

## Advantages of a Full Featured 700 Series Relay

Since the launch of the 700 series relays in 2000, this product line has continuously evolved both functionally and visually. The 700 series product line has the perfect mix of historical Magnecraft relay quality combined with a dynamic arsenal of options. When mated with the Magnecraft sockets and accessories, these RoHS compliant relays provide a complete modular system that will meet all your plug-in relay requirements in a package that is both visually appealing and functionally outstanding.

- Offers a “one stop solution” for your power management system.
- Several Contact configurations and materials to meet your individual needs.
- Plug-In switching capabilities from 10 mA to 20 Amps.
- Several Feature Code and Operation combinations available for all budgets.
- Ejector clips, ribbed relay housings and space-saving sockets allow for easy removal from crowded DIN rails.
- Color and appearance designed for high visibility in all environments.
- Wiring diagrams include NEMA and IEC standards.
- Engineering availability allows for customized relay solutions.

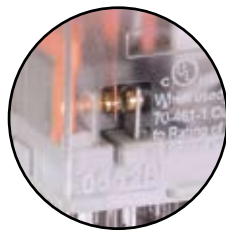


**Removable Lock-Down Door**  
When Activated, Locks Push Button and Contacts in the Powered Position.

**Color-Coded Push Button**  
Allows Manual Operation of Relay.  
AC Coils Red or DC Coils Blue.

**Finger Grip Cover**  
Easy Removal of Relay from Socket.

**Gold Flashed Contacts**  
Prevents Premature Oxidation and Increases Shelf-life.



**Contact Viewing Window**  
Shows Position of Contacts.

**Isolated Input and Output Terminals**  
Separates Control Circuits from Load Circuits.



**Slim Design**  
Minimizes Space on DIN Rail.

**Module Compatible**  
Allows for Optional Protection or LED Modules to be Used With Sockets.



**2-Way Side or DIN Rail Mounting System**  
Retrofits Existing Panel Mounting and 35mm DIN Rail.

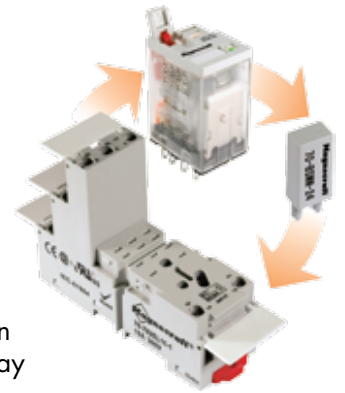
# The Complete System Solution!

**Flag Indicator**  
Shows Relay Status in Manual or Powered Condition.



**Bi-Polar LED Status Lamp**  
Shows Coil "ON" or "OFF" Status.

**I.D. Tag/Write-On Plastic Label**  
Used for Identification of Relays in Multi-Relay Circuits.



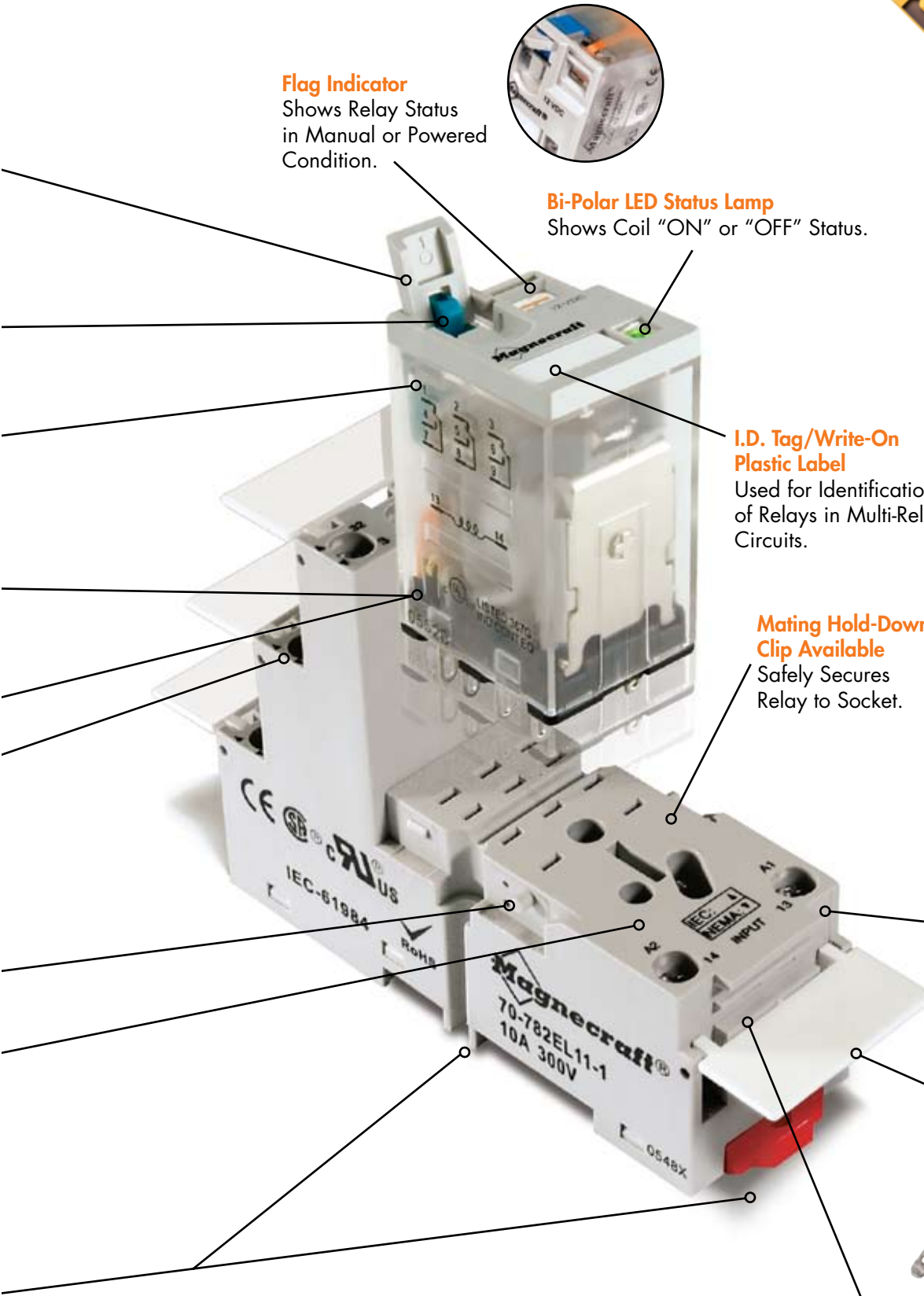
**Mating Hold-Down Clip Available**  
Safely Secures Relay to Socket.



**Finger-Safe**  
Protects Operators from Live Circuits.

**I.D. Tag/Write-On Plastic Label**  
Used to Match Wire Identification Tags with Socket Connections.

**Internal Coil Bus Jumper System**  
Allows Connection to Adjacent Sockets Without Additional Wiring.

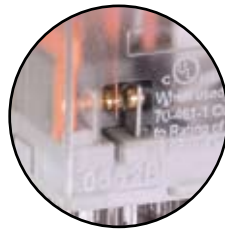


## Advantages of a Plain Cover 700 Series Relay

The Plain Cover Super Series relays support budget minded applications with premium performance. Maintaining the same ratings and internal components as the Full Feature Series; the Plain Cover Series perform as well as premium relays while maintaining low costs by offering several option configurations.

**Finger Grip Cover**  
Easy Removal of Relay from Socket.

**Contact Viewing Window**  
Shows Position of Contacts.



**Gold Flashed Contacts**  
Prevents Premature Oxidation and Increases Shelf-life.

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- Engineering availability allows for customized relay solutions.

**Isolated Input and Output Terminals**  
Separates Control Circuits from Load Circuits.

**Slim Design**  
Minimizes Space on DIN Rail.



**Module Compatible**  
Allows for Optional Protection or LED Modules to be Used With Sockets.

**2-Way Side or DIN Rail Mounting System**  
Retrofits Existing Panel Mounting and 35mm DIN Rail.

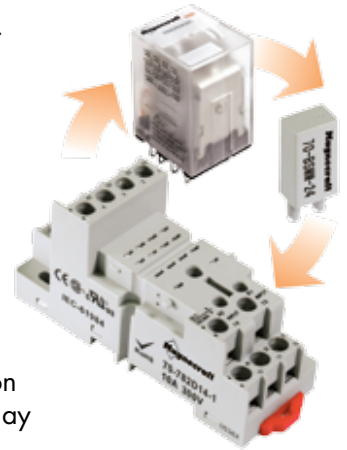


# The Complete System Solution!

**Flag Indicator**  
Shows Relay Status in Manual or Powered Condition.



**Optional Bi-Polar LED Status Lamp**  
Shows Coil "ON" or "OFF" Status.

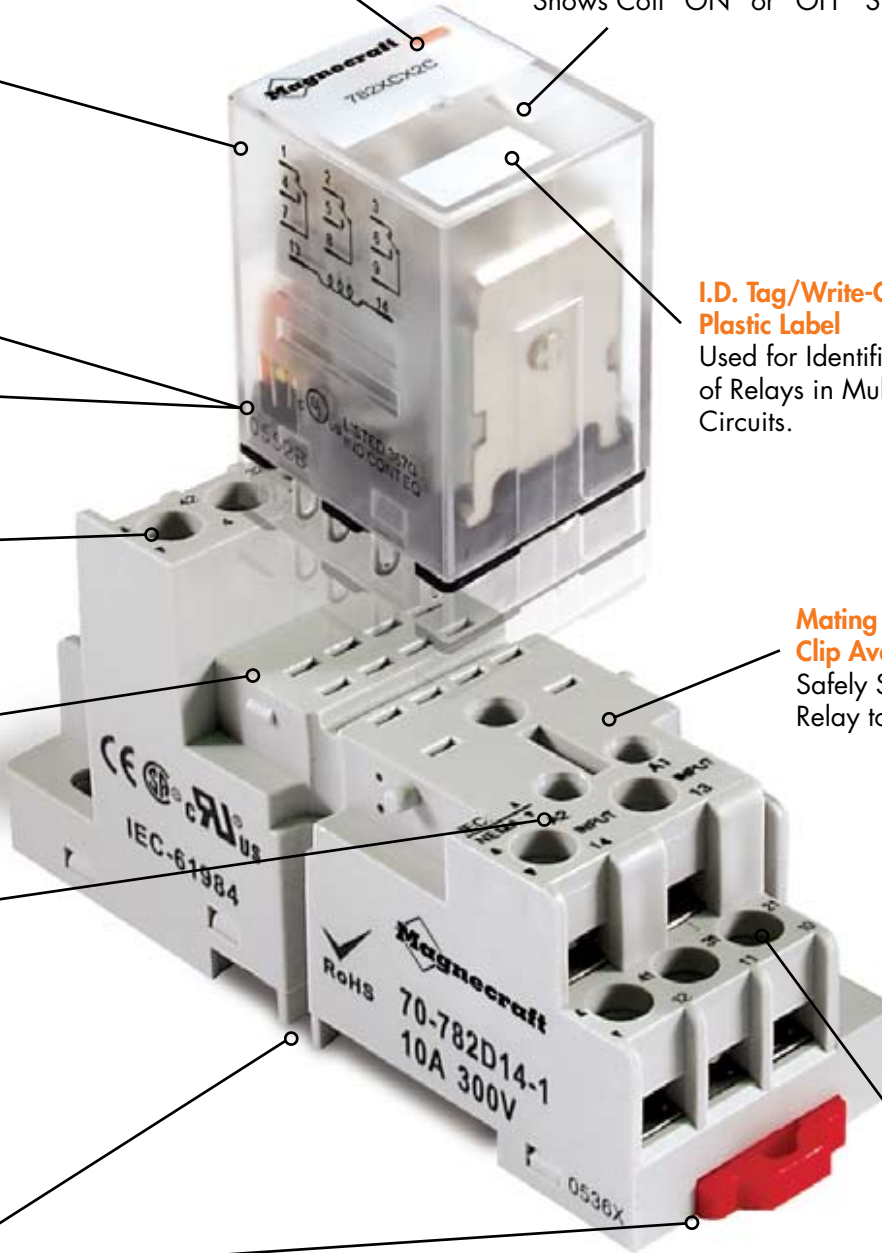


**I.D. Tag/Write-On Plastic Label**  
Used for Identification of Relays in Multi-Relay Circuits.

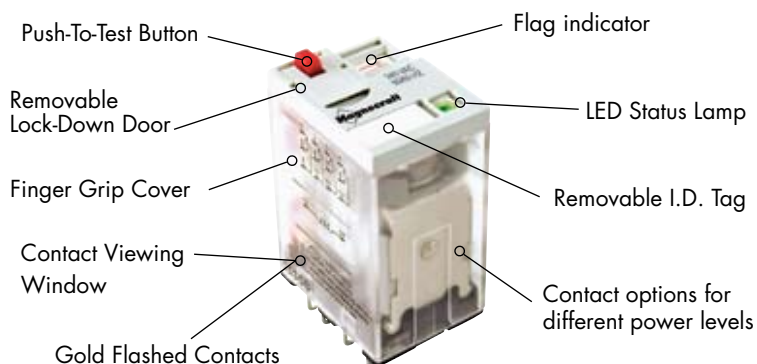
**Mating Hold-Down Clip Available**  
Safely Secures Relay to Socket.



**Finger-Safe**  
Protects Operators from Live Circuits.



## 782 Ice Cube Relays/4PDT, 3-10 Amp Rating (DC & AC)



### General Specifications

(UL 508)

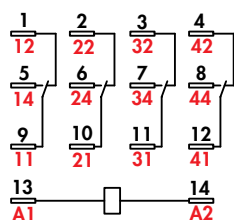
### 782XDX1

### 782XDX2

### 782XDX3

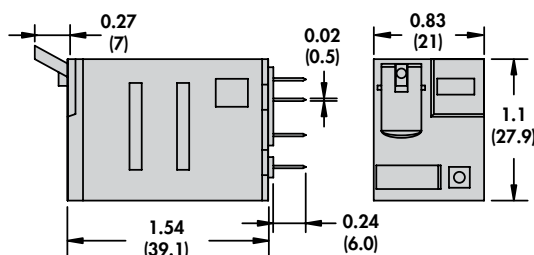
Contact Characteristics		Units	Low Level	Standard	Low Level
Number and type of Contacts			4PDT	4PDT	4PDT
Contact materials			Fine Silver, Gold Diffused	Silver Alloy	Bifurcated
Thermal (Carrying) Current		A	3	10	3
Maximum Switching Voltage		V	240	300	240
Switching Current @ Voltage		~ Resistive	3A @120V 50/60Hz	10A @120V 50/60Hz	3A @120V 50/60Hz
		~ Resistive	3A @240V 50/60Hz	8A @277V 50/60Hz	3A @240V 50/60Hz
		≡ Resistive	3A @30V	8A @28V	3A @30V
		HP	1/10 @120VAC	1/3 @120VAC	1/16 @120VAC
		HP	1/10 @240VAC	1 @277 VAC	
		Pilot Duty	C300	B300	
Minimum Switching Requirement		mA	3 @17VDC (.04W)	100 @5VDC (.5W)	3 @17VDC (.04W)
Coil Characteristics					
Voltage Range		~ V	6...240	6...240	6...240
		≡ V	6...125	6...125	6...125
Operating Range		% of Nominal	85% to 110%	85% to 110%	85% to 110%
			80% to 110%	80% to 110%	80% to 110%
Average consumption		~ VA	1.2	1.2	1.2
		≡ W	0.9	0.9	0.9
Drop-out voltage threshold		~	15%	15%	15%
		≡	10%	10%	10%
Performance Characteristics					
Electrical Life (UL508)		Operations @ Rated Current	(Resistive) 200,000	200,000	200,000
Mechanical Life		Unpowered	10,000,000	10,000,000	10,000,000
Operating time (response time)			20 ms	20	20
Dielectric strength		Between coil and contact	~ V(rms) 1500	1500	1500
		Between poles	~ V(rms) 1500	1500	1500
		Between contacts	~ V(rms) 1500	1500	1500
Environment					
Product certifications		Standard version	UL, CSA, CE	UL, CSA, CE	UL, CSA, CE
Ambient air temperature		Storage	°C -40...+85	-40...+85	-40...+85
around the device		Operation	°C -40...+55	-40...+55	-40...+55
Vibration resistance		Operational	g-n 3, 10 - 55 Hz	3, 10 - 55 Hz	3, 10 - 55 Hz
Shock resistance			g-n 10	10	10
Degree of protection			IP 40	IP 40	IP 40
Weight			grams 36	36	36

### 782XDX1, 2, 3

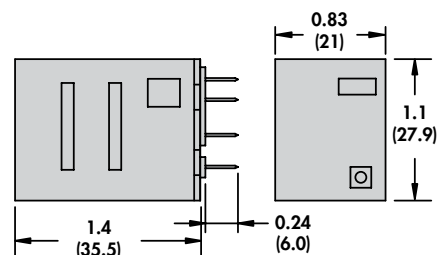


NEMA  
IEC  
Wiring Diagram  
Bottom View

### Full Featured Dimensions



### Plain Cover Dimensions







Full Featured



Plain Cover

Standard Part Numbers

**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

Nominal Voltage	Coil Resistance	4PDT Part Number (Full Feature) 10 Amp	4PDT Part Number (Plain Cover) 10 Amp	4PDT Part Number (Full Feature) 3 Amp, Bi-Furcated
AC Operated				
6 VAC 50/60 Hz	9.6 Ohms	782XDX2M4L-6A	<b>782XDX2C-6A</b>	782XDX3M4L-6A
12 VAC 50/60 Hz	46 Ohms	782XDX2M4L-12A	<b>782XDX2C-12A</b>	782XDX3M4L-12A
24 VAC 50/60 Hz	180 Ohms	<b>782XDX2M4L-24A</b>	<b>782XDX2C-24A</b>	<b>782XDX3M4L-24A</b>
120 VAC 50/60 Hz	4430 Ohms	<b>782XDX2M4L-120A</b>	<b>782XDX2C-120A</b>	<b>782XDX3M4L-120A</b>
220-230 VAC 50/60 Hz	15000 Ohms	<b>782XDX2M4L-220/230A</b>	<b>782XDX2C-220/230A</b>	782XDX3M4L-220/230A
240 VAC 50/60 Hz	15720 Ohms	<b>782XDX2M4L-240A</b>	<b>782XDX2C-240A</b>	782XDX3M4L-240A
DC Operated				
6 VDC	40 Ohms	782XDX2M4L-6D	<b>782XDX2C-6D</b>	782XDX3M4L-6D
12 VDC	160 Ohms	<b>782XDX2M4L-12D</b>	<b>782XDX2C-12D</b>	<b>782XDX3M4L-12D</b>
24 VDC	650 Ohms	<b>782XDX2M4L-24D</b>	<b>782XDX2C-24D</b>	<b>782XDX3M4L-24D</b>
48 VDC	2600 Ohms	782XDX2M4L-48D	<b>782XDX2C-48D</b>	<b>782XDX3M4L-48D</b>
110-125 VDC	11000 Ohms	<b>782XDX2M4L-110/125D</b>	<b>782XDX2C-110/125D</b>	<b>782XDX3M4L-110/125D</b>

Custom Relay Part Number Builder

Series	Contact Config.	Contact Code	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	XDX = 4PDT	3 Amp Fine Silver, Gold Diffused = 1 10 Amp Silver Alloy = 2 3 Amp Bifurcated = 3	Full Feature = No Code Plain Cover = C	Plug In = No Code PC terminal = T	Side Push Button = M Locking Push Button = M4 Bi-Polar LED = L	VAC = 6 - 240A VDC = 6 - 125D

For other mating sockets, see Section 2: 70-782EL14-1, 70-782E14-1, 70-461-1, 70-378-1, 70-379-1

Relay Adapters



16-782C1

Section 3, p.14-16



16-782C

Section 3, p.14-16

70-782D14-1  
SOCKET

16-782SC  
Metal Hold-Down Clip  
Section 3, p.8-11

