0	Open
1	NEMA Type 1
4	NEMA Type 4/4X
7	NEMA Type 7/9

Hz AC	AC Voltage Suffix Code*										
	24	48	110	110-115	115-120	120	220-230	230-240	440-480	460-480	575-600
50 Hz AC	B24	B48	A1	B11	–	–	B22	B2	B44	–	A6
60 Hz AC	A24	A48	–	–	A1	B11	A22	A2	–	A4	A6

\*Additional AC voltages available: 200-208V, 277V, 347V, 380V, 415V, 500V (see catalog for more detail)

DC	DC Voltage Suffix Code**										
	12	24	32	48	64	72	90	115-125	230-250	500-550	575-600
	Z12	Z24	Z32	Z48	Z64	Z72	Z90	Z1	Z2	Z5	Z6

\*\*Additional DC voltages available: 6V, 18V (see catalog for more detail)

[www.rockwellautomation.com](http://www.rockwellautomation.com)

### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846



# Electronic High Performance Timing Relays

(Catalog Number 700–FS)

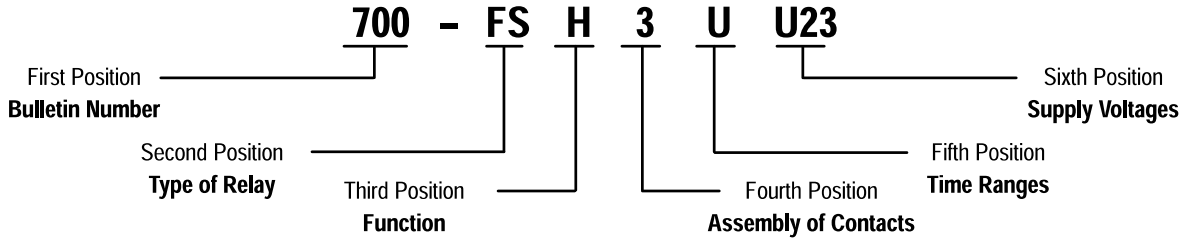
## Product Data



The Bulletin 700–FS Electronic High Performance Timing Relays consist of Multi–Function, Single Function and Special Function designs. These products offer the customer optimum space utilization and maximum functionality. In addition, the timing ranges are easily adjusted, and the LEDs provide visual indication of the coil and timing status.

- 22.5mm (5/8 inch) Wide
- Dual Voltage
  - 24–48V DC
  - 24–240V AC
- DIN Rail Mounting
- Finger Safe Terminals
- Single Pull Double Throw (SPDT) Contact Configuration
  - Multi–Function/Multi–Range (On–Delay, Off–Delay, On–and–Off–Delay, One Shot, Fleeting Off–Delay, Flasher, On–Delay Pulse Generator, Pulse Converter, On–Function, Off–Function, with 10 Timing Ranges)
  - Single Function (On–Delay, Off–Delay, On–and–Off–Delay, One Shot, Fleeting Off–Delay, Flasher (Pulse), Flasher (Pause), On–Delay Pulse Generator, On–Delay (Pulse Controlled), One Shot/Watch Dog, Pulse Converter, with 12 Timing Ranges)
  - Special Function/Multi–Range (Flasher, True Off–Delay, Star–Delta, with 12 Timing Ranges)
- Double Pull Double Throw (DPDT) Contact Configuration
  - Multi–Function/Multi–Range (On–Delay, Off–Delay, On–and–Off–Delay, One Shot, Fleeting Off–Delay, Flasher, On–Delay Pulse Generator, Pulse Converter, On–Function, Off–Function, with 10 Timing Ranges)
  - Single Function/Multi–Range (On–Delay, Off–Delay, with 10 Timing Ranges)

## Catalog Number Explanation



### Multi-Function Timing Relays

700-FS	M	3	U	U23
	Function	Assembly of contacts	Time ranges	Supply voltages
	<b>M</b> Multi-function timing relays 8 Single-functions: A, B, C, D, E, F, I, & L. ON and OFF function additional (for installation and maintenance)	<b>3</b> 1 Change-over contact 1 C/O (SPDT) <b>4</b> 2 Change-over contacts 2 C/O (DPDT)	<b>U</b> 0.05 s...60 h	<b>Z12</b> 12 VDC <b>U23</b> 24...48 VDC 24...240 V 50/60 Hz

### Single Function Timing Relays

700-FS	A	3	A	U23
	Function	Assembly of contacts	Time ranges	Supply voltages
	<b>A</b> On-delay <b>B</b> Off-delay <b>C</b> On- and off-delay <b>D</b> One shot <b>E</b> Fleeting off-delay <b>F</b> Flasher (repeat cycle starts w/pulse) <b>G</b> Flasher (repeat cycle starts w/pause) <b>I</b> On-delay pulse generator <b>J</b> On-delay (pulse controlled) <b>K</b> One shot / watch dog (pulse controlled) <b>L</b> Pulse converter	<b>all functions:</b> <b>3</b> 1 Change-over contact 1 C/O (SPDT)  <b>Functions A and B:</b> <b>4</b> 2 Change-over contacts 2 C/O (DPDT)	<b>A</b> 0.05...1 s <b>B</b> 0.15...3 s <b>C</b> 0.5...10 s <b>D</b> 1.5...30 s <b>E</b> 0.05...1 min <b>F</b> 0.15...3 min <b>G</b> 0.5...10 min <b>H</b> 1.5...30 min <b>I</b> 0.05...1 h <b>J</b> 0.15...3 h <b>K</b> 0.5...10 h <b>L</b> 3.0...60 h <b>U</b> 0.05 s...60 h	<b>Z12</b> 12 VDC <b>U23</b> 24...48 VDC 24...240 V 50/60 Hz  NOTE: Only the 700-FSA and 700-FSB are available with the "U" multi-time setting ranges (0.05s to 60h).

### Special Function Timing Relays

<b>700-FS</b>	<b>H</b>	<b>3</b>	<b>U</b>	<b>U23</b>
	<b>Function</b> <b>H</b> Flasher (repeat cycle starting with pulse or pause)	<b>Assembly of contacts</b> <b>3</b> 1 Change-over contact 1 C/O (SPDT)	<b>Time ranges</b> <b>U</b> 0.05 s...60 h <b>V</b> 0.05 s ... 60 h (2 ranges)	<b>Supply voltages</b> <b>Z12</b> 12 VDC <b>U23</b> 24...48 VDC 24...240 V 50/60 Hz
<b>700-FS</b>	<b>Q</b>	<b>3</b>	<b>Q</b>	<b>U18</b>
	<b>Function</b> <b>Q</b> Off-delay without supply voltages (true off-delay)	<b>Assembly of contacts</b> <b>3</b> 1 Change-over contact 1 C/O (SPDT) <b>4</b> 2 Change-over contact 2 C/O (DPDT)	<b>Time ranges</b> <b>Q</b> 0.15 s ... 10 min	<b>Supply voltages</b> <b>U18</b> 24...240 VDC 24...240 V 50/60 Hz
<b>700-FS</b>	<b>Y</b>	<b>2</b>	<b>C</b>	<b>U23</b>
	<b>Function</b> <b>Y</b> Star-delta timing relays	<b>Assembly of contacts</b> <b>2</b> 2 normally open contacts 2 N.O.	<b>Time ranges</b> <b>C</b> 0.5...10 s <b>D</b> 1.5...30 s <b>E</b> 0.05...1 min <b>F</b> 0.15...3 min <b>G</b> 0.5...10 min	<b>Supply voltages</b> <b>U23</b> 24...48 VDC 24...240 V 50/60 Hz