

# SPDT & DPDT CROSS-WIRED DUPLEXOR

## ARF SERIES

ALTERNATING RELAYS | INNER DOOR MOUNTING



- ◆ For Duplex Control of two loads
- ◆ Both SPDT Output & DPDT Cross-Wired Output
- ◆ Control voltages of 12 & 24V AC/DC and 120 & 240V AC
- ◆ Flange-enclosure designed for deadfront door-mounting
- ◆ Low profile selector switch for normal alternation or to lock either load ON first
- ◆ Selector switch accessible without opening inner door
- ◆ 2 LEDs indicate relay status
- ◆ 8 Pin Back-Mounted socket provided with relay
- ◆ Pilot Duty Rating



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**800.238.7474**  
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**SALES@MACROMATIC.COM**

Alternating Relays are used in applications requiring the optimization of load usage by equalizing the run time of two loads. A version with DPDT Cross-Wired output is also used for additional capacity in case of excess load requirements. This alternating action is initiated by a control switch, such as a float switch, manual switch, timing relay, pressure switch, or other isolated contact. Each time the initiating switch is opened, the output relay contacts will change state, thus alternating the two loads.

A three-position selector switch is included. For SPDT versions, this allows the unit to alternate the two loads as normal or select one or the other load to be the only one energized when the control switch closes. For DPDT cross-wired versions, the switch provides the option to alternate the two loads as normal or select which load always comes on first when the LEAD switch closes. In either case, a load that has fewer hours of operation than the other load could be used more often to eventually balance the run time of both loads. The low-profile selector switch prevents any accidental changes in status.

These products utilize a flange-enclosure designed to be deadfront-mounted on an inner door and used with back-mounted sockets. Everything needed for setup, use and troubleshooting is on the top of the unit: LED status indication and low-profile selector switch. With this product, the selector switch can be moved to any position without having to open the inner door.

For typical applications and detailed connection diagrams, visit: [www.macromatic.com/ar-apps](http://www.macromatic.com/ar-apps).

OUTPUT CONTACTS	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET ■
<b>SPDT</b> w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARF012A6R ARF024A6R ARF120A6R ARF240A6R	8 Pin Octal <b>OR08-PC ■</b>  LOAD 1: PIN 2 LOAD 2: PIN 8 <b>DIAGRAM 17</b>
<b>DPDT CROSS-WIRED</b> w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARF012A3R ARF024A3R ARF120A3R ARF240A3R	8 Pin Octal <b>OR08-PC ■</b>  <b>DIAGRAM 19</b>

■ 8 Pin Back-Mounted Socket provided with relay

Sockets & Accessories available

# SPDT & DPDT CROSS-WIRED DUPLEXOR

## ARF SERIES

### APPLICATION DATA

**Voltage Tolerance:**

AC Operation: +10/-15% of nominal at 50/60 Hz.

DC Operation: +10/-15% of nominal.

**Load (Burden):** Less than 3VA

**Output Contacts:**

10A @ 240V AC/24V DC,

1/2HP @ 120/240V AC (N.O.), 1/3HP @ 120/240VAC (N.C.)

B300, R300 (N.O.) Pilot Duty

**Life:**

Mechanical: 10,000,000 operations

Full Load: 100,000 operations

**Temperature:** Operating: -28° to 65°C (-18° to 149°F)

Storage: -40° to 85°C (-40° to 185°F)

**Indicator LEDs:** 2 LEDs marked LOAD 1 and LOAD 2

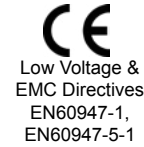
**Optional Selector Switch Settings:**

LOAD 1

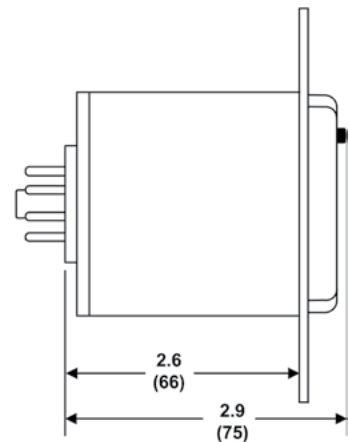
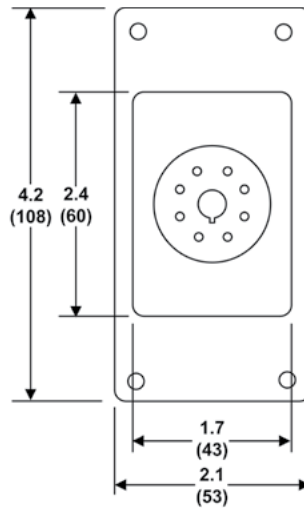
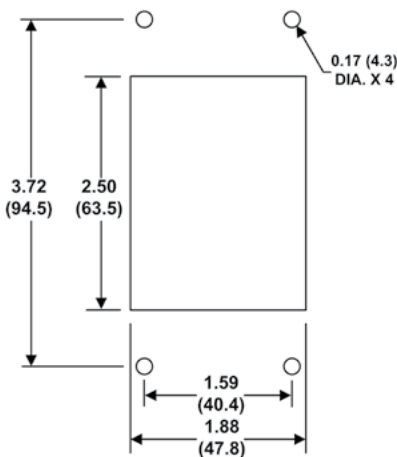
ALTERNATE

LOAD 2

**Approvals:**



### DIMENSIONS



All Dimensions in Inches (Millimeters)

# SOCKETS & ACCESSORIES

## 8 Pin Octal Socket- Surface or DIN Rail-Mounted

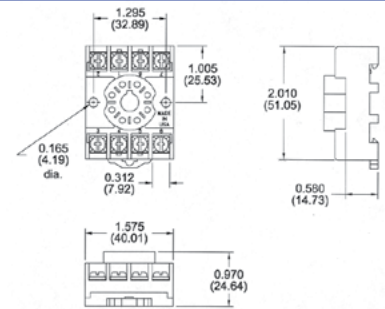
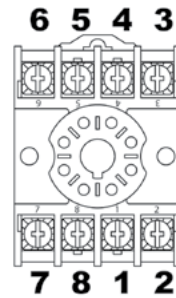
- ◆ 10A @ 600V
- ◆ 1 or 2 #12-20 AWG Wire
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque 12 in-lbs



File #E169693 File #LR701114



Catalog Number:  
70169-D



## 11 Pin Octal Socket Surface or DIN Rail-Mounted

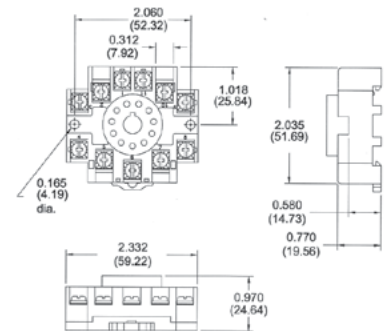
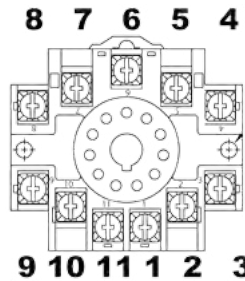
- ◆ 10A @ 300V
- ◆ 1 or 2 #12-20 AWG Wire
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque 12 in-lbs



File #E169693 File #LR701114



Catalog Number:  
70170-D



## 8 Pin Octal Socket- Back-Mounted

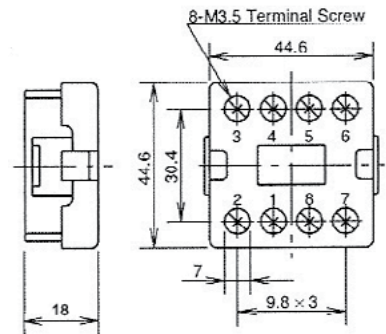
- ◆ 10A @ 300V
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque of 10 in-lbs



File #E62437



Catalog Number:  
OR08-PC



## 12 Pin Socket Surface-Mounted

- ◆ 10A @ 600V
- ◆ #12-20 AWG Wire
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque 12 in-lbs

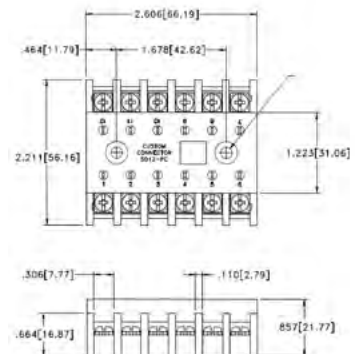
**NOTE:** If a 12 Pin Socket is required for DIN-rail mounting, please contact Macromatic.



File #LR29513



Catalog Number:  
SD12-PC



## Hold Down Spring

Can be used for:

- ◆ Panel-Mounted Sockets
- ◆ Sockets Mounted to 35mm DIN Rail \*

\* Requires two #8, 3/4" length machine screws with washers & nuts--contact Macromatic or [www.macromatic.com/70166](http://www.macromatic.com/70166) for more information.



Catalog Number:  
70166

