

SPDT & DPDT DUPLEXOR

ARP SERIES



- ◆ For Duplex Control of two loads
- ◆ Control voltages of 12 & 24V AC/DC and 120 & 240V AC
- ◆ Compact plug-in design utilizing industry-standard 8 or 11 pin octal socket
- ◆ 10A SPDT or DPDT Output Configuration
- ◆ Optional low profile selector switch for normal alternation or to lock either load to be ON only
- ◆ 2 LEDs indicate load to energize next
- ◆ Pilot Duty Rating



Better. By Design.

800.238.7474
WWW.MACROMATIC.COM
SALES@MACROMATIC.COM

Alternating Relays are used in special applications where the optimization of load usage is required by equalizing the run time of two loads. 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 is the next to energize.

These Alternating Relays are available in either SPDT or DPDT output configurations and typically are used to control two loads, with only one on at a time. For products used when additional capacity is required (ability to turn both loads on at the same time), see Alternating Relays with DPDT Cross-Wired output configurations.

Each version is available with an optional three-position selector switch. 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. A load that has fewer hours 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.

OUTPUT CONTACTS	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET
SPDT w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A6 ARP024A6 ARP120A6 ARP240A6	8 Pin Octal 70169-D LOAD 1: PIN 2 LOAD 2: PIN 8 DIAGRAM 17
SPDT w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A6R ARP024A6R ARP120A6R ARP240A6R	
DPDT w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A2 ARP024A2 ARP120A2 ARP240A2	11 Pin Octal 70170-D LOAD 1: PINS 3 OR 11 LOAD 2: PINS 1 OR 9 DIAGRAM 18
DPDT w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A2R ARP024A2R ARP120A2R ARP240A2R	

Sockets & Accessories available

SPDT & DPDT 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

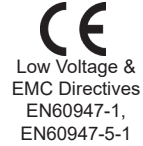
Temperature: Operating: -28° to 65°C (-18° to 149°F)
Storage: -40° to 85°C (-40° to 185°F)

Indicator LEDs: 2 LEDs marked LOAD 1 and LOAD 2

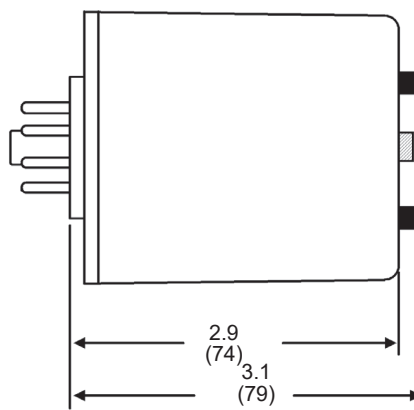
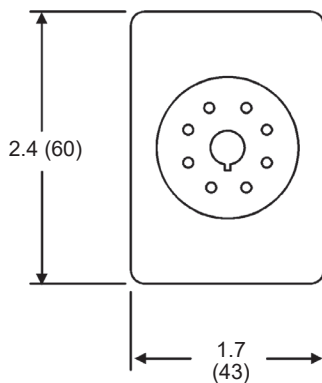
Optional Selector Switch Settings:

LOAD 1
ALTERNATE
LOAD 2

Approvals:



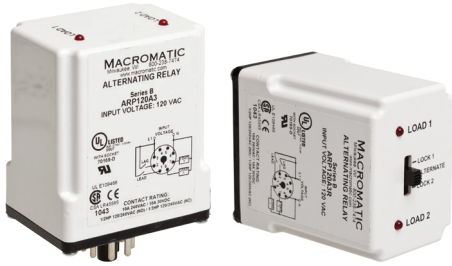
DIMENSIONS



All Dimensions in Inches (Millimeters)

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



Better. By Design.

800.238.7474

WWW.MACROMATIC.COM

SALES@MACROMATIC.COM

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.

OUTPUT CONTACTS	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET
DPDT CROSS-WIRED w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A3 ARP024A3 ARP120A3 ARP240A3	8 Pin Octal 70169-D
DPDT CROSS-WIRED w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A3R ARP024A3R ARP120A3R ARP240A3R	
DPDT CROSS-WIRED w/o Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A5 ARP024A5 ARP120A5 ARP240A5	8 Pin Octal 70169-D
DPDT CROSS-WIRED w/ Selector Switch	12V AC/DC 24V AC/DC 120V AC 240V AC	ARP012A5R ARP024A5R ARP120A5R ARP240A5R	

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

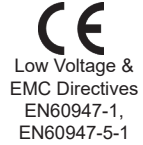
Temperature: Operating: -28° to 65°C (-18° to 149°F)
Storage: -40° to 85°C (-40° to 185°F)

Indicator LEDs: 2 LEDs marked LOAD 1 and LOAD 2

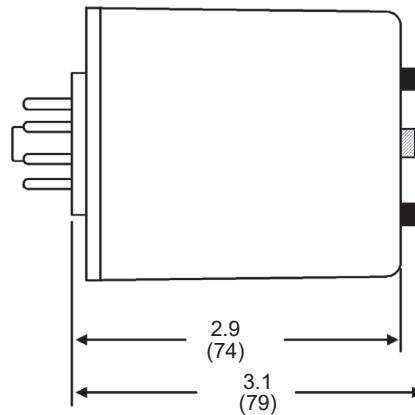
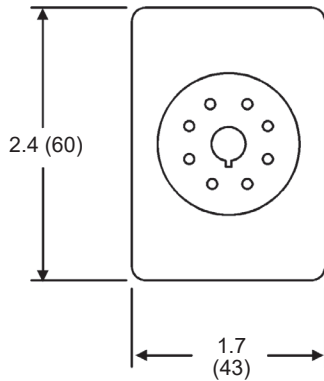
Optional Selector Switch Settings:

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

Approvals:



DIMENSIONS



All Dimensions in Inches (Millimeters)