

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 3: Function. Position 4: Contact Configuration. Position 5: Time Range. Position 6: 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 3: Function. Position 4: Contact Configuration. Position 5: Time Range. Position 6: Supply Voltage.

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, Rated Input Control Voltage, Cat. No., P Q.

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, Rated Input Control Voltage, Cat. No., P Q.

Accessories. Description, Cat. No., P Q. Heat Sink— Panel or DIN Rail Mount, Heat Sink— Panel or DIN Rail Mount, Heat Sink— Panel or DIN Rail Mount.

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.

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.

700-SK Slim Line Relay with Plug-in Quick Connect Terminals. Input/Sensor Module, Output/SSR Module. Input-to-Output Isolation Method, LED Indicator, Response Speed, Logic Level Supply Voltage, Supply Current, Rated Input Sensor Voltage, Cat. No., P Q.

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

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



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Relays and Timing Relays

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



Overview Allen-Bradley Relays and Timing Relays

Table with columns: Relay Type, Bulletin, Contact Rating [A], Number of Contacts (1 c/o, 1 NO, 2 c/o, 3 c/o, 4 c/o, 2 NO), Solid State, Assembly (Pluggable, Panel/Rail).

Interposing Relays. Miniature Square Base, Slim Line.

Interposing Terminal Block Relays.

Timing Relays. Dial Timing, Digital Timing, Miniature Timing, Miniature Timing, Panel Mount Timing, DIN Rail Timing.

Solid State Relays. Tube Base, Ice Cube, Slim Line; Input/Sensor Module, Slim Line; Output/SSR Module, Hockey Puck, Flat Pack.

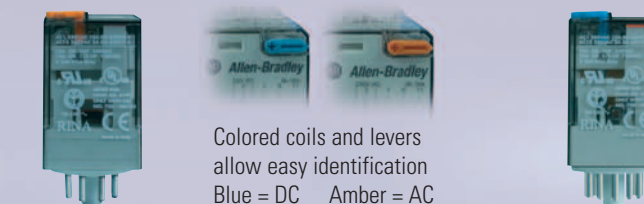
www.rockwellautomation.com. Corporate Headquarters: Rockwell Automation, 777 East Wisconsin Avenue, Suite 1400, Milwaukee, WI, 53202-5302 USA. Tel: (1) 414.212.5200, Fax: (1) 414.212.5201. Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2436 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444.

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### Allen-Bradley General Purpose Plug-in Relays

#### 700-HA Tube Base with Pin Terminals



Colored coils and levers allow easy identification  
Blue = DC Amber = AC

#### 700-HB Square Base with Blade Style Quick Connect Terminals

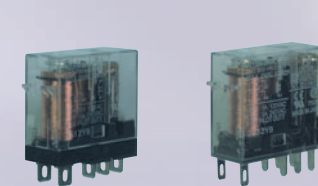


#### 700-HC Miniature Square Base with Blade Style Terminals

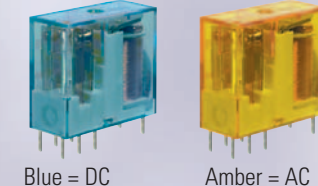


Colored coils and levers allow easy identification  
Blue = DC Amber = AC

#### 700-HK Slim Line with Plug-in Quick Connect Terminals

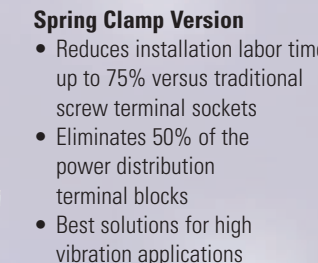
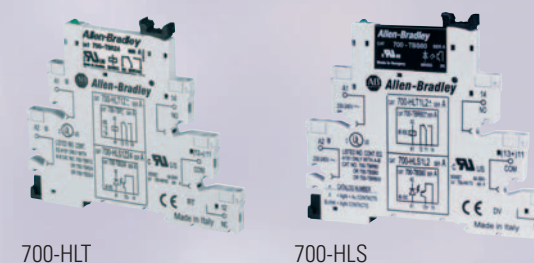


#### 700-HP Slim Line with Plug-in Quick Connect Terminals Pin Style (PCB)



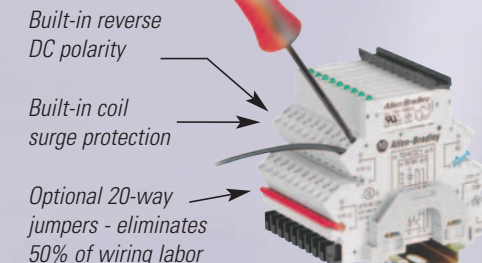
### Allen-Bradley DIN Rail Interposing Terminal Block Relays

#### 700-HL Terminal Block Relays

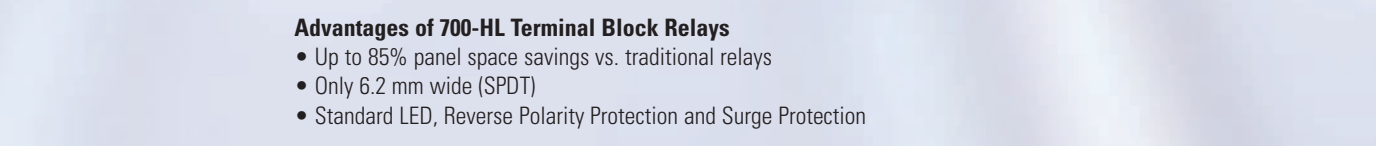


**Spring Clamp Version**

- Reduces installation labor time up to 75% versus traditional screw terminal sockets
- Eliminates 50% of the power distribution terminal blocks
- Best solutions for high vibration applications



Coil Voltage	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
AC [V]	240	700-HLT1Z24	700-HLT1L2	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24	700-HLT1Z24
DC [V]	24	700-HLT1U24	700-HLT1L24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24	700-HLT1U24
AC/DC [V]	110 / 125	700-HLT1U110	700-HLT1L110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110	700-HLT1U110
120 VAC/125 VDC	220	700-HLT1U220	700-HLT1L220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220	700-HLT1U220



#### Accessories for Terminal Block Relays

Description	Replacement Relays	Replacement Solid State Relays	20-Way Jumper	End Barrier
Order must be for 20 relays or multiples of 20	Order must be for 20 relays or multiples of 20	4-blade miniature relay for use with 1 N. O. SSR output. Order must be for 20 relays or multiples of 20	Can be cut to required length. I <sub>max</sub> = 36 A max per 20-way jumper	Used for visual inspection of groups, safe separation of neighboring 700-HL modules that end with jumpers. Order must be for 10 or multiples of 10
<b>Socket Input voltage</b>	<b>Cat. No.</b>	<b>Cat. No.</b>	<b>Cat. No.</b>	<b>Cat. No.</b>
24 V	700-TBR24	700-TBS24	700-TBJ20R	700-HN177
200...240 V 120 V...125 V	700-TBR60	700-TBS60	700-TBJ20G	700-HN177
			700-TBJ20B	700-HN177
<b>Package Quantity</b>	20	20	1	10

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

### Allen-Bradley Plug-in Timing Relays

#### 700-HR Multi-Function, Multi-Range Dial Timing Relays with Pin Terminals



- Dial Timing Relays
- 5 A Contact Rating
- Multiple Programmable Timing Ranges
- Tube Base Pin Style Terminals
- Multi-Voltage Inputs
- Timed Contacts and Instantaneous Contacts
- Transistor Outputs
- Single Function and Multi-Function
- Up to 10 Different Operating Modes
- 0.05 s ... 300 h Timing Range



Output Modes	Output	Timing Ranges	Input Voltage	Cat. No.	Package Quantity	Socket	Pins
ON-Delay One Shot	2 c/o	0.05 s ... 300 h	①	700-HRS42TU24	1	700-HN204	8
Repeat Cycle ON-Start	1 c/o Timed + Inst. Contact		②	700-HRP42TA17	1		
ON-Delay One Shot	2 c/o		②	700-HRS42TA17	1		
ON-Delay	1 c/o Timed + Inst. Contact	0.05 s ... 300 h	24...48 VAC/DC	700-HRC12TU24	1		
Repeat Cycle OFF-Start	2 c/o		②	700-HRM12TA17	1		
Repeat Cycle ON-Start	1 c/o Timed + Inst. Contact	0.05 s ... 30 h	24 VAC/DC 100...240 VAC	700-HRF72DU25	1		
Star-Delta	1 c/o Timed + Inst. Contact	0.5 s ... 120 s	100...120 VAC 200...240 VAC	700-HRY6FA12	1		
True OFF-Delay	2 c/o	0.05 s ... 12 s 0.05 min ... 12 min 0.05 s ... 12 s 0.05 min ... 12 min	24 VAC/DC	700-HRQ2GU25 700-HRQ2HU25 700-HRQ2GA22 700-HRQ2HA22	1		
ON-Delay, OFF-Delay, One Shot, Repeat Cycle OFF-Start, Repeat Cycle ON-Start, Signal ON/OFF-Delay	2 c/o	0.05 s ... 300 h	①	700-HRS2TU24	1	700-HN205	11
True OFF-Delay	2 c/o		②	700-HRS2TA17	1		

① 24...48 VAC, 12...48 VDC    ② 100...240 VAC, 100...125 VDC    ③ Indicates True OFF-Delay timer with reset

#### Bulletin 700-HX Multi-Function, Multi-Range Digital Timing Relays with Pin Terminals



- Digital Timer
- 5 A Contact Rating
- 10 Function or Modes

Output Modes	Output	Timing Ranges	Input Voltage	Cat. No.	P Q	Socket	Pins
A mode: Signal ON-Delay 1	1 c/o	0.000...9.999 s	100...240 VAC	700-HX86SA17	1	700-HN204	8
A-1 mode: Signal ON-Delay 2		0.000...99.99 s					
A-2 mode: Power ON-Delay 1		0.000...999.9 s					
A-3 mode: Power ON-Delay 2		0.000...9999 s					
B mode: Repeat Cycle 1		0.000...99 min 59 s					
B-1 mode: Repeat Cycle 2		0.000...999.9 min					
D mode: Signal OFF-Delay		0.000...9999 min	24 VAC	700-HX86SU24	1		
E mode: One Shot		0.000...99 h 59 min	12...24 VDC				
F mode: Cumulative		0.000...999.9 h					
Twin Timer		0.000...9999 h					

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

### Allen-Bradley Plug-in Timing Relays

#### 700-HNK Multi-Function, Multi-Range, Timing Relays with Plug-in Quick Connect Terminals



- Ultra-Slim Timing Relay
- Dimensions: 12.8 x 31.2 x 47 mm
- 4 Different Operating Modes
- 1 c/o, 2 NO
- Three Operating Voltages
- DIN Rail Mount with Socket
- Time Range up to 10 Hours

Output Modes	Output	Timing Ranges	Input Voltage	Cat. No.	Package Quantity	Socket
ON-Delay One Shot	1 c/o	0.1 s ... 10 min	24 VAC	700-HNK41AA24	1	700-HN121
Repeat Cycle, Off-Start			24 VDC	700-HNK41AZ24	1	
Repeat Cycle, ON-Start			24 VAC	700-HNK41BA24	1	
			24 VDC	700-HNK41BZ24	1	
ON-Delay One Shot	2 NO	0.1 s ... 10 min	24 VAC	700-HNK42AA24	1	700-HN122
Repeat Cycle, Off-Start			24 VDC	700-HNK42AZ24	1	
Repeat Cycle, ON-Start			24 VAC	700-HNK42BA24	1	
			24 VDC	700-HNK42BZ24	1	

#### 700-HNC Multi-Function, Multi-Range, Timing Relays with Blade Style Terminals



- Miniature Timing Relay
- Dimensions: 21.5 x 28 x 56.6 mm
- Four Different Operating Modes
- 4 c/o contacts
- DIN Rail Mount with Socket
- Time Range up to 10 Hours

Output Modes	Output	Timing Ranges	Input Voltage	Cat. No.	Package Quantity	Socket
ON-Delay One Shot	4 c/o	0.1 s ... 10 min	24 VAC	700HNC44AA24	1	700-HN103
Repeat Cycle, Off-Start			100...120 VAC	700-HNC44AA12	1	
Repeat Cycle, ON-Start			200...230 VAC	700-HNC44AA23	1	
			24 VDC	700-HNC44AZ24	1	
			100...110 VDC	700-HNC44AZ11	1	
			24 VAC	700-HNC44BA24	1	
			100...120 VAC	700-HNC44BA12	1	
			200...230 VAC	700-HNC44BA23	1	
			24 VDC	700-HNC44BZ24	1	
			100...110 VDC	700-HNC44BZ11	1	

### Allen-Bradley Panel Mount Preset Counter / Timing Relay

#### 700-HXM Multi-Function, Preset Digital Counter / Timing Relay



Timer Modes	Counter Modes	Input	Output	Counter Range	Timing Range	Input Voltage	Cat. No.	P Q
A mode: Signal ON-Delay B mode: Repeat Cycle D mode: Signal OFF-Delay E mode: One Shot F mode: Accumulative Z mode: ON/OFF-duty Adjustable Repeat Cycle	Increment Decrement Individual Quadrature	N, F, C, K	N, F, C, K	...9999	0.000...9999 h	24 VDC	700-HXM66S224	1

#### Accessories

Description	Cat. No.	P Q
Replacement Flush Mounting Adapter (One shipped with each 700-HXM66S224)	700-HN141	1

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

#### Accessories for Sockets 700-HN204, 700-HN205, 700-HN153 Ser. B

Description	Multi-Function Multi-Range Timing Module
	• 8 functions selectable • 7 available time ranges from 0.5 s ... 1000 h
<b>Voltage Range</b>	12...24 VAC/DC
<b>Cat. No.</b>	700-HT3
<b>Package Quantity</b>	1

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

#### Accessories for Sockets 700-HN104, 700-HN123, 700-HN153, 700-HN204, 700-HN205

Description	ON-Delay Timing Module	One Shot Timing Module	Diode with LED Surge Suppressor	Varistor with LED Surge Suppressor	RC Surge Suppressor	Diode with LED Surge Suppressor	Diode Surge Suppressor
<b>Voltage Range</b>	12...24 VAC/DC	12...24 VAC/DC	6...24 VDC	28...60 VDC	110...220 VDC	6...24 VAC	110...220 VDC
<b>Used with socket</b>	700-HN104 700-HN123 700-HN153 700-HN204 700-HN205	700-HN123 700-HN153	700-HN104 700-HN104	700-HN104	700-HN104 700-HN123 700-HN153 700-HN204 700-HN205	700-HN104 700-HN123 700-HN153 700-HN204 700-HN205	700-HN123 700-HN153 700-HN204 700-HN205
<b>Cat. No.</b>	700-AT1	700-AT2	700-ADL1	700-ADL2	700-ADL3	700-AV1R	700-AV3R
<b>Package Quantity</b>	1	1	10	10	10	10	10

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