

## Description

# Magnecraft General Purpose Relays

## 750 Series

DPDT and 3DPT, 10 A



UL listed when used with proper Magnecraft sockets



750 Clear Cover



750 Full-Feature Cover

## Description

The 750 series octal base, plug-in relays offer clear or full-feature covers with multiple mounting options and accessories.

| Feature                              | Benefit                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Octal style mounting                 | Robust and historically-proven mounting platform that provides excellent structural support                                      |
| 10 A max. switching current          | Ideal for automation panels and controls                                                                                         |
| Clear or full-feature cover options  | Full-feature covers include LED indicator and locking test button                                                                |
| DPDT and 3PDT contact configurations | Simultaneously control separate circuits                                                                                         |
| Socket mount option                  | Simplifies installation and maintenance while also allowing the use of protection modules, hold-down clips and other accessories |
| Gold-flashed contacts                | Reduces contact oxidation and increases shelf life                                                                               |
| Mechanical flag indicator            | Standard feature displays relay status during testing or operation                                                               |

| Contact Rating | Contact Configuration | Nominal Voltage | Coil Resistance (Ω) | Standard Part Number: Clear Cover | Standard Part Number: Clear Cover with LED | Standard Part Number: Full-Feature |
|----------------|-----------------------|-----------------|---------------------|-----------------------------------|--------------------------------------------|------------------------------------|
| 10 A           | DPDT                  | 12 Vac 50/60Hz  | 16.9                | 750XBXRC-12A                      | 750XBXRCL-12A                              | 750XBXRM4L-12A                     |
|                |                       | 24 Vac 50/60Hz  | 72                  | 750XBXRC-24A                      | 750XBXRCL-24A                              | 750XBXRM4L-24A                     |
|                |                       | 120 Vac 50/60Hz | 1700                | 750XBXRC-120A                     | 750XBXRCL-120A                             | 750XBXRM4L-120A                    |
|                |                       | 240 Vac 50/60Hz | 6800                | 750XBXRC-240A                     | 750XBXRCL-240A                             | 750XBXRM4L-240A                    |
|                |                       | 12 Vdc          | 120                 | 750XBXRC-12D                      | 750XBXRCL-12D                              | 750XBXRM4L-12D                     |
|                |                       | 24 Vdc          | 470                 | 750XBXRC-24D                      | 750XBXRCL-24D                              | 750XBXRM4L-24D                     |
|                |                       | 48 Vdc          | 1800                | 750XBXRC-48D                      | 750XBXRCL-48D                              | 750XBXRM4L-48D                     |
|                |                       | 110 Vdc         | 7300                | 750XBXRC-110D                     | 750XBXRCL-110D                             | 750XBXRM4L-110D                    |
|                | 3PDT                  | 12 Vac 50/60Hz  | 16.9                | 750XCXRC-12A                      | 750XCXRCL-12A                              | 750XCXRM4L-12A                     |
|                |                       | 24 Vac 50/60Hz  | 72                  | 750XCXRC-24A                      | 750XCXRCL-24A                              | 750XCXRM4L-24A                     |
|                |                       | 120 Vac 50/60Hz | 1700                | 750XCXRC-120A                     | 750XCXRCL-120A                             | 750XCXRM4L-120A                    |
|                |                       | 240 Vac 50/60Hz | 6800                | 750XCXRC-240A                     | 750XCXRCL-240A                             | 750XCXRM4L-240A                    |
|                |                       | 12 Vdc          | 120                 | 750XCXRC-12D                      | 750XCXRCL-12D                              | 750XCXRM4L-12D                     |
|                |                       | 24 Vdc          | 470                 | 750XCXRC-24D                      | 750XCXRCL-24D                              | 750XCXRM4L-24D                     |
|                |                       | 48 Vdc          | 1800                | 750XCXRC-48D                      | 750XCXRCL-48D                              | 750XCXRM4L-48D                     |
|                |                       | 110 Vdc         | 7300                | 750XCXRC-110D                     | 750XCXRCL-110D                             | 750XCXRM4L-110D                    |

## Part Number Explanation

|                                                             |            |             |                                                                                                           |          |            |                                                                       |
|-------------------------------------------------------------|------------|-------------|-----------------------------------------------------------------------------------------------------------|----------|------------|-----------------------------------------------------------------------|
| <b>Series:</b><br>750 = 750 Series Relay                    | <b>750</b> | <b>XBXR</b> | <b>M4L</b>                                                                                                | <b>-</b> | <b>24D</b> | <b>Coil Voltages:</b><br>12-240A = 12-240 VAC<br>12-110D = 12-110 VDC |
| <b>Contact Configuration:</b><br>XBXR = DPDT<br>XCXR = 3PDT |            |             | <b>Cover Options:</b><br>C = Clear Cover<br>CL = Clear Cover and LED<br>M4L = Locking Push Button and LED |          |            |                                                                       |

Please contact Customer Service for more information (847-441-2540).

# Magnecraft General Purpose Relays

## 750 Series

### DPDT and 3DPT, 10 A

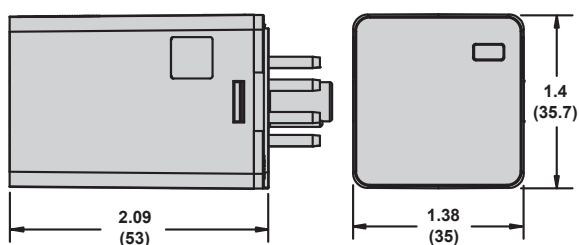
## Specifications

| Part Number                                                             | 750XBXR                                                                                                                                                                                                                                    | 750XCXR                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contact Characteristics</b>                                          |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| Terminal Style                                                          | Octal                                                                                                                                                                                                                                      | Octal                                                                                                                                                                                                                                      |
| Contact Configuration                                                   | DPDT                                                                                                                                                                                                                                       | 3PDT                                                                                                                                                                                                                                       |
| Maximum Current                                                         | 10 A                                                                                                                                                                                                                                       | 10 A                                                                                                                                                                                                                                       |
| Contact Materials                                                       | Silver Alloy                                                                                                                                                                                                                               | Silver Alloy                                                                                                                                                                                                                               |
| Maximum Switching Voltage                                               | IEC: 250 Vac / 28 Vdc<br>UL/CSA: 300 Vac / 30 Vdc                                                                                                                                                                                          | IEC: 250 Vac / 28 Vdc<br>UL/CSA: 300 Vac / 30 Vdc                                                                                                                                                                                          |
| Rated Switching Current at Voltage<br>(Conforming to IEC AC-1 and DC-1) | NO: 10 A at 250 Vac, NC: 5 A at 250 Vac<br>NO: 10 A at 28 Vdc, NC: 5 A at 28 Vdc                                                                                                                                                           | NO: 10 A at 250 Vac, NC: 5 A at 250 Vac<br>NO: 10 A at 28 Vdc, NC: 5 A at 28 Vdc                                                                                                                                                           |
| Rated Switching Current at Voltage<br>(Conforming to UL)                | <b>Resistive:</b> 10 A at 277 Vac 50 / 60 Hz, 200k cycles<br><b>Resistive:</b> 10 A at 30 Vdc, 200k cycles<br><b>Motor:</b> 1/3 HP at 120 Vac, 6k cycles<br><b>Motor:</b> 1 HP at 277 Vac, 6k cycles<br><b>Pilot Duty:</b> B300, 6k cycles | <b>Resistive:</b> 10 A at 277 Vac 50 / 60 Hz, 200k cycles<br><b>Resistive:</b> 10 A at 30 Vdc, 200k cycles<br><b>Motor:</b> 1/3 HP at 120 Vac, 6k cycles<br><b>Motor:</b> 1 HP at 277 Vac, 6k cycles<br><b>Pilot Duty:</b> B300, 6k cycles |
| Minimum Switching Requirement                                           | 10 mA at 17 Vdc                                                                                                                                                                                                                            | 10 mA at 17 Vdc                                                                                                                                                                                                                            |
| <b>Coil Characteristics</b>                                             |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| Maximum Operating Voltage                                               | 110% (AC / DC)                                                                                                                                                                                                                             | 110% (AC / DC)                                                                                                                                                                                                                             |
| Maximum Pickup Voltage                                                  | 85% (AC); 80% (DC)                                                                                                                                                                                                                         | 85% (AC); 80% (DC)                                                                                                                                                                                                                         |
| Drop-out Voltage Threshold                                              | 15% (AC); 10% (DC)                                                                                                                                                                                                                         | 15% (AC); 10% (DC)                                                                                                                                                                                                                         |
| Average Consumption                                                     | 3 VA (AC); 1.4 W (DC)                                                                                                                                                                                                                      | 3 VA (AC); 1.4 W (DC)                                                                                                                                                                                                                      |
| <b>General Characteristics</b>                                          |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| Electrical Life at Rated Load                                           | 100,000 operations                                                                                                                                                                                                                         | 100,000 operations                                                                                                                                                                                                                         |
| Mechanical Life                                                         | 5,000,000 operations                                                                                                                                                                                                                       | 5,000,000 operations                                                                                                                                                                                                                       |
| Operating Time (Response Time)                                          | 20 ms                                                                                                                                                                                                                                      | 20 ms                                                                                                                                                                                                                                      |
| Dielectric Strength - Between Coil and Contact (AC)                     | 2500 V(rms)                                                                                                                                                                                                                                | 2500 V(rms)                                                                                                                                                                                                                                |
| Dielectric Strength - Between Poles (AC)                                | 2000 V(rms)                                                                                                                                                                                                                                | 2000 V(rms)                                                                                                                                                                                                                                |
| Dielectric Strength - Between Open Contacts (AC)                        | 1500 V(rms)                                                                                                                                                                                                                                | 1500 V(rms)                                                                                                                                                                                                                                |
| Ambient Air Temperature around the Device -<br>Storage                  | -40 to +85 °C (-40 to +185°F)                                                                                                                                                                                                              | -40 to +85 °C (-40 to +185 °F)                                                                                                                                                                                                             |
| Ambient Air Temperature around the Device -<br>Operation                | -40 to +55 °C (-40 to +131°F)                                                                                                                                                                                                              | -40 to +55 °C (-40 to +131 °F)                                                                                                                                                                                                             |
| Vibration Resistance - Operational                                      | +/- 1 mm (10–35 Hz) and 3 g-n (35–150 Hz)                                                                                                                                                                                                  | +/- 1 mm (10–35 Hz) and 3 g-n (35–150 Hz)                                                                                                                                                                                                  |
| Shock Resistance                                                        | 10 g-n                                                                                                                                                                                                                                     | 10 g-n                                                                                                                                                                                                                                     |
| Degree of Protection (Housing Only)                                     | IP 40                                                                                                                                                                                                                                      | IP 40                                                                                                                                                                                                                                      |
| Weight                                                                  | 83 g (2.93 oz)                                                                                                                                                                                                                             | 83 g (2.93 oz)                                                                                                                                                                                                                             |
| Agency Approvals                                                        | UL with socket, UR (E164862), CE, CSA (225619), RoHS                                                                                                                                                                                       |                                                                                                                                                                                                                                            |

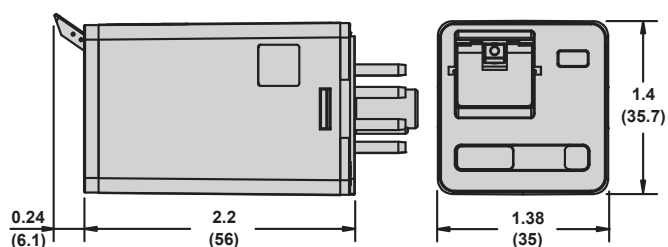
Note: Actual product performance may vary depending on application and environmental conditions.

## Dimensions — inches (millimeters)

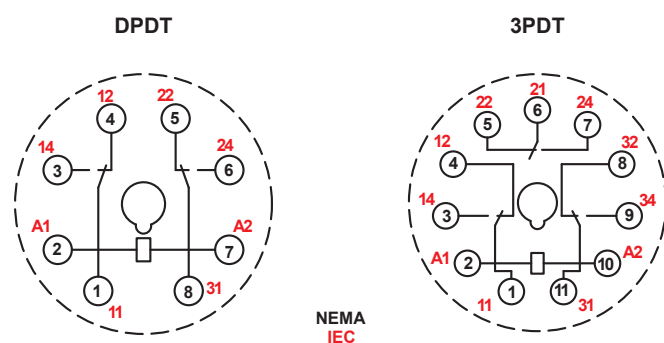
### Clear Cover Dimensions



### Full-Feature Cover Dimensions

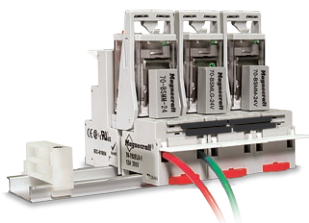


## Wiring Diagrams



# Magnecraft General Purpose Relays

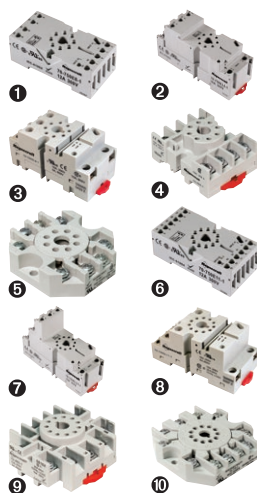
## 750 Series Accessories



### Description

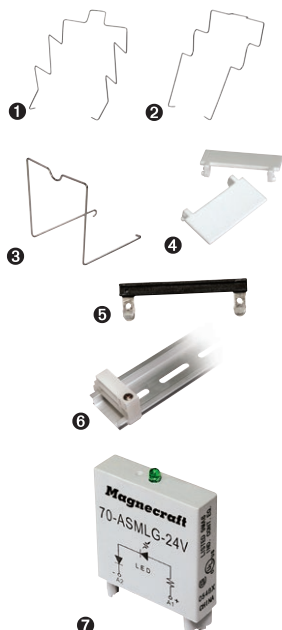
Optional sockets offer customizable, Fingersafe solutions including protection modules, hold-down clips, and ID tags. Sockets are DIN rail and panel mount compatible.

### Relay Accessories



| Description | Function                                                   | For Use With Relays | Pkg. Min. | Standard Part Number |
|-------------|------------------------------------------------------------|---------------------|-----------|----------------------|
| Socket ①    | DIN/Panel mount, module compatible                         | 750XBXR             | 10        | 70-750E8-1           |
| Socket ②    | DIN/Panel mount with elevator terminals, module compatible | 750XBXR             | 10        | 70-750EL8-1          |
| Socket ③    | DIN/Panel mount, module compatible                         | 750XBXR             | 10        | 70-750DL8-1          |
| Socket ④    | DIN/Panel mount with screw terminals and clamping plates   | 750XBXR             | 10        | 70-464-1             |
| Socket ⑤    | Panel mount with screw terminals and clamping plates       | 750XBXR             | 10        | 70-169-1             |
| Socket ⑥    | DIN/Panel mount with elevator terminals, module compatible | 750XCXR             | 10        | 70-750E11-1          |
| Socket ⑦    | DIN/Panel mount with elevator terminals                    | 750XCXR             | 10        | 70-750EL11-1         |
| Socket ⑧    | DIN/Panel mount, module compatible                         | 750XCXR             | 10        | 70-750DL11-1         |
| Socket ⑨    | DIN/Panel mount with screw terminals and clamping plates   | 750XCXR             | 10        | 70-465-1             |
| Socket ⑩    | Panel mount with screw terminals and clamping plates       | 750XCXR             | 10        | 70-170-1             |

### Socket Accessories



| Description                                    | Function                                                                              | For Use With Sockets                                                          | Coil Voltage    | Pkg. Min. | Standard Part Number |
|------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------|-----------|----------------------|
| Metal Spring Clip ①                            | Secures relay in socket                                                               | 70-750EL8-1, 70-750E8-1, 70-750E11-1, 70-464-1                                | —               | 10        | 16-1351              |
| Metal Spring Clip ②                            | Secures relay in socket                                                               | 70-750E8-1, 70-750DL8-1, 70-750E11-1, 70-464-1                                | —               | 10        | 16-1344              |
| Metal Spring Clip ③                            | Secures relay in socket                                                               | 70-750DL8-1                                                                   | —               | 10        | 16-1332              |
| Plastic I.D. Tag ④                             | Write-on plastic labels                                                               | 70-750E8-1, 70-750EL8-1, 70-750DL8-1, 70-750E11-1, 70-750EL11, 70-750DL11-1   | —               | 10        | 16-750/788FT-1       |
| Insulated Coil Bus Jumper System ⑤             | Wireless socket connection                                                            | 70-750EL8-1, 70-750E8-1, 70-750DL8-1, 70-750E11-1, 70-464-1, 70-465-1         | —               | 10        | 16-750/788CBJ-1      |
| Extruded Aluminum DIN Rail, 39.37" (1000 mm) ⑥ | Quick installation and removal of sockets                                             | —                                                                             | —               | 10        | 16-700DIN            |
| DIN Rail End Clip ⑥                            | Plastic end clip with locking screw                                                   | —                                                                             | —               | 10        | 16-DCLIP-1           |
| Large Socket Module                            | MOV Suppressor<br>(Protects external drive circuitry from damaging electrical spikes) | 70-750E8-1, 70-750EL8-1, 70-750DL8-1, 70-750E11-1, 70-750EL11-1, 70-750DL11-1 | 24 Vac/Vdc      | 10        | 70-ASMM-24           |
| Large Socket Module                            | Protection Diode<br>(Protects external drive circuitry from inductive voltages)       |                                                                               | 250 Vdc         | 10        | 70-ASMD-250          |
| Large Socket Module ⑦                          | LED Indicator (Provides coil status at a glance)                                      |                                                                               | 110/240 Vac/Vdc | 10        | 70-ASMLG-110/240     |
| Large Socket Module                            | RC Suppressor (Snubs back EMF of relay coil)                                          |                                                                               | 110/240 Vac     | 10        | 70-ASMR-110/240      |

Note: Use of LED or RC socket module may increase coil power draw by up to 10%.