

Advantages of a 782/Full Featured, Super 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.

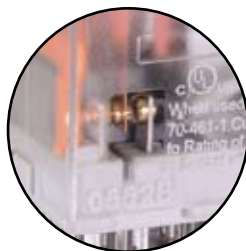


Removable Lock-Down Door

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.

Contact Viewing Window

Shows Position of Contacts.

Isolated Input and Output Terminals

Separates Control Circuits from Load Circuits.

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.



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

Secures Relay to Socket.

Slim Design

Minimizes Space on DIN Rail.

Finger-Safe

Protects Operators from Live Circuits.

Internal Coil Buss Jumper System

Allows Connection to Adjacent Sockets Without Additional Wiring.

I.D. Tag/Write-On Plastic Label

Used to Match Wire Identification Tags with Socket Connections.

The Complete System Solution!



Advantages of a 782/Plain Cover, Super 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.

- 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.

Finger Grip Cover

Easy Removal of Relay from Socket.

Contact Viewing Window

Shows Position of Contacts.



Isolated Input and Output Terminals

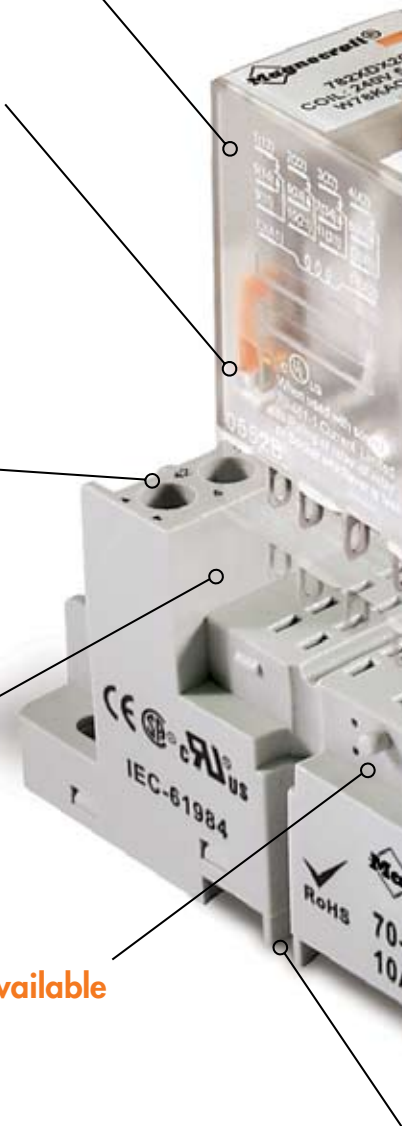
Separates Control Circuits from Load Circuits.

Slim Design

Minimizes Space on DIN Rail.

Mating Hold-Down Clip Available

Secures Relay to Socket.



Flag Indicator

Shows Relay Status in Manual or Powered Condition.



Optional Bi-Polar LED Status Lamp

Shows Coil "ON" or "OFF" Status.

Write-On I.D Label

Used for Identification of Relays in Multi-Relay Circuits.

Module Compatible

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

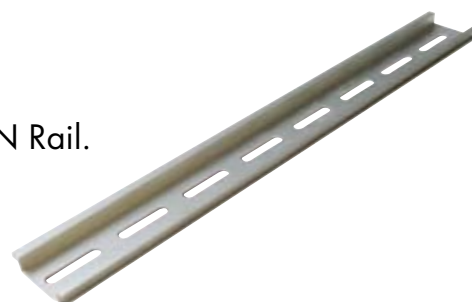
Finger-Safe

Protects Operators from Live Circuits.

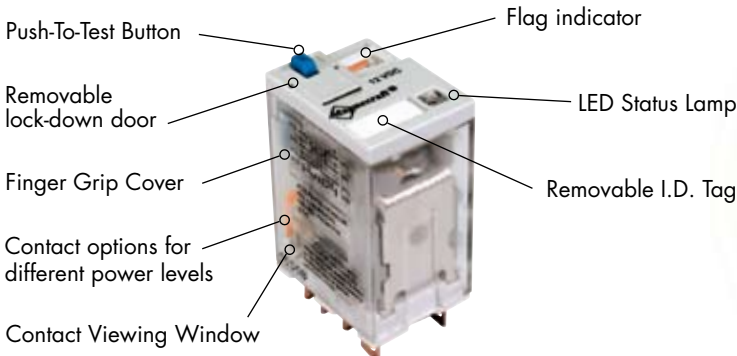
2-Way Side or DIN Rail Mounting System

Retrofits Existing Panel Mounting and 35 mm DIN Rail.

The Complete System Solution!

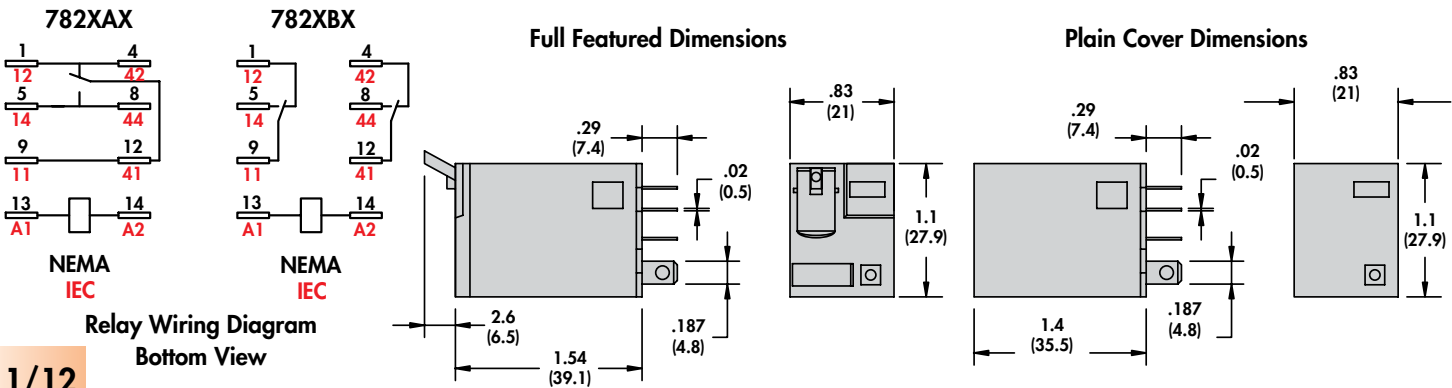


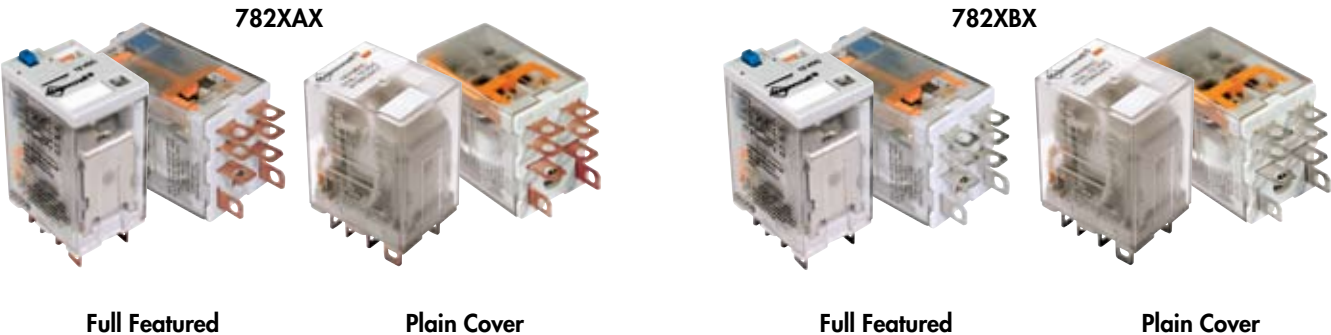
782 Ice Cube Relays/SPDT, 20 Amp Rating/DPDT 20 Amp Rating



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	20
Maximum Switching Voltage		V	300	300
Switching Current @ Voltage		~ Resistive	20A @ 120V 50/60Hz	20A @ 120V 50/60Hz
		~ Resistive	20A @ 277V 50/60Hz	20A @ 277V 50/60Hz
		⋮ Resistive	20A @ 28V	20A @ 28V
		HP	1/2 @ 120VAC	1/2 @ 120VAC
		HP	1 @ 250 VAC	1 @ 250 VAC
Minimum Switching Requirement		Pilot Duty	B300	B300
		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 around the device	Storage	°C	-40...+85	-40...+85
	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





Standard Part Numbers

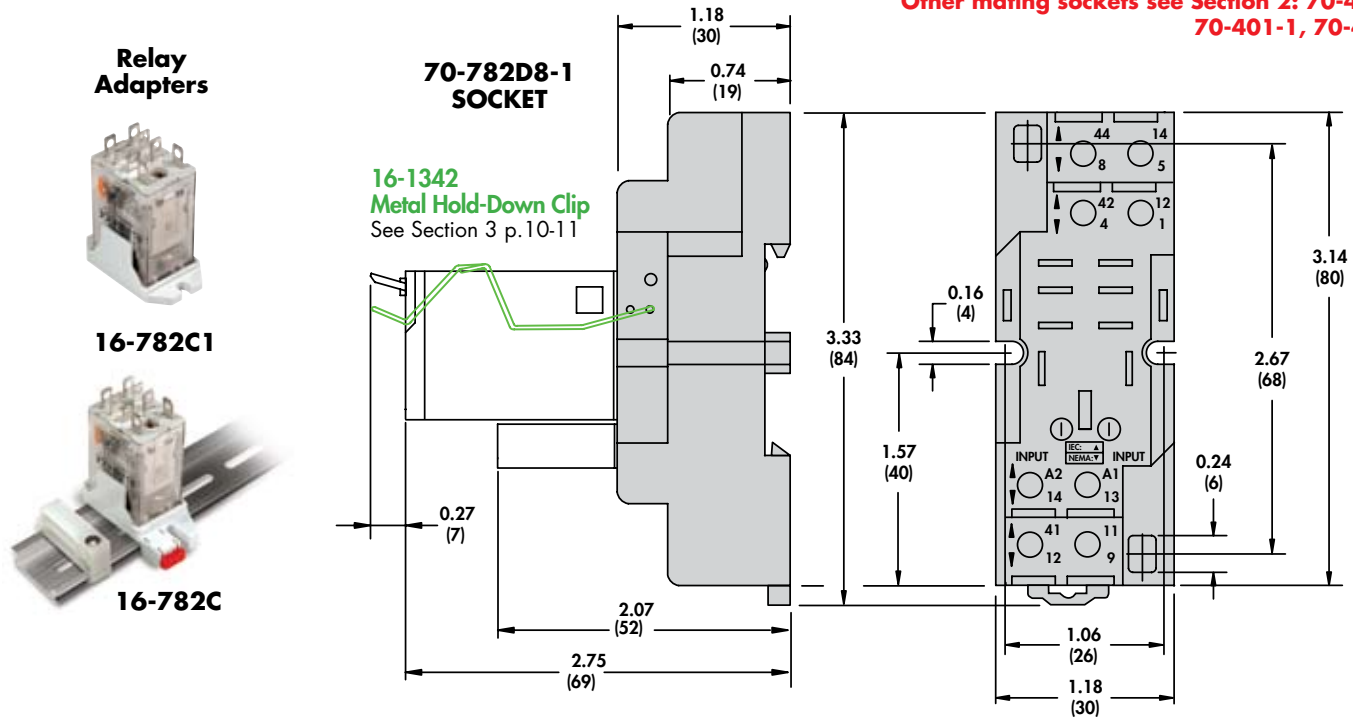
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

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	782XBX4M4L-6A	782XBXC-6A
12 VAC 50/60 HZ	46 Ohms	782XAXM4L-12A	782XAXC-12A	782XBX4M4L-12A	782XBXC-12A
24 VAC 50/60 HZ	180 Ohms	782XAXM4L-24A	782XAXC-24A	782XBX4M4L-24A	782XBXC-24A
120 VAC 50/60 HZ	4430 Ohms	782XAXM4L-120A	782XAXC-120A	782XBX4M4L-120A	782XBXC-120A
220-240 VAC 50/60 HZ	15720 Ohms	782XAXM4L-220/240A	782XAXC-220/240A	782XBX4M4L-220/240A	782XBXC-220/240A
DC Operated					
6 VDC	40 Ohms	782XAXM4L-6D	782XAXC-6D	782XBX4M4L-6D	782XBXC-6D
12 VDC	160 Ohms	782XAXM4L-12D	782XAXC-12D	782XBX4M4L-12D	782XBXC-12D
24 VDC	650 Ohms	782XAXM4L-24D	782XAXC-24D	782XBX4M4L-24D	782XBXC-24D
48 VDC	2600 Ohms	782XAXM4L-48D	782XAXC-48D	782XBX4M4L-48D	782XBXC-48D
110-125 VDC	11000 Ohms	782XAXM4L-110/125D	782XAXC-110/125D	782XBX4M4L-110/125D	782XBXC-110/125D

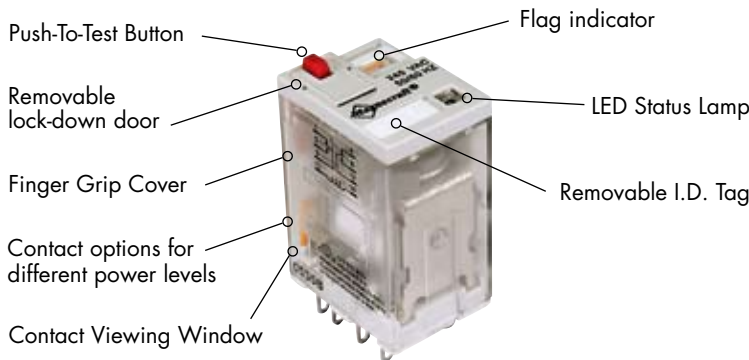
Custom Relay Part Number Builder

782	XBX	C	T	M4L-	240A
Series	Contact Configuration	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	SPDT - XAX	Full Feature - No Code	Plug In - No Code	Side Push Button - M	VAC = 6 - 240A
	DPDT - XBX	Plain Cover - C	PC terminal - T	Locking Push Button - M4	VDC = 6 - 125D
				Bi-Polar LED - L	

Other mating sockets see Section 2: 70-459-1, 70-401-1, 70-402-1

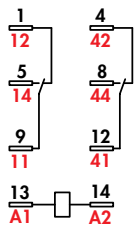


782 Ice Cube Relays/DPDT, 3-10 Amp Rating (DC and AC)



General Specifications (UL 508)			782XBX2	782XBX3
Contact Characteristics		Units	Standard	Low Level
Number and type of Contacts			DPDT	DPDT
Contact materials			Silver Alloy	Bifurcated
Thermal (Carrying) Current		A	10	3
Maximum Switching Voltage		V	300	300
Switching Current @ Voltage		~ Resistive	10A @ 120V 50/60Hz	3A @ 120V 50/60Hz
		~ Resistive	8A @ 277V 50/60Hz	3A @ 277V 50/60Hz
		~ Resistive	8A @ 28V	3A @ 30V
		HP	1/3 @ 120VAC	1/16 @ 120VAC
		HP	1 @ 277 VAC	
		Pilot Duty	B300	
Minimum Switching Requirement		mA	100 @ 5VDC (.5W)	10 @ 5VDC (.05W)
Coil Characteristics				
Voltage Range		~ V	6...240	6...240
		~ V	6...125	6...125
Operating Range		~ % of Nominal	85% to 100%	85% to 100%
		~ % of Nominal	80% to 100%	80% to 100%
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)	200,000	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)	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
Ambient air temperature around the device	Storage	°C	-40...+85	-40...+85
	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

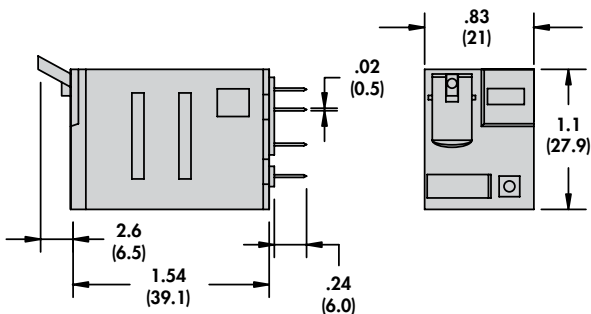
782XBX2, 3



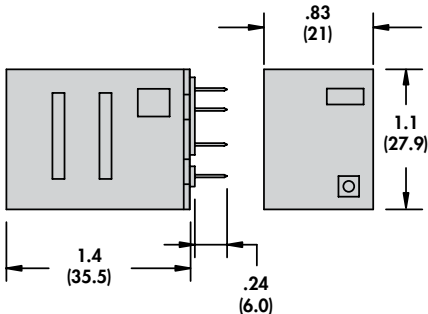
NEMA
IEC

Relay Wiring Diagram
Bottom View

Full Featured Dimensions



Plain Cover Dimensions





Full Featured

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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	782XB2M4L-6A	782XB2C-6A	782XB3M4L-6A
12 VAC 50/60 HZ	46 Ohms	782XB2M4L-12A	782XB2C-12A	782XB3M4L-12A
24 VAC 50/60 HZ	180 Ohms	782XB2M4L-24A	782XB2C-24A	782XB3M4L-24A
120 VAC 50/60 HZ	4430 Ohms	782XB2M4L-120A	782XB2C-120A	782XB3M4L-120A
220-240 VAC 50/60 HZ	15720 Ohms	782XB2M4L-220/240A	782XB2C-220/240A	782XB3M4L-220/240A
DC Operated				
6 VDC	40 Ohms	782XB2M4L-6D	782XB2C-6D	782XB3M4L-6D
12 VDC	160 Ohms	782XB2M4L-12D	782XB2C-12D	782XB3M4L-12D
24 VDC	650 Ohms	782XB2M4L-24D	782XB2C-24D	782XB3M4L-24D
48 VDC	2600 Ohms	782XB2M4L-48D	782XB2C-48D	782XB3M4L-48D
110-125 VDC	11000 Ohms	782XB2M4L-110/125D	782XB2C-110/125D	782XB3M4L-110/125D

Custom Relay Part Number Builder

782	XB2	1	C	T	M4L-	240A
Series	Contact Config.	Contact Code	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	DPDT - XB2	3 Amp Fine Silver - Code 1	Full Feature - No Code	Plug In - No Code	Side Push Button - M	VAC = 6 - 240A
		10 Amp Silver Alloy - Code 2	Plain Cover - C	PC terminal - T	Locking Push Button - M4	VDC = 6 - 125D
		3 Amp Bifurcated - Code 3			Bi-Polar LED - L	

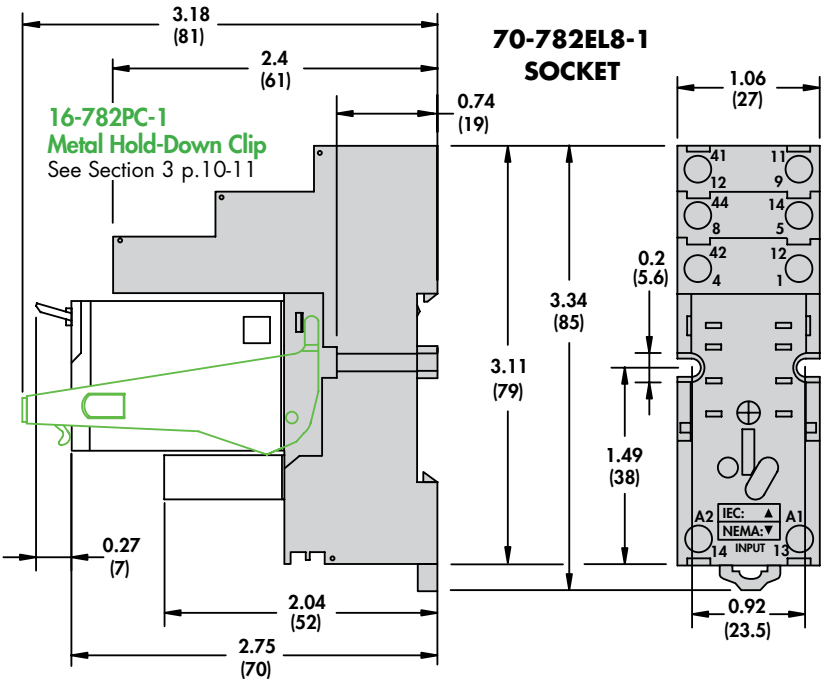
Relay
Adapters



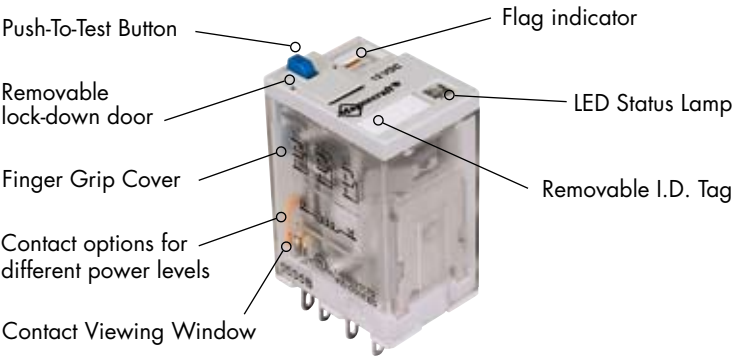
16-782C1



16-782C

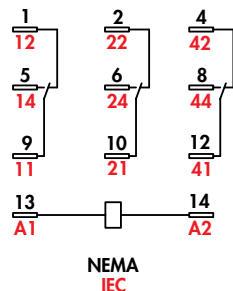


782 Ice Cube Relays/3PDT, 3-10 Amp Rating (DC and AC)



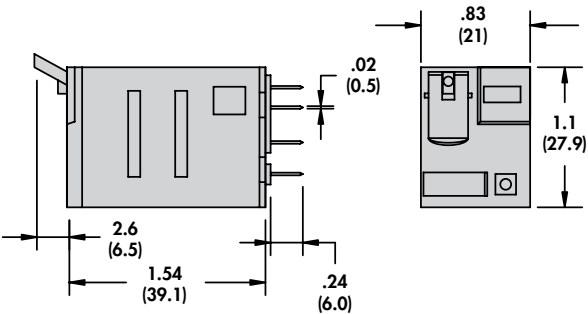
General Specifications		(UL 508)		782XCX2	782XCX3
Contact Characteristics			Units	Standard	Low Level
Number and type of Contacts				3PDT	3PDT
Contact materials				Silver Alloy	Bifurcated
Thermal (Carrying) Current			A	10	3
Maximum Switching Voltage			V	300	300
Switching Current @ Voltage		~	Resistive	10A @ 120V 50/60Hz	3A @ 120V 50/60Hz
		~	Resistive	8A @ 277V 50/60Hz	3A @ 277V 50/60Hz
		~	Resistive	8A @ 28V	3A @ 30V
		~	HP	1/3 @ 120VAC	1/16 @ 120VAC
		~	HP	1 @ 277 VAC	
Minimum Switching Requirement			Pilot Duty	B300	
			mA	100 @ 5VDC (.5W)	10 @ 5VDC (.05W)
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)		200,000	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)	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
Ambient air temperature around the device	Storage		°C	-40...+85	-40...+85
	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

782XCX2, 3

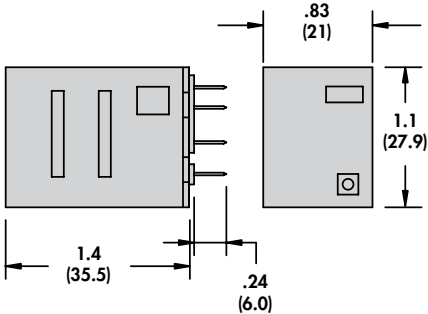


Relay Wiring Diagram Bottom View

Full Featured Dimensions



Plain Cover Dimensions





Full Featured

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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	3PDT Part Number (Full Feature) 3 Amp, Bifurcated
AC Operated				
6 VAC 50/60 HZ	9.6 Ohms	782XCX2M4L-6A	782XCX2C-6A	782XCX3M4L-6A
12 VAC 50/60 HZ	46 Ohms	782XCX2M4L-12A	782XCX2C-12A	782XCX3M4L-12A
24 VAC 50/60 HZ	180 Ohms	782XCX2M4L-24A	782XCX2C-24A	782XCX3M4L-24A
120 VAC 50/60 HZ	4430 Ohms	782XCX2M4L-120A	782XCX2C-120A	782XCX3M4L-120A
220-240 VAC 50/60 HZ	15720 Ohms	782XCX2M4L-220/240A	782XCX2C-220/240A	782XCX3M4L-220/240A
DC Operated				
6 VDC	40 Ohms	782XCX2M4L-6D	782XCX2C-6D	782XCX3M4L-6D
12 VDC	160 Ohms	782XCX2M4L-12D	782XCX2C-12D	782XCX3M4L-12D
24 VDC	650 Ohms	782XCX2M4L-24D	782XCX2C-24D	782XCX3M4L-24D
48 VDC	2600 Ohms	782XCX2M4L-48D	782XCX2C-48D	782XCX3M4L-48D
110-125 VDC	11000 Ohms	782XCX2M4L-110/125D	782XCX2C-110/125D	782XCX3M4L-110/125D

Custom Relay Part Number Builder

782	XCX	1	C	T	M4L-	240A
Series	Contact Config.	Contact Code	Cover Options	Terminal Style	Feature Options	Coil Voltage
782	3PDT - XCX	3 Amp Fine Silver - Code 1 10 Amp Silver Alloy - Code 2 3 Amp Bifurcated - Code 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

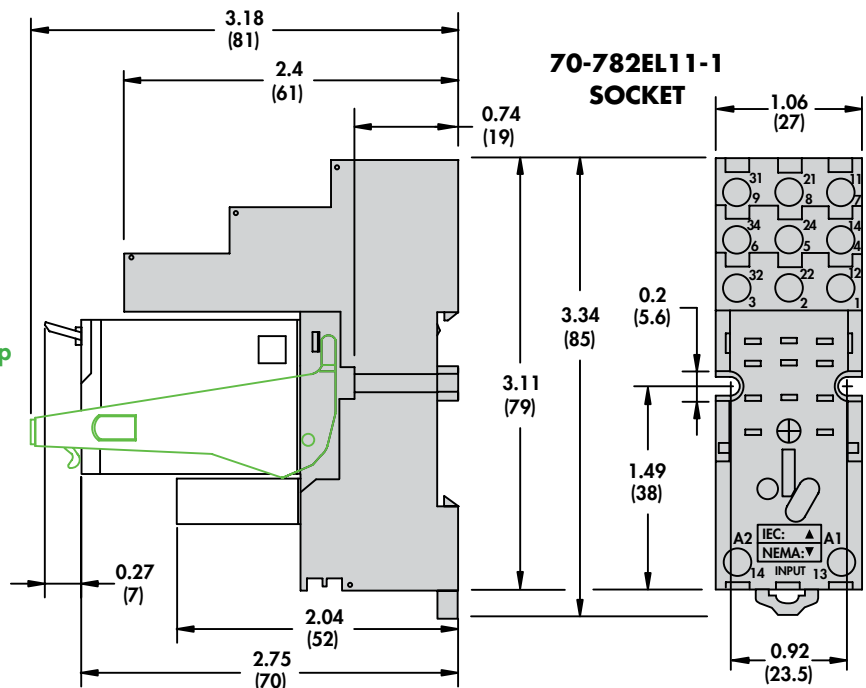


16-782C1

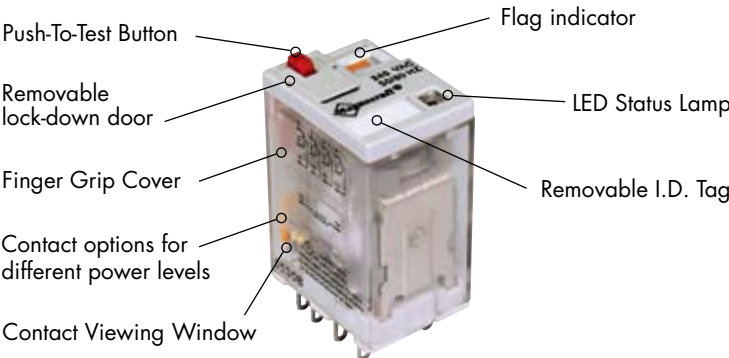
16-782PC-1
Metal Hold-Down Clip
See Section 3 p.10-11



16-782C

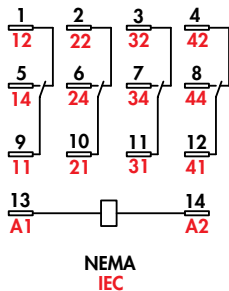


782 Ice Cube Relays/4PDT, 3-10 Amp Rating (DC and AC)



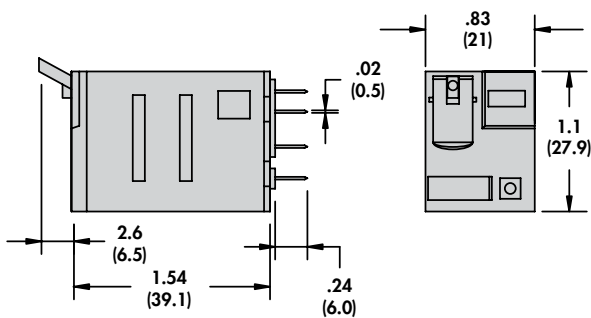
General Specifications (UL 508)		782XDX2		782XDX3	
Contact Characteristics		Units	Standard	Low Level	
Number and type of Contacts			4PDT	4PDT	
Contact materials			Silver Alloy	Bifurcated	
Thermal (Carrying) Current		A	10	3	
Maximum Switching Voltage		V	300	300	
Switching Current @ Voltage		~	Resistive	10A @ 120V 50/60Hz	
		~	Resistive	8A @ 277V 50/60Hz	
		~	Resistive	8A @ 28V	
		~	HP	1/3 @ 120VAC	
		~	HP	1 @ 277 VAC	
Minimum Switching Requirement		Pilot Duty	B300	10 @ 5VDC (.05W)	
		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	~	1500	
		Between poles	~	1500	
		Between contacts	~	1500	
Environment					
Product certifications		Standard version		UL, CSA, CE	
Ambient air temperature around the device		Storage	°C	-40...+85	
		Operation	°C	-40...+55	
Vibration resistance		Operational	g-n	3, 10 - 55 Hz	
Shock resistance			g-n	10	
Degree of protection				IP 40	

782XDX2, 3

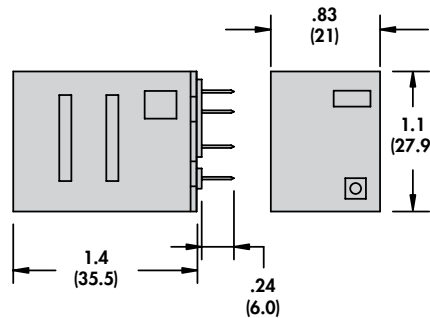


Relay Wiring Diagram Bottom View

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
220-240 VAC 50/60 HZ	15720 Ohms	782XDX2M4L-220/240A	782XDX2C-220/240A	782XDX3M4L-220/240A
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	4PDT - XDX	3 Amp Fine Silver - Code 1	Full Feature - No Code	Plug In - No Code	Side Push Button - M	VAC = 6 - 240A
		10 Amp Silver Alloy - Code 2	Plain Cover - C	PC terminal - T	Locking Push Button - M4	VDC = 6 - 125D
		3 Amp Bifurcated - Code 3			Bi-Polar LED - L	

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



16-782C

