

## Allen-Bradley DIN Rail Timing Relays

### 700-FS High Performance Timing Relays for DIN Rail Mounting

**Type Designation**

**700-FS** **A** **3** **A** **U23**

**Third Position** **Fourth Position** **Fifth Position** **Sixth Position**

Position	Definition	Description
<b>3</b>	<b>Function</b>	<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 starting w/pulse <b>G</b> Flasher starting w/pause <b>H</b> Repeat cycle timer (not available with sup. Voltage U18) <b>I</b> ON-Delay pulse generator (only available with sup. Voltage U18) <b>J</b> ON-Delay (pulse controlled) <b>K</b> One Shot / watch dog (pulse controlled) <b>L</b> Pulse converter <b>M</b> Multifunction <b>Q</b> OFF-Delay Power-OFF (only available with sup. Voltage U18) <b>Y</b> Star-Delta
<b>4</b>	<b>Contact Configuration</b>	<b>2</b> 2 N. O. Star-Delta <b>3</b> 1 c/o <b>4</b> 2 c/o for function A/B/M/Q
<b>5</b>	<b>Time Range</b>	<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> 0.5 ... 1 h <b>J</b> 0.15 ... 3 h <b>K</b> 0.5 ... 10 h <b>L</b> 3.0 ... 60 h <b>Multi Time Range</b> <b>Q</b> 0.15 s ... 10 min <b>V</b> 2 x 0.05 s ... 60 h
<b>6</b>	<b>Supply Voltage</b>	<b>Z12</b> 12 VDC <b>U23</b> 24 ... 48 VDC and 24 ... 240 VAC 50/60 Hz  No Star-Delta timers with and Z12 supply voltage

### 700-FE Economy Timing Relays for DIN Rail Mounting

**Type Designation**

**700-FE** **M** **1** **R** **U22**

**Third Position** **Fourth Position** **Fifth Position** **Sixth Position**

Position	Definition	Description
<b>3</b>	<b>Function</b>	<b>A</b> ON-Delay <b>B</b> OFF-Delay <b>D</b> One Shot <b>E</b> Fleeting OFF-Delay <b>F</b> Flasher starting w/pulse <b>L</b> Pulse converter <b>M</b> Multifunction <b>Y</b> Star-Delta
<b>4</b>	<b>Contact Configuration</b>	<b>1</b> 1 N.O. <b>2</b> 2 N.O. Star-Delta <b>3</b> 1 c/o
<b>5</b>	<b>Time Range</b>	<b>R</b> 0.5 s ... 1 h <b>S</b> 0.75 s ... 1 h (A, D, F) 0.5 s ... 1 h (B) <b>T</b> 0.05 s ... 10 h <b>Q</b> 0.15 s ... 10 min (Star-Delta)
<b>6</b>	<b>Supply Voltage</b>	<b>U22</b> 24 VDC and 110 ... 240 VAC 50/60 Hz <b>U23</b> 24 ... 48 VDC and 24 ... 240 VAC 50/60 Hz

For full information please refer to the Selection Guide «Relays and Timers», Publication 700-SG003B-EN-P or the Catalogue «Industrial Controls», Publication A114-CA001A-EN-P

## Allen-Bradley Solid State Relays for Screw Mounting

### 700-SH Hockey Puck Relay for Screw Mounting

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output (Load) Max. Cont. Current & Rated Voltage Range ①	Rated Input Control Voltage	Cat. No.	P Q
Phototriac Photocoupler	Yes	Yes	5 A @ 24...240 VAC	5...24 VDC	700-SH05GZ25	1
			100...120 VAC	100...120 VAC	700-SH05GA12	1
			200...240 VAC	200...240 VAC	700-SH05GA22	1
Phototriac Photocoupler	Yes	Yes	10 A @ 24...240 VAC	5...24 VDC	700-SH10GZ25	1
			100...120 VAC	100...120 VAC	700-SH10GA12	1
			200...240 VAC	200...240 VAC	700-SH10GA22	1
Phototriac Photocoupler	Yes	Yes	10 A @ 200...480 VAC	5...24 VDC	700-SH10HZ25	1
			25 A @ 24...240 VAC	5...24 VDC	700-SH25GZ25	1
			100...120 VAC	100...120 VAC	700-SH25GA12	1
			200...240 VAC	200...240 VAC	700-SH25GA22	1
Phototriac Photocoupler	Yes	Yes	25 A @ 200...480 VAC	5...24 VDC	700-SH25HZ25	1
			40 A @ 24...240 VAC	5...24 VDC	700-SH40GZ25	1
			100...120 VAC	100...120 VAC	700-SH40GA12	1
			200...240 VAC	200...240 VAC	700-SH40GA22	1
			40 A @ 200...480 VAC	5...24 VDC	700-SH40HZ25	1

① Maximum load current when mounted on a heat sink

### Bulletin 700-SE Flat Pack Relay for Screw Mounting

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output (Load) Max. Cont. Current & Rated Voltage Range ①	Rated Input Control Voltage	Cat. No.	P Q
Phototriac	Yes	No	5 A @ 100...240 VAC	5 VDC	700-SE05GZ205	1
			12 VDC	12 VDC	700-SE05GZ212	1
			24 VDC	24 VDC	700-SE05GZ224	1
			10 A @ 100...240 VAC	5 VDC	700-SE10GZ205	1
			12 VDC	12 VDC	700-SE10GZ212	1
			24 VDC	24 VDC	700-SE10GZ224	1
			20 A @ 100...240 VAC	5 VDC	700-SE20GZ205	1
			12 VDC	12 VDC	700-SE20GZ212	1
			24 VDC	24 VDC	700-SE20GZ224	1
	No		5 A @ 100...240 VAC	5 VDC	700-SE05GN205	1
			12 VDC	12 VDC	700-SE05GN212	1
			24 VDC	24 VDC	700-SE05GN224	1
			10 A @ 100...240 VAC	5 VDC	700-SE10GN205	1
			12 VDC	12 VDC	700-SE10GN212	1
			24 VDC	24 VDC	700-SE10GN224	1
			20 A @ 100...240 VAC	5 VDC	700-SE20GN205	1
			12 VDC	12 VDC	700-SE20GN212	1
			24 VDC	24 VDC	700-SE20GN224	1

① Maximum load current when mounted on a heat sink

### Accessories

Description	Cat. No.	P Q
Heat Sink—Panel or DIN Rail Mount ②	700-S10	1
Heat Sink—Panel or DIN Rail Mount ②	700-S20	1
Heat Sink—Panel or DIN Rail Mount ②	700-S30	1

② For information regarding selection of the proper heat sink for your application, refer to graphs «Heat Sink Size vs. Load Current» on page 54 or «Load Current vs. Ambient Temperature Characteristics» on page 55 of publication 700-SG003B-EN-P

## Allen-Bradley Plug-in Solid State Relays

### 700-SA Tube Base Relay with Pin Terminals

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output (Load) Max. Cont. Current & Rated Voltage Range	Rated Input Control Voltage	Cat. No.	P Q
Photocoupler	Yes	Yes	5 A @ 100...240 VAC	5...24 VDC	700-SAZY5Z25	1
	N/A	Yes	3 A @ 5...110 VDC	5...24 VDC	700-SANY3Z25	1
Socket 700-HN204						

### Bulletin 700-SC Ice Cube Relay with Blade Style Terminals

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output (Load) Max. Cont. Current & Rated Voltage Range	Rated Input Control Voltage	Cat. No.	P Q
Photocoupler	Yes	Yes	3 A @ 100...240 VAC	5...24 VDC	700-SCZY3Z25	1
			2 A @ 100...240 VAC	100/110 VAC	700-SCZY2A1	1
			200/220 VAC	200/220 VAC	700-SCZY2A2	1
Phototriac Photocoupler	No		3 A @ 100...240 VAC	24 VDC	700-SCTY3Z24	1
	N/A		3 A @ 4...48 VDC	5...24 VDC	700-SCNY3Z25	1
Phototriac Photocoupler	Yes	No	3 A @ 100...240 VAC	24 VDC	700-SCZN3Z26	1
			3 A @ 100...240 VAC	24 VDC	700-SCTN3Z24	1
			3 A @ 4...48 VDC	4...24 VDC	700-SCNN3Z26	1
			2 A @ 5...110 VDC	5...24 VDC	700-SCNN2Z25	1
Socket 700-HN103 700-HN104						

### 700-SK Slim Line Relay with Plug-in Quick Connect Terminals

#### Input/Sensor Module

- High response speed models
- Input Sensor Module to allow high voltage 100...240 VAC or 12...24 VDC sensor interface to low voltage (logic) device such as a PC
- Output Module for typical Solid State Relays applications

Input-to-Output Isolation Method	LED Indicator	Response Speed	Logic Level Supply Voltage	Supply Current	Rated Input Sensor Voltage	Cat. No.	P Q
Photocoupler	Yes	10 Hz	4...32 VDC	0.1...100 mA	100...240 VAC	700-SKICA18	1
		High-speed (1 kHz)	4...32 VDC	0.1...100 mA	12...24 VDC	700-SKIC24	1
Socket 700-HN121							

#### Output/SSR Module

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Rated Output (Load) Max. Current and Voltage Range	Rated Input Control Voltage	Cat. No.	P Q
Phototriac	Yes	Yes	2 A @ 100...240 VAC	5...24 VDC	700-SK0Z2Z25	1
	No		2 A @ 100...240 VAC	5...24 VDC	700-SK0N2Z25	1
Photocoupler	N/A		2 A @ 5...48 VDC	5...24 VDC	700-SK0C2Z25	1
			1.5 A @ 48...200 VDC	5...24 VDC	700-SK0C1Z25	1
Socket 700-HN121						

#### Advantages of 700-S Solid State Relays

- Long life of approx. 100'000 energized hours or 11.4 years
- Low maintenance; no moving parts or contacts to wear or be affected by vibration or shock
- Low control power consumption (typically 25 times less than electromechanical relays)

For full information please refer to the Selection Guide «Relays and Timers», Publication 700-SG003B-EN-P

## Relays and Timing Relays

The Heart of the Line for Reliable and Cost-effective Control



## Overview

## Allen-Bradley Relays and Timing Relays

Relay Type	Bulletin	Contact Rating [A]	Number of Contacts							Assembly	
			1 c/o	1 NO	2 c/o	3 c/o	4 c/o	2 NO	Solid State	Pluggable	Panel / Rail

### General Purpose Relays

Tube Base	700-HA	10									
		15									
Square Base	700-HB	15									
		15									

### Interposing Relays

Miniature Square Base	700-HC	7									
		10									
Slim Line	700-HK	5									
		10									
	700-HP	8									

### Interposing Terminal Block Relays

	700-HL	2									
		6									

### Timing Relays

Dial Timing	700-HR	5									
		5									
Digital Timing	700-HX	5									
		5									
Miniature Timing	700-HNK	5									
		5									
Miniature Timing	700-HNC	5									
		5									
Panel Mount Timing	700-HXM	5									
		5									
DIN Rail Timing	700-FS	8									
		8									
		8									
		6									
		6									
		6									

### Solid State Relais

Tube Base	700-SA	3									
		5									
Ice Cube	700-SC	2									
		3									
Slim Line; Input/Sensor Module	700-SK	—									
		—									
Slim Line; Output/SSR Module	700-SK	2									
		2									
Hockey Puck	700-SH	5 ... 40									
		5 ... 20									
Flat Pack	700-SE	5 ... 20									
		5 ... 20									

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