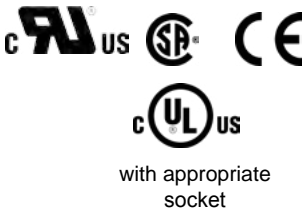


# DPDT CROSS-WIRED DUPLEXOR

## ARP SERIES



- ◆ For Duplex Control of two loads
- ◆ 10A DPDT Cross-Wired Output Configuration when additional capacity is required
- ◆ Control voltages of 12 & 24V AC/DC and 120 & 240V AC
- ◆ Compact plug-in design utilizing industry-standard 8 pin octal socket
- ◆ Optional low profile selector switch for normal alternation or to lock either load to be ON first
- ◆ 2 LEDs indicate load to energize first
- ◆ Pilot Duty Rating



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Alternating Relays with DPDT cross-wired outputs are used in applications requiring both (a) the optimization of load usage by equalizing the run time of two loads and (b) 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. Two LEDs indicate which load will energize first.

Alternating Relays with DPDT cross-wired output configurations are typically used to control two loads when the need to have both loads on at the same time for additional capacity is required. For products where only one load needs to be on at a time, see Alternating Relays with SDPT & DPDT output configurations.

An optional three position selector switch is offered. This allows a DPDT cross-wired unit to alternate the two loads as normal, or lock the relay to always operate the same load first each time. 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 selector switch has a low-profile to prevent any accidental changes in status.

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>DPDT CROSS-WIRED</b> w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A3 ARP024A3 ARP120A3 ARP240A3	8 Pin Octal <b>70169-D</b>  <b>DIAGRAM 19</b>
<b>DPDT CROSS-WIRED</b> w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A3R ARP024A3R ARP120A3R ARP240A3R	 <b>DIAGRAM 147</b>
<b>DPDT CROSS-WIRED</b> w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A5 ARP024A5 ARP120A5 ARP240A5	8 Pin Octal <b>70169-D</b>  <b>DIAGRAM 147</b>
<b>DPDT CROSS-WIRED</b> w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A5R ARP024A5R ARP120A5R ARP240A5R	 <b>DIAGRAM 147</b>

Sockets & Accessories available

# DPDT CROSS-WIRED DUPLEXOR

## ARP SERIES

### APPLICATION DATA

**Voltage Tolerances:** 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

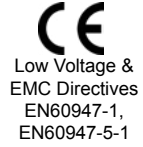
**Temperature:** Operating: -28° to 65°C (-18° to 149°F)  
Storage: -40° to 85°C (-40° to 185°F)

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

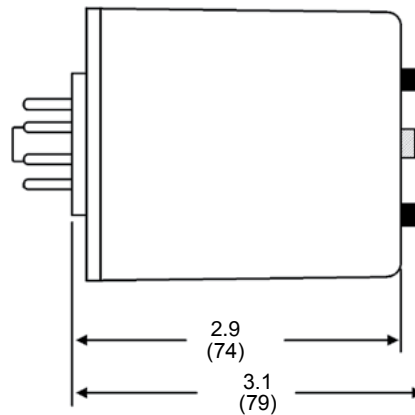
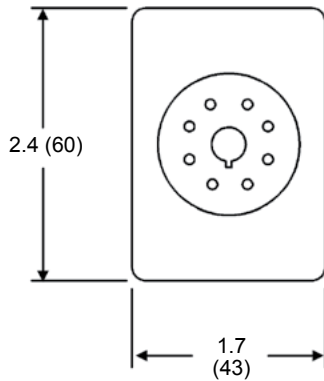
**Optional Selector Switch Settings:**

LOAD 1 (always energizes first)  
ALTERNATE  
LOAD 2 (always energizes first)

**Approvals:**



### DIMENSIONS



All Dimensions in Inches (Millimeters)

# SOCKETS & ACCESSORIES

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

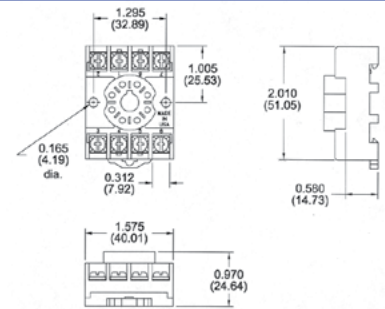
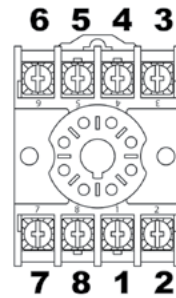
- ◆ 10A @ 600V
- ◆ 1 or 2 #12-20 AWG Wire
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque 12 in-lbs



File #E169693 File #LR701114



Catalog Number:  
70169-D



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

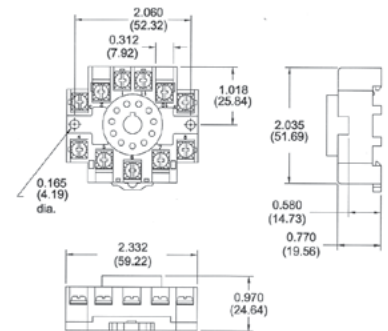
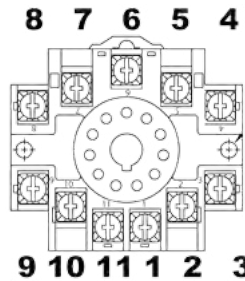
- ◆ 10A @ 300V
- ◆ 1 or 2 #12-20 AWG Wire
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque 12 in-lbs



File #E169693 File #LR701114



Catalog Number:  
70170-D



## 8 Pin Octal Socket- Back-Mounted

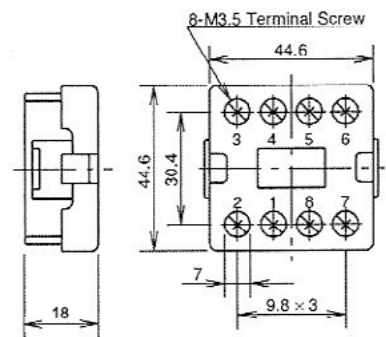
- ◆ 10A @ 300V
- ◆ Pressure Wire Clamp Terminations
- ◆ Recommended Tightening Torque of 10 in-lbs



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

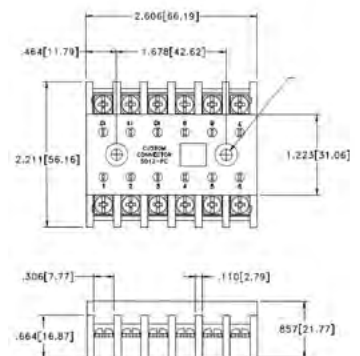
**NOTE:** If a 12 Pin Socket is required for DIN-rail mounting, please contact Macromatic.



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

