

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.

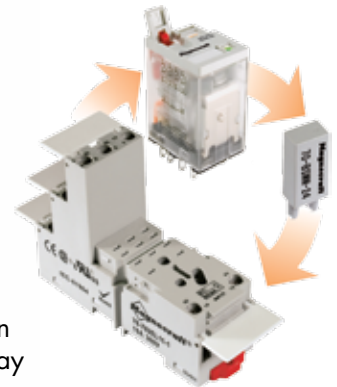
Mating Hold-Down Clip Available
Safely Secures Relay to Socket.



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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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.

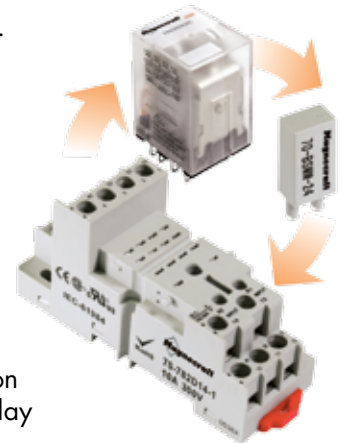
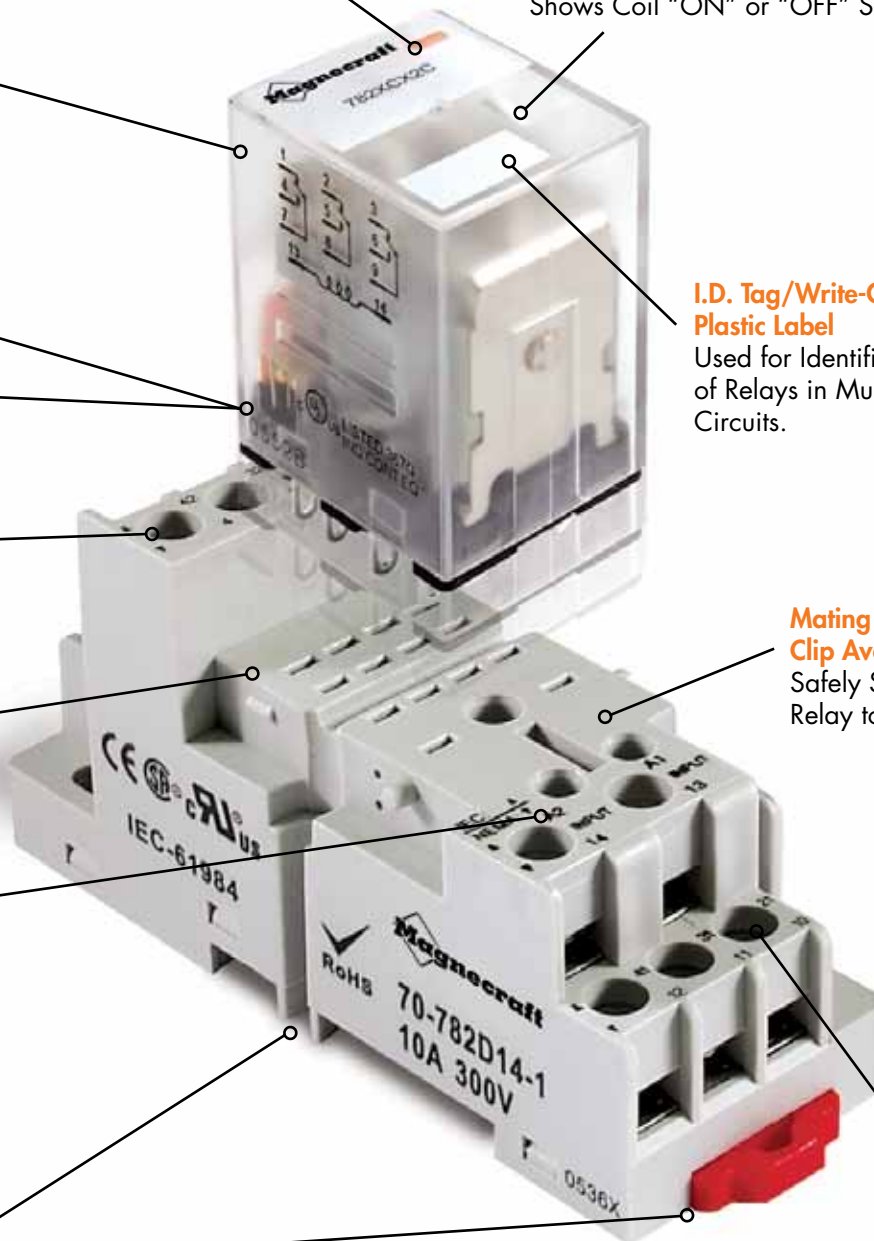
Mating Hold-Down Clip Available

Safely Secures Relay to Socket.

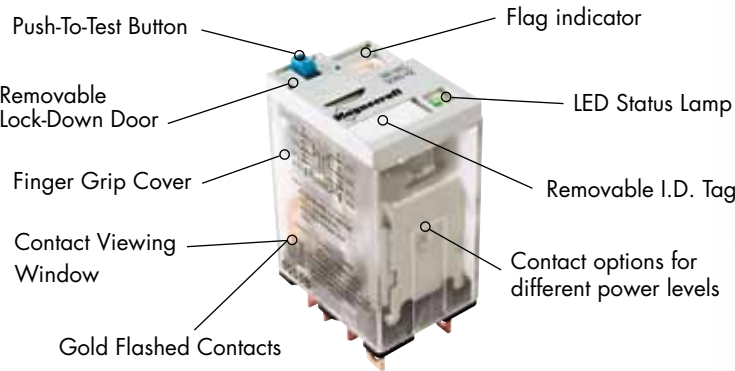
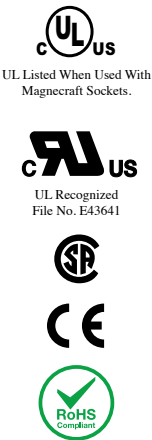


Finger-Safe

Protects Operators from Live Circuits.



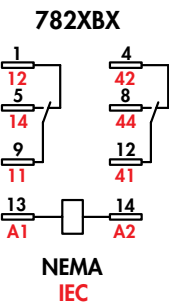
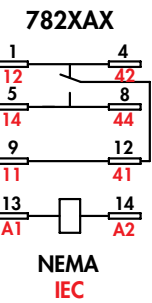
782 Ice Cube Relays/SPDT & DPDT, 15-20 Amp Rating



General Specifications

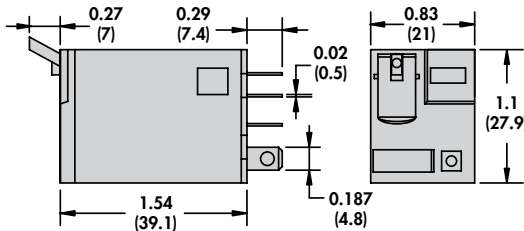
(UL 508)

Contact Characteristics		Units	782XAX	782XBX
Number and type of Contacts			SPDT	DPDT
Contact materials			Silver Alloy	Silver Alloy
Thermal (Carrying) Current		A	20	15
Maximum Switching Voltage		V	300	300
Switching Current @ Voltage	~	Resistive	20A @ 120V 50/60Hz	15A @ 120V 50/60Hz
	~	Resistive	20A @ 277V 50/60Hz	12A @ 277V 50/60Hz
	~	Resistive	20A @ 28V	12A @ 28V
	~	HP	1/2 @ 120VAC	1/2 @ 120VAC
	~	HP	1 @ 250 VAC	1 @ 250 VAC
	~	Pilot Duty	B300	B300
Minimum Switching Requirement		mA	100 @ 5VDC (.5W)	100 @ 5VDC (.5W)
Coil Characteristics				
Voltage Range	~	V	6...240	6...240
	~	V	6...125	6...125
Operating Range	% of Nominal	~	85% to 110%	85% to 110%
		~	80% to 110%	80% to 110%
Average consumption	~	VA	1.2	1.2
	~	W	0.9	0.9
Drop-out voltage threshold	~		15%	15%
	~		10%	10%
Performance Characteristics				
Electrical Life (UL508)	Operations @ Rated Current	(Resistive)	100,000	100,000
Mechanical Life	Unpowered		10,000,000	10,000,000
Operating time (response time)		ms	20	20
Dielectric strength	Between coil and contact	~ V(rms)	2500	2500
	Between poles	~ V(rms)	1500	1500
	Between contacts	~ V(rms)	1500	1500
Environment				
Product certifications	Standard version		UL, CSA, CE	UL, CSA, CE
Ambient air temperature	Storage	°C	-40...+85	-40...+85
around the device	Operation	°C	-40...+55	-40...+55
Vibration resistance	Operational	g-n	3, 10 - 55 Hz	3, 10 - 55 Hz
Shock resistance		g-n	10	10
Degree of protection			IP 40	IP 40
Weight		grams	36	36

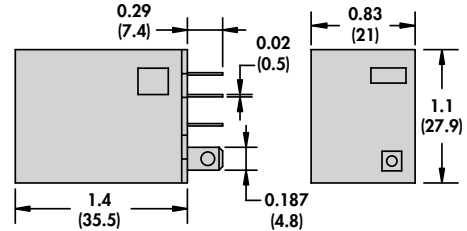


Wiring Diagram
Bottom View

Full Featured Dimensions



Plain Cover Dimensions



782XAX



Full Featured



Plain Cover

782XBX



Full Featured



Plain Cover

Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Voltage	Coil Resistance	SPDT Part Number (Full Feature) 20 Amp	SPDT Part Number (Plain Cover) 20 Amp	DPDT Part Number (Full Feature) 20 Amp	DPDT Part Number (Plain Cover) 20 Amp
AC Operated					
6 VAC 50/60 Hz	9.6 Ohms	782XAXM4L-6A	782XAXC-6A	782XBM4L-6A	782XBXC-6A
12 VAC 50/60 Hz	46 Ohms	782XAXM4L-12A	782XAXC-12A	782XBM4L-12A	782XBXC-12A
24 VAC 50/60 Hz	180 Ohms	782XAXM4L-24A	782XAXC-24A	782XBM4L-24A	782XBXC-24A
120 VAC 50/60 Hz	4430 Ohms	782XAXM4L-120A	782XAXC-120A	782XBM4L-120A	782XBXC-120A
220-230 VAC 50/60 Hz	15000 Ohms	782XAXM4L-220/230A	782XAXC-220/230A	782XBM4L-220/230A	782XBXC-220/230A
240 VAC 50/60 Hz	15720 Ohms	782XAXM4L-240A	782XAXC-240A	782XBM4L-240A	782XBXC-240A
DC Operated					
6 VDC	40 Ohms	782XAXM4L-6D	782XAXC-6D	782XBM4L-6D	782XBXC-6D
12 VDC	160 Ohms	782XAXM4L-12D	782XAXC-12D	782XBM4L-12D	782XBXC-12D
24 VDC	650 Ohms	782XAXM4L-24D	782XAXC-24D	782XBM4L-24D	782XBXC-24D
48 VDC	2600 Ohms	782XAXM4L-48D	782XAXC-48D	782XBM4L-48D	782XBXC-48D
110-125 VDC	11000 Ohms	782XAXM4L-110/125D	782XAXC-110/125D	782XBM4L-110/125D	782XBXC-110/125D

Custom Relay Part Number Builder

Series	Contact Configuration	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	XAX = SPDT XBX = DPDT	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: 70-459-1, 70-401-1, 70-402-1

Relay Adapters



16-782C1

Section 3, p.14-16

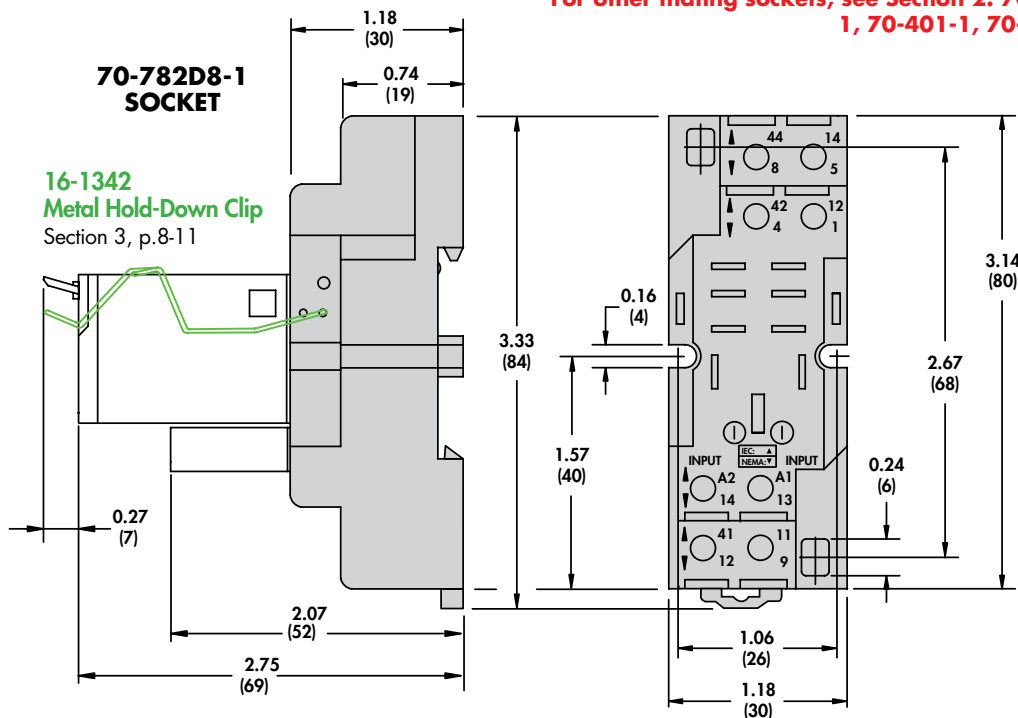


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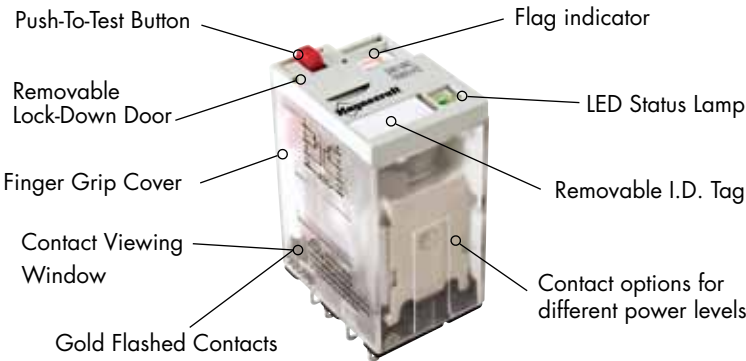
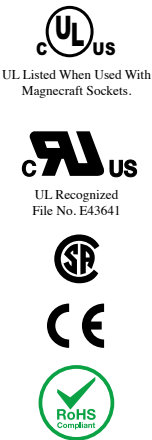
Section 3, p.14-16

70-782D8-1 SOCKET

**16-1342
Metal Hold-Down Clip**
Section 3, p.8-11

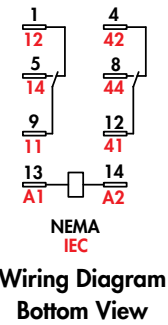


782 Ice Cube Relays/DPDT, 3-10 Amp Rating (DC & AC)

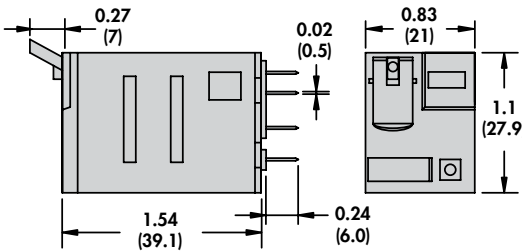


General Specifications		(UL 508)	782XB1	782XB2	782XB3
Contact Characteristics		Units	Low Level	Standard	Low Level
Number and type of Contacts			DPDT	DPDT	DPDT
Contact materials			Fine Silver, Gold Diffused	Silver Alloy	Bifurcated
Thermal (Carrying) Current		A	3	10	3
Maximum Switching Voltage		V	240	300	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 @28V	8A @28V	3A @30V
		HP	1/10 @120VAC	1/3 @120VAC	1/16 @120VAC
		HP	1/10 @240 VAC	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 100%	85% to 100%	85% to 100%
		~	80% to 100%	80% to 100%	80% to 100%
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	100,000
Mechanical Life	Unpowered		10,000,000	10,000,000	10,000,000
Operating time (response time)		ms	20	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

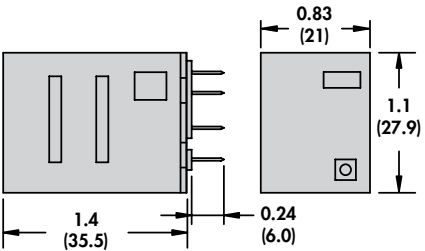
782XB1, 2, 3



Full Featured Dimensions



Plain Cover Dimensions





Full Featured

**NEW
NEW
NEW
NEW
NEW**



Plain Cover

Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Voltage	Coil Resistance	DPDT Part Number (Full Feature) 10 Amp	DPDT Part Number (Plain Cover) 10 Amp	DPDT Part Number (Full Feature) 3 Amp, Bifurcated
AC Operated				
6 VAC 50/60 Hz	9.6 Ohms	782XBX2M4L-6A	782XBX2C-6A	782XBX3M4L-6A
12 VAC 50/60 Hz	46 Ohms	782XBX2M4L-12A	782XBX2C-12A	782XBX3M4L-12A
24 VAC 50/60 Hz	180 Ohms	782XBX2M4L-24A	782XBX2C-24A	782XBX3M4L-24A
120 VAC 50/60 Hz	4430 Ohms	782XBX2M4L-120A	782XBX2C-120A	782XBX3M4L-120A
220-230 VAC 50/60 Hz	15000 Ohms	782XBX2M4L-220/230A	782XBX2C-220/230A	782XBX3M4L-220/230A
240 VAC 50/60 Hz	15720 Ohms	782XBX2M4L-240A	782XBX2C-240A	782XBX3M4L-240A
DC Operated				
6 VDC	40 Ohms	782XBX2M4L-6D	782XBX2C-6D	782XBX3M4L-6D
12 VDC	160 Ohms	782XBX2M4L-12D	782XBX2C-12D	782XBX3M4L-12D
24 VDC	650 Ohms	782XBX2M4L-24D	782XBX2C-24D	782XBX3M4L-24D
48 VDC	2600 Ohms	782XBX2M4L-48D	782XBX2C-48D	782XBX3M4L-48D
110-125 VDC	11000 Ohms	782XBX2M4L-110/125D	782XBX2C-110/125D	782XBX3M4L-110/125D

Custom Relay Part Number Builder

782	XB	1	C	T	M4L-	240A
Series	Contact Config.	Contact Code	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	XB = DPDT	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

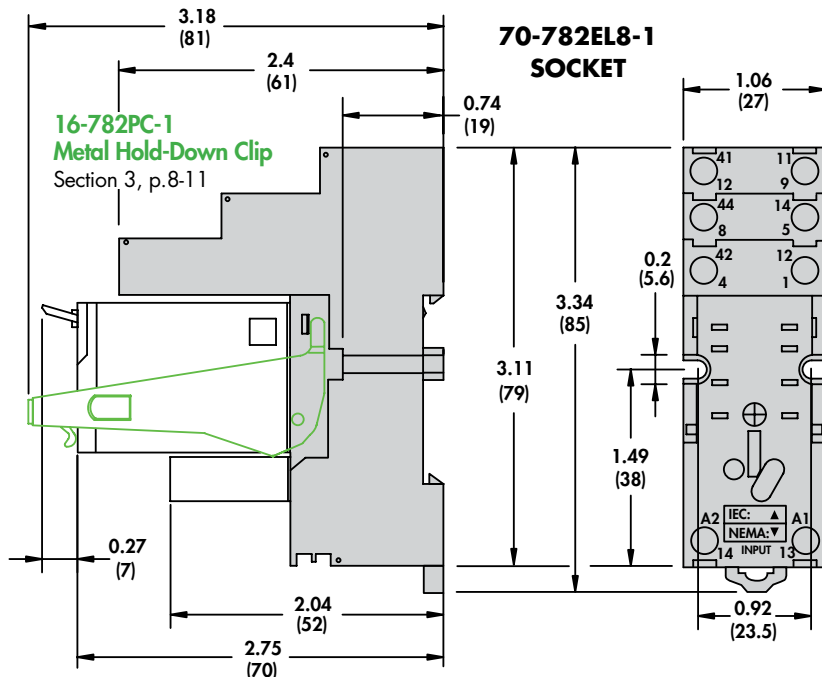
Relay Adapters



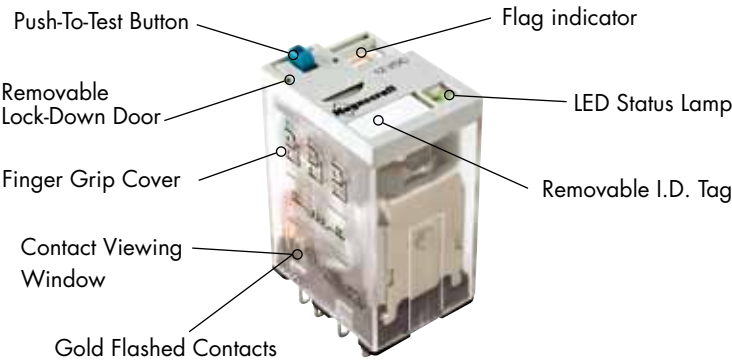
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Section 3, p.14-16



16-782C
Section 3, p.14-16

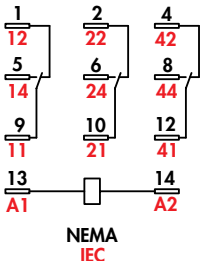


782 Ice Cube Relays/3PDT, 3-10 Amp Rating (DC & AC)



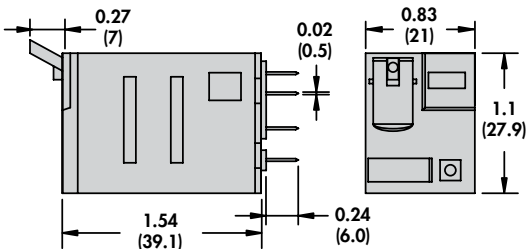
General Specifications		(UL 508)	782XCX2	
Contact Characteristics		Units	Standard	
Number and type of Contacts			3PDT	
Contact materials			Silver Alloy	
Thermal (Carrying) Current		A	10	
Maximum Switching Voltage		V	300	
Switching Current @ Voltage		~	Resistive	
		~	10A @ 120V 50/60Hz	
		~	Resistive	
		~	8A @ 277V 50/60Hz	
		~	Resistive	
		~	8A @ 28V	
		~	HP	
		~	1/3 @ 120VAC	
		~	HP	
		~	1 @ 277 VAC	
		~	Pilot Duty	
		~	B300	
Minimum Switching Requirement		mA	100 @ 5VDC (.5W)	
Coil Characteristics				
Voltage Range		~	V	
		~	6....240	
		~	V	
		~	6....125	
Operating Range		% of Nominal	~	
		~	85% to 110%	
		~	80% to 110%	
Average consumption		~	VA	
		~	1.2	
		~	W	
		~	0.9	
Drop-out voltage threshold		~	~	
		~	15%	
		~	10%	
Performance Characteristics				
Electrical Life (UL508)		Operations @ Rated Current	(Resistive)	200,000
Mechanical Life		Unpowered		10,000,000
Operating time (response time)			ms	20
Dielectric strength		Between coil and contact	~	V(rms)
		Between poles	~	V(rms)
		Between contacts	~	V(rms)
				1500
				1500
				1500
Environment				
Product certifications		Standard version		UL, CSA, CE
Ambient air temperature		Storage	°C	-40...+85
around the device		Operation	°C	-40...+55
Vibration resistance		Operational	g-n	3, 10 - 55 Hz
Shock resistance			g-n	10
Degree of protection				IP 40
Weight			grams	36

782XCX2

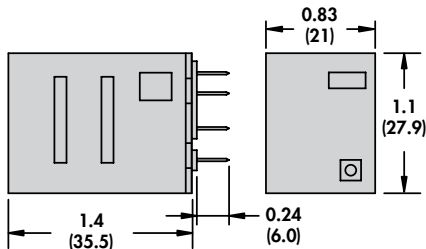


Wiring Diagram
Bottom View

Full Featured Dimensions



Plain Cover Dimensions





Full Featured

NEW
NEW
NEW
NEW
NEW



Plain Cover

Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Voltage	Coil Resistance	3PDT Part Number (Full Feature) 10 Amp	3PDT Part Number (Plain Cover) 10 Amp
AC Operated			
6 VAC 50/60 Hz	9.6 Ohms	782XCX2M4L-6A	782XCX2C-6A
12 VAC 50/60 Hz	46 Ohms	782XCX2M4L-12A	782XCX2C-12A
24 VAC 50/60 Hz	180 Ohms	782XCX2M4L-24A	782XCX2C-24A
120 VAC 50/60 Hz	4430 Ohms	782XCX2M4L-120A	782XCX2C-120A
220-230 VAC 50/60 Hz	15000 Ohms	782XCX2M4L-220/230A	782XCX2C-220/230A
240 VAC 50/60 Hz	15720 Ohms	782XCX2M4L-240A	782XCX2C-240A
DC Operated			
6 VDC	40 Ohms	782XCX2M4L-6D	782XCX2C-6D
12 VDC	160 Ohms	782XCX2M4L-12D	782XCX2C-12D
24 VDC	650 Ohms	782XCX2M4L-24D	782XCX2C-24D
48 VDC	2600 Ohms	782XCX2M4L-48D	782XCX2C-48D
110-125 VDC	11000 Ohms	782XCX2M4L-110/125D	782XCX2C-110/125D

Custom Relay Part Number Builder

Series	Contact Config.	Contact Code	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	XCX	2	C	T	M4L-	240A
782	XCX = 3PDT	10 Amp Silver Alloy = 2	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

Relay Adapters



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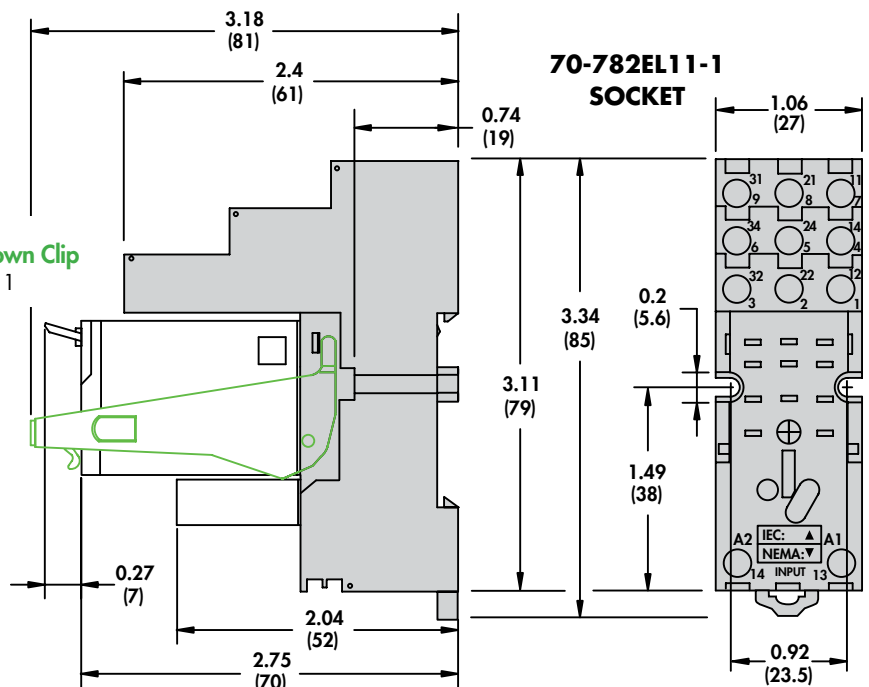
Section 3, p. 14-16



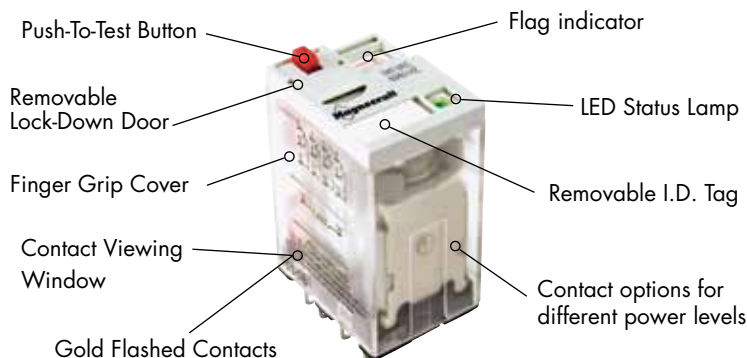
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Section 3, p. 14-16

16-782PC-1
Metal Hold-Down Clip
Section 3, p. 8-11



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



General Specifications

(UL 508)

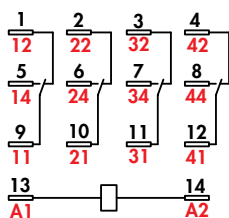
782XDX1

782XDX2

782XDX3

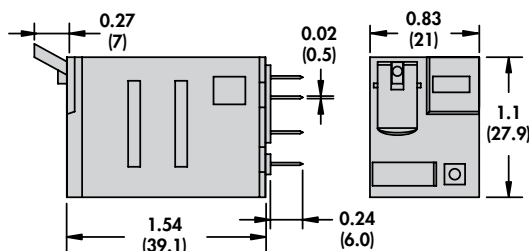
Contact Characteristics		Units	Low Level	Standard	Low Level
Number and type of Contacts			4PDT	4PDT	4PDT
Contact materials			Fine Silver, Gold Diffused	Silver Alloy	Bifurcated
Thermal (Carrying) Current		A	3	10	3
Maximum Switching Voltage		V	240	300	240
Switching Current @ Voltage	~	Resistive	3A @120V 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
Minimum Switching Requirement	~	HP	1/10 @240VAC	1 @277 VAC	
	~	Pilot Duty	C300	B300	
	~	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)		ms	20	20	20
Dielectric strength	Between coil and contact	~	V(rms)	1500	1500
	Between poles	~	V(rms)	1500	1500
	Between contacts	~	V(rms)	1500	1500
Environment					
Product certifications	Standard version		UL, CSA, CE	UL, CSA, CE	UL, CSA, CE
Ambient air temperature around the device	Storage	°C	-40...+85	-40...+85	-40...+85
	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

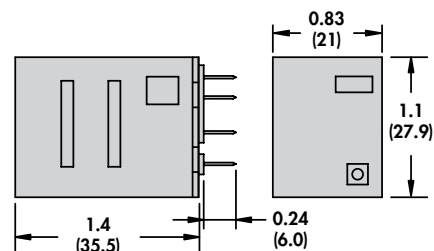


NEMA
IEC
Wiring Diagram
Bottom View

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	782XDX2C-6A	782XDX3M4L-6A
12 VAC 50/60 Hz	46 Ohms	782XDX2M4L-12A	782XDX2C-12A	782XDX3M4L-12A
24 VAC 50/60 Hz	180 Ohms	782XDX2M4L-24A	782XDX2C-24A	782XDX3M4L-24A
120 VAC 50/60 Hz	4430 Ohms	782XDX2M4L-120A	782XDX2C-120A	782XDX3M4L-120A
220-230 VAC 50/60 Hz	15000 Ohms	782XDX2M4L-220/230A	782XDX2C-220/230A	782XDX3M4L-220/230A
240 VAC 50/60 Hz	15720 Ohms	782XDX2M4L-240A	782XDX2C-240A	782XDX3M4L-240A
DC Operated				
6 VDC	40 Ohms	782XDX2M4L-6D	782XDX2C-6D	782XDX3M4L-6D
12 VDC	160 Ohms	782XDX2M4L-12D	782XDX2C-12D	782XDX3M4L-12D
24 VDC	650 Ohms	782XDX2M4L-24D	782XDX2C-24D	782XDX3M4L-24D
48 VDC	2600 Ohms	782XDX2M4L-48D	782XDX2C-48D	782XDX3M4L-48D
110-125 VDC	11000 Ohms	782XDX2M4L-110/125D	782XDX2C-110/125D	782XDX3M4L-110/125D

Custom Relay Part Number Builder

782	XDX	1	C	T	M4L-	240A
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

