

## Advantages of a Full Featured, Octal 700 Series Relay

Octal style mounting is a robust and historically proven form of mounting electrical components. This interface provides excellent structural support that has been recognized by the electrical industry for over half a century. Magnecraft has combined this historical platform with modern features and performance. The 750 Octal relays will mate with all forms of the 8 and 11 pin octal sockets. This package provides all the performance and features of Magnecraft's 700 series relay, while using a mounting platform that the customer has grown accustomed to.



### Removable Lock-Down Door

When Activated, Locks Push Button and Contacts in the Powered Position.

### Color-Coded Push Button

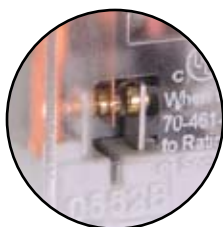
Allows Manual Operation of Relay. AC Coils Red or DC Coils Blue.

### 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.

- 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 16 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.



### 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.

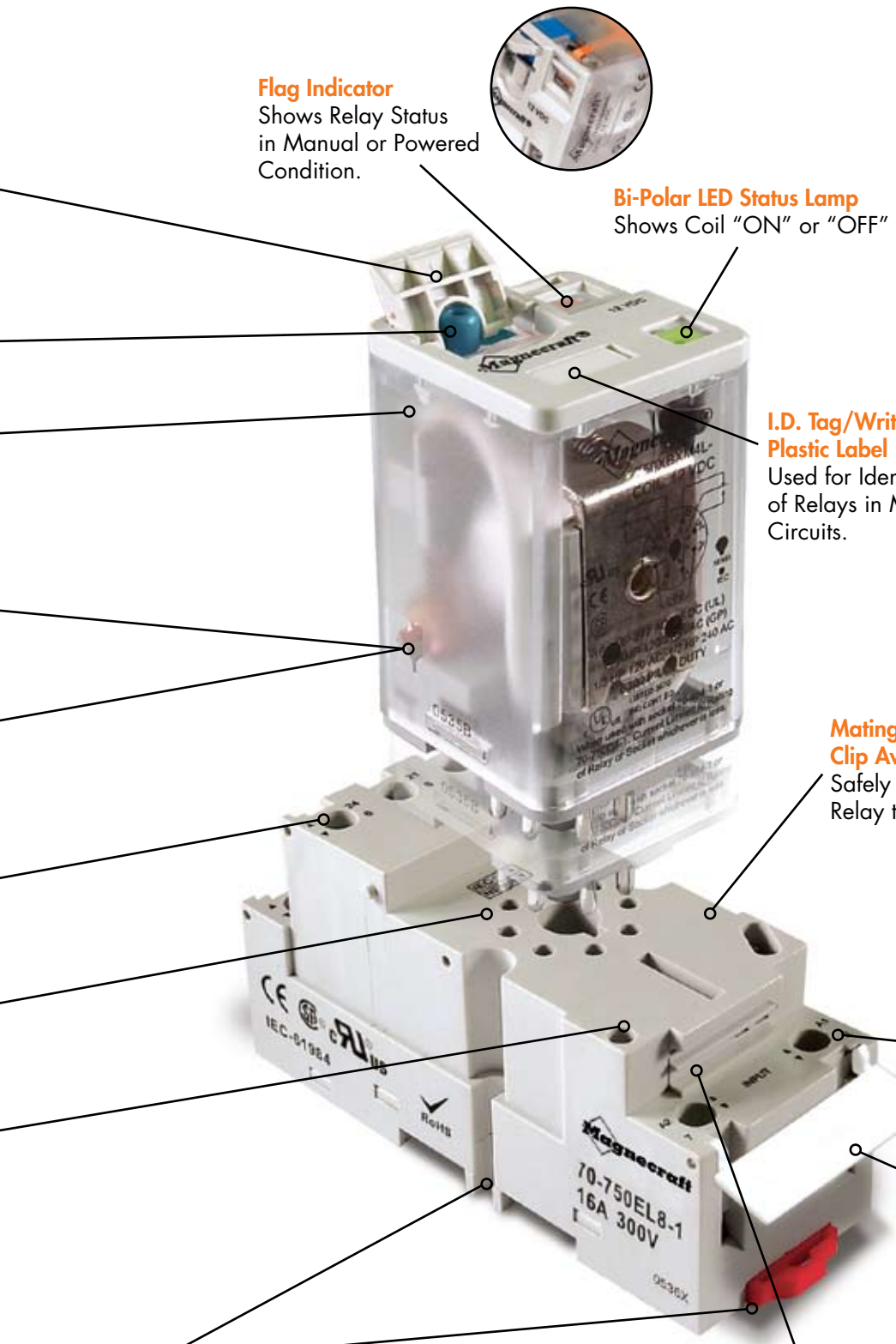
**Mating Hold-Down Clip Available**  
Safely Secures Relay to Socket.



**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, Octal 700 Series Relay

Plain Cover octal style relays provide a historical interface for the budget minded yet performance driven customer. The Plain Cover 750 relays allow the customer to utilize the performance of a premium relay while adhering to an aggressive budget. This is accomplished by Magnecraft's ability to utilize the electrical components of the Full Feature 750 relays and deleting options that may not be required by the customer. The 750 Plain Cover relays offer competitive pricing while maintaining premium performance.

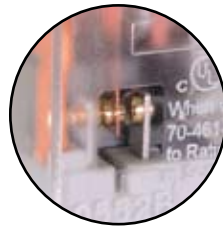
- Offers a "one stop solution" for your power management system.
- Several Contact configurations and materials to meet your individual needs.
- Plug-In switching capabilities from 10 mA to 16 Amps.
- Several Feature Code and Operation combinations available for all budgets.
- Ejector clips, ribbed relay 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.

### Gold Flashed Contacts

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### 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.

# The Complete System Solution!

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

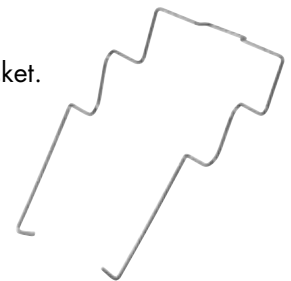


**Optional Bi-Polar LED Status Lamp**  
Shows Coil "ON" or "OFF" Status.

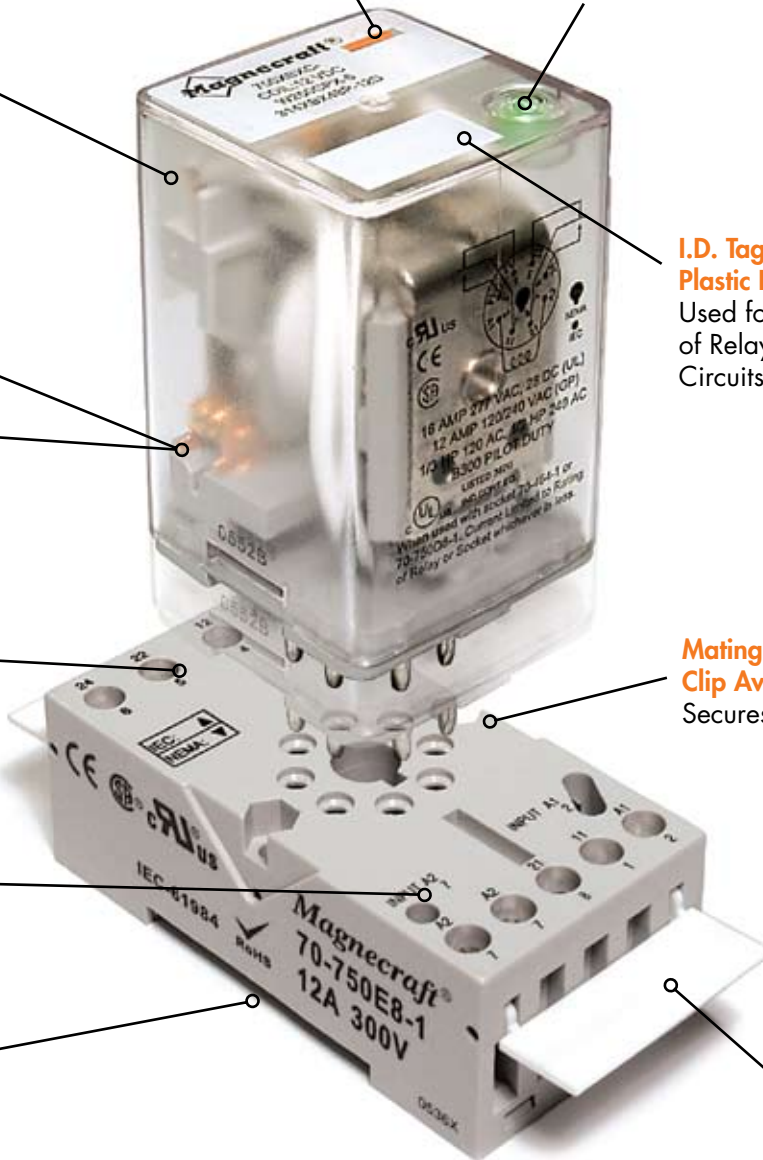


**I.D. Tag/Write-On Plastic Label**  
Used for Identification of Relays in Multi-Relay Circuits.

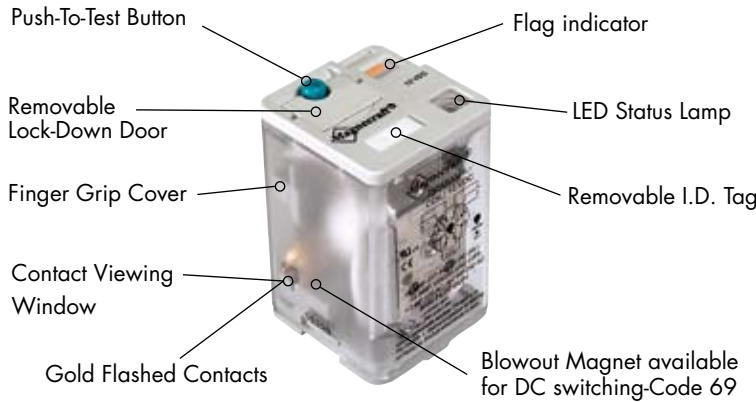
**Mating Hold-Down Clip Available**  
Secures Relay to Socket.



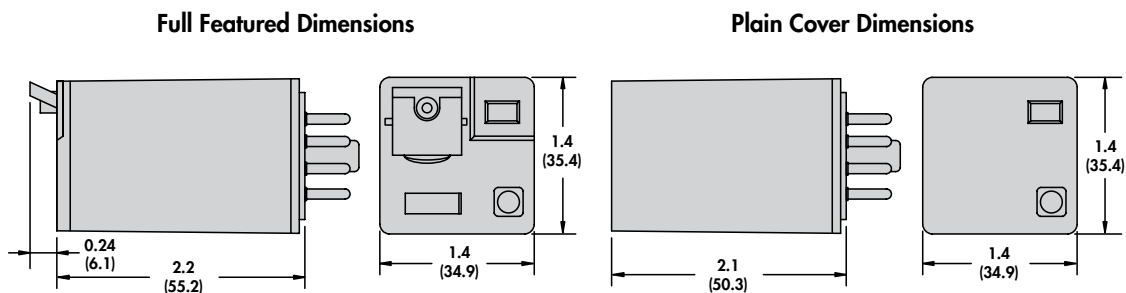
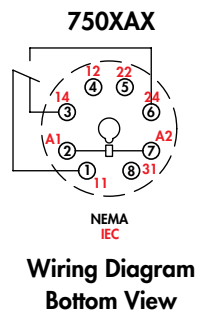
**I.D. Tag/Write-On Plastic Label**  
Used to match wire identification tags with socket connections.



# 750 Octal Relays, 8-Pin/SPDT, 16 Amp Rating (DC & AC)



General Specifications		(UL 508)		750XAX
Contact Characteristics			Units	Standard
Number and type of Contacts				SPDT
Contact materials				Silver Alloy
Thermal (Carrying) Current			A	16
Maximum Switching Voltage			V	300
Switching Current @ Voltage		~	Resistive	16A @ 277V 50/60Hz
		~	Resistive	16A @ 120V 50/60Hz
		≡	Resistive	16A @ 28V
			HP	1/3 @ 120VAC
			HP	1/2 @ 240 VAC
Minimum Switching Requirement			Pilot Duty	B300
			mA	100 @ 5VDC (.5W)
Coil Characteristics				
Voltage Range		~	V	6...240
		≡	V	6...125
Operating Range		~		85% to 110%
		≡		80% to 110%
Average consumption	% of Nominal	~	VA	3
		≡	W	1.4
Drop-out voltage threshold		~		15%
		≡		10%
Performance Characteristics				
Electrical Life (UL508)	Operations @ Rated Current		(Resistive)	100,000
Mechanical Life	Unpowered			5,000,000
Operating time (response time)			ms	20
Dielectric strength	Between coil and contact	~	Vrms	1500
	Between poles	~	Vrms	1500
	Between contacts	~	Vrms	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
Weight			grams	89







Full Featured



Plain Cover

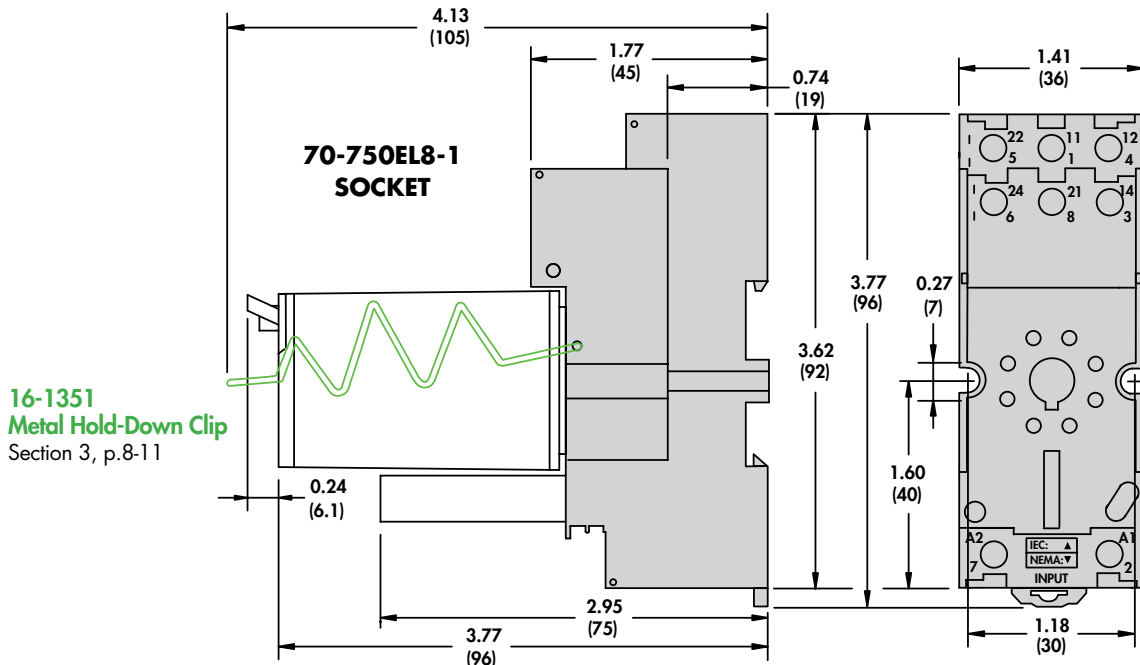
Standard Part Numbers

Nominal Voltage	Coil Resistance	SPDT Part Number (Full Feature) 16 Amp	SPDT Part Number (Plain Cover) 16 Amp
AC Operated			
6 VAC 50/60 Hz	4.2 Ohms	750AXM4L-6A	750XAXC-6A
12 VAC 50/60 Hz	18 Ohms	750AXM4L-12A	750XAXC-12A
24 VAC 50/60 Hz	72 Ohms	750AXM4L-24A	750XAXC-24A
120 VAC 50/60 Hz	1700 Ohms	750AXM4L-120A	750XAXC-120A
220-240 VAC 50/60 Hz	7200 Ohms	750AXM4L-220/240A	750XAXC-220/240A
DC Operated			
6 VDC	32 Ohms	750AXM4L-6D	750XAXC-6D
12 VDC	120 Ohms	750AXM4L-12D	750XAXC-12D
24 VDC	470 Ohms	750AXM4L-24D	750XAXC-24D
48 VDC	1800 Ohms	750AXM4L-48D	750XAXC-48D
110-125 VDC	10000 Ohms	750AXM4L-110/125D	750XAXC-110/125D

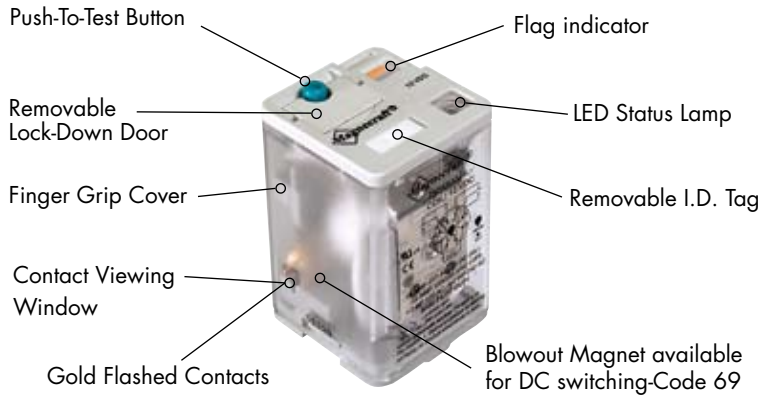
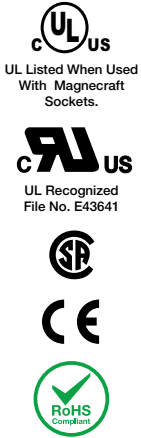
Custom Relay Part Number Builder

Series	Contact Configuration	Contact Code	Cover Options	Feature Options	Coil Voltage
750	XAX	16 Amp Silver Alloy = No Code	Full Feature = No Code Plain Cover = C	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: 70-750E8-1, 70-750DL8-1, 70-464-1, 70-169-1



# 750 Octal Relays, 8-Pin/DPDT, 16 Amp Rating (DC & AC)



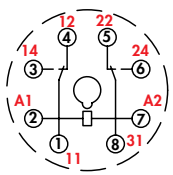
## General Specifications

(UL 508)

750XBX

Contact Characteristics		Units	Standard
Number and type of Contacts			DPDT
Contact materials			Silver Alloy
Thermal (Carrying) Current		A	16
Maximum Switching Voltage		V	300
Switching Current @ Voltage	~	Resistive	16A @ 277V 50/60Hz
	~	Resistive	16A @ 120V 50/60Hz
	∴	Resistive	16A @ 28V
		HP	1/3 @ 120VAC
		HP	1/2 @ 240 VAC
		Pilot Duty	B300
Current rating with magnetic blowout - Code 69	∴	A	3 @ 150VDC
Minimum Switching Requirement		mA	100 @ 5VDC (.5W)
<b>Coil Characteristics</b>			
Voltage Range	~	V	6...240
	∴	V	6...125
Operating Range	% of Nominal	~	85% to 110%
		∴	80% to 110%
Average consumption	~	VA	3
	∴	W	1.4
Drop-out voltage threshold	~		15%
	∴		10%
<b>Performance Characteristics</b>			
Electrical Life (UL508)	Operations @ Rated Current	(Resistive)	100,000
Mechanical Life	Unpowered		5,000,000
Operating time (response time)		ms	20
Dielectric strength	Between coil and contact	~	Vrms 1500
	Between poles	~	Vrms 1500
	Between contacts	~	Vrms 1500
<b>Environment</b>			
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
Weight		grams	89

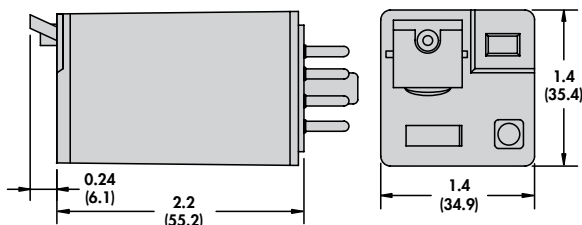
### 750XBX



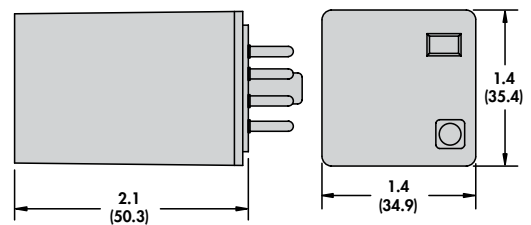
NEMA  
IEC

Wiring Diagram  
Bottom View

### Full Featured Dimensions



### Plain Cover Dimensions





Full Featured



Plain Cover

Standard Part Numbers

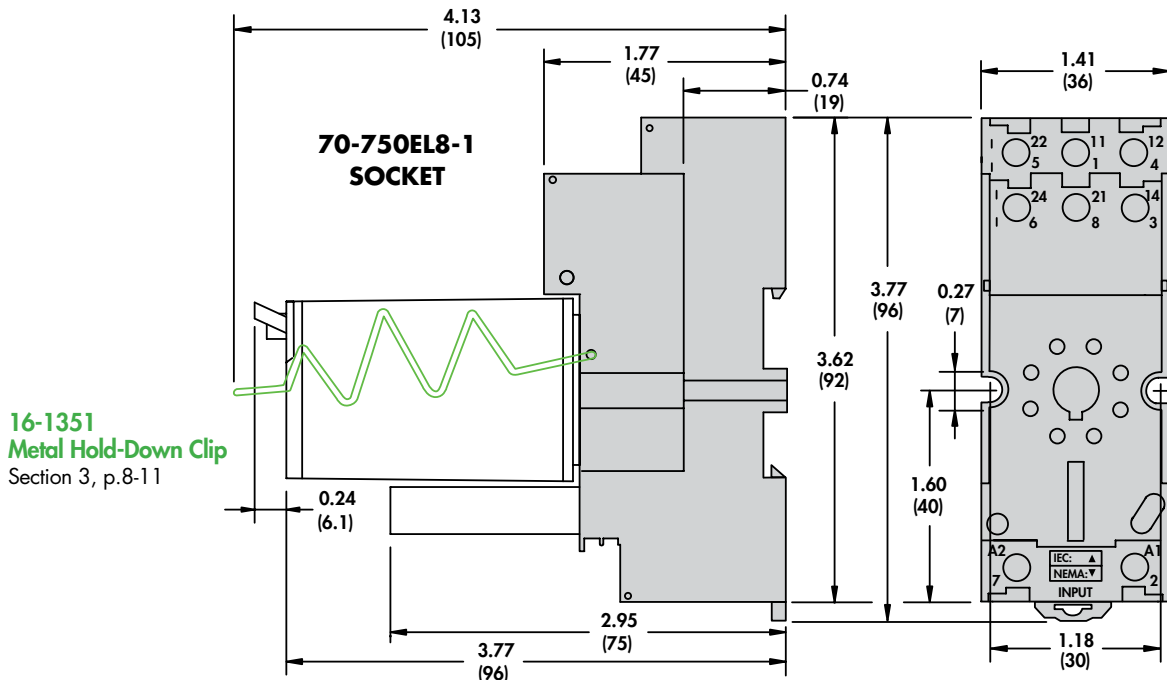
**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

Nominal Voltage	Coil Resistance	DPDT Part Number (Full Feature) 16 Amp	DPDT Part Number (Plain Cover) 16 Amp
AC Operated			
6 VAC 50/60 Hz	4.2 Ohms	750BXM4L-6A	<b>750BXC-6A</b>
12 VAC 50/60 Hz	18 Ohms	<b>750BXM4L-12A</b>	<b>750BXC-12A</b>
24 VAC 50/60 Hz	72 Ohms	<b>750BXM4L-24A</b>	<b>750BXC-24A</b>
120 VAC 50/60 Hz	1700 Ohms	<b>750BXM4L-120A</b>	<b>750BXC-120A</b>
220-240 VAC 50/60 Hz	7200 Ohms	<b>750BXM4L-220/240A</b>	<b>750BXC-220/240A</b>
DC Operated			
6 VDC	32 Ohms	750BXM4L-6D	<b>750BXC-6D</b>
12 VDC	120 Ohms	<b>750BXM4L-12D</b>	<b>750BXC-12D</b>
24 VDC	470 Ohms	<b>750BXM4L-24D</b>	<b>750BXC-24D</b>
48 VDC	1800 Ohms	<b>750BXM4L-48D</b>	<b>750BXC-48D</b>
110-125 VDC	10000 Ohms	<b>750BXM4L-110/125D</b>	<b>750BXC-110/125D</b>

Custom Relay Part Number Builder

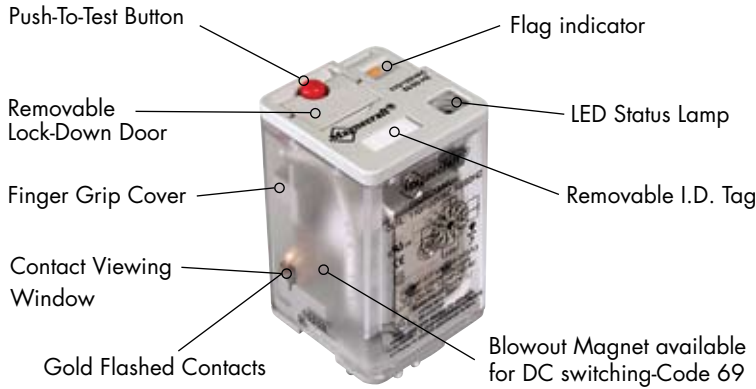
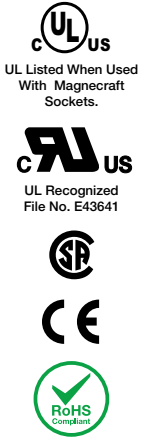
Series	Contact Conf.	DC Switching Option	Contact Code	Cover Options	Feature Options	Coil Voltage
750	XBX			C	ML-	240A
750	XBX = DPDT	Magnetic Blowout = 69	16 Amp Silver Alloy = No Code	Full Feature = No Code Plain Cover = C	Side Push Button = M Locking Push Button = M4 Bi-Polar LED = L	VAC = 6 - 240A VDC = 6 - 250D

For other mating sockets, see Section 2: 70-750E8-1, 70-750DL8-1, 70-464-1, 70-169-1





# 750 Octal Relays, 11-Pin/3PDT, 16 Amp Rating (DC & AC)

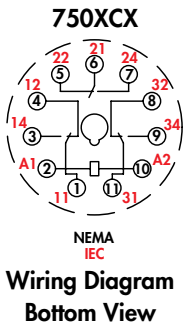


## General Specifications

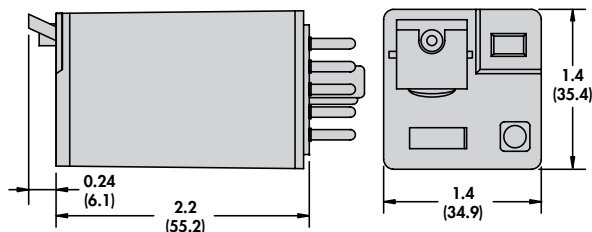
(UL 508)

750XCX

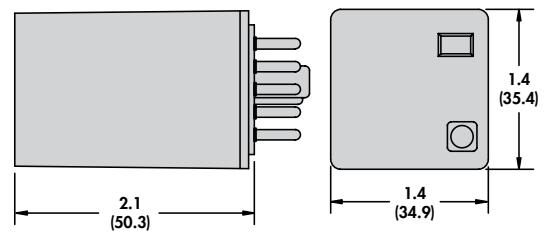
Contact Characteristics		Units	Standard
Number and type of Contacts			3PDT
Contact materials			Silver Alloy
Thermal (Carrying) Current		A	16
Maximum Switching Voltage		V	300
Switching Current @ Voltage	~	Resistive	16A @ 277V 50/60Hz
	~	Resistive	16A @ 120V 50/60Hz
	~	Resistive	16A @ 28V
	~	HP	1/3 @ 120VAC
	~	HP	1/2 @ 240 VAC
	~	Pilot Duty	B300
Minimum Switching Requirement		mA	100 @ 5VDC (.5W)
<b>Coil Characteristics</b>			
Voltage Range	~	V	6...240
	~	V	6...125
Operating Range	% of Nominal	~	85% to 110%
		~	80% to 110%
Average consumption	~	VA	3
	~	W	1.4
Drop-out voltage threshold	~		15%
	~		10%
<b>Performance Characteristics</b>			
Electrical Life (UL508)	Operations @ Rated Current	(Resistive)	100,000
Mechanical Life	Unpowered		5,000,000
Operating time (response time)		ms	20
Dielectric strength	Between coil and contact	~	Vrms
	Between poles	~	Vrms
	Between contacts	~	Vrms
<b>Environment</b>			
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
Weight		grams	89



Full Featured Dimensions



Plain Cover Dimensions





Full Featured



Plain Cover

**Standard Part Numbers**

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

Nominal Voltage	Coil Resistance	3PDT Part Number (Full Feature) 16 Amp	3PDT Part Number (Plain Cover) 16 Amp
AC Operated			
6 VAC 50/60 Hz	4.2 Ohms	750XCXM4L-6A	<b>750XCXC-6A</b>
12 VAC 50/60 Hz	18 Ohms	<b>750XCXM4L-12A</b>	<b>750XCXC-12A</b>
24 VAC 50/60 Hz	72 Ohms	<b>750XCXM4L-24A</b>	<b>750XCXC-24A</b>
120 VAC 50/60 Hz	1700 Ohms	<b>750XCXM4L-120A</b>	<b>750XCXC-120A</b>
220-240 VAC 50/60 Hz	7200 Ohms	<b>750XCXM4L-220/240A</b>	<b>750XCXC-220/240A</b>
DC Operated			
6 VDC	32 Ohms	750XCXM4L-6D	<b>750XCXC-6D</b>
12 VDC	120 Ohms	<b>750XCXM4L-12D</b>	<b>750XCXC-12D</b>
24 VDC	470 Ohms	<b>750XCXM4L-24D</b>	<b>750XCXC-24D</b>
48 VDC	1800 Ohms	<b>750XCXM4L-48D</b>	<b>750XCXC-48D</b>
110-125 VDC	10000 Ohms	<b>750XCXM4L-110/125D</b>	<b>750XCXC-110/125D</b>

**Custom Relay Part Number Builder**

Series	Contact Configuration	Contact Code	Cover Options	Feature Options	Coil Voltage
750	XCX		C	ML-	240A
750	XCX = 3PDT	16 Amp Silver Alloy = No Code	Full Feature = No Code Plain Cover = C	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: 70-750E11-1, 70-750DL11-1, 70-465-1, 70-170-1**

16-1351  
Metal Hold-Down Clip  
Section 3, p.8-11

