

# ARP SERIES

## Alternating Relay



8-PIN



11-PIN

### Description

The ARP Series is used in systems where equal run time for two motors is desirable. The selector switch allows selection of alternation or for continuous operation of either load. LED's indicate the status of the output relay. This versatile series may be front panel mounted (BZ1 accessory required) or 35 mm DIN-rail mounted with an accessory socket.

### Operation

**Alternating:** When the rotary switch is in the "alternate" position, alternating operation of Load A and Load B occurs upon the opening of the control switch S1. To terminate alternating operation and cause only the selected load to operate, rotate the switch to position "A" to lock Load A or position "B" to lock Load B. The LEDs indicate the status of the internal relay and which load is selected to operate.

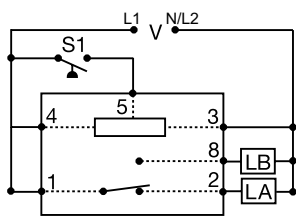
**Note:** Input voltage must be applied at all times for proper alternation. The use of a solid-state control switch for S1 may not initiate alternation correctly. S1 voltage must be from the same supply as the unit's input voltage (see connection diagrams). Loss of input voltage resets the unit; Load A becomes the lead load for the next operation.

**Duplexing (Cross-Wired):** Duplexing models operate the same as alternating relays and when both the Control (S1) and Lag Load (S2) Switches are closed, Load A and Load B energize simultaneously.

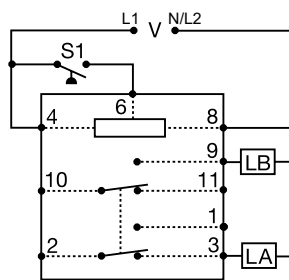
The DPDT 8-pin, cross-wired option, allows extra system load capacity through simultaneous operation of both motors when needed. Relay contacts are not isolated.

### Wiring Diagram

SPDT 8-PIN

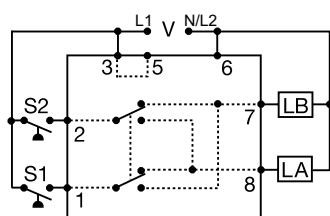


DPDT 11-PIN



Relay contacts in above are isolated.

DPDT 8-PIN CROSS-WIRED



V = VOLTAGE  
LA = LOAD A  
LB = LOAD B  
S1 = PRIMARY CONTROL SWITCH  
S2 = LAG LOAD SWITCH

### Features & Benefits

FEATURES	BENEFITS
<b>Alternating or electrically locked operation</b>	Flexibility to run unit alternating between the two loads as normal or lock the relay to one specific load.
<b>Low profile selector switch</b>	Prevents accidental actuation
<b>LED status indication</b>	Visual indication of which load is engaged
<b>Industry standard base connection</b>	Flexibility to use in many applications

### Ordering Information

MODEL	LINE VOLTAGE	OUTPUT FORM	DESCRIPTION
AR120A-3095	120VAC	SPDT	8-pin for alternating applications. Rotary switch allows user to lock internal relay to one specific load.
ARP23S	24VAC	DPDT	8-pin cross-wired for duplexing applications. Rotary switch allows user to lock internal relay to one specific load.
ARP41	120VAC	SPDT	8-pin for alternating applications.
ARP41S	120VAC	SPDT	8-pin for alternating applications. Rotary switch allows user to lock internal relay to one specific load.
ARP42S	120VAC	DPDT	11-pin for alternating applications. Rotary switch allows user to lock internal relay to one specific load.
ARP43	120VAC	DPDT	8-pin cross-wired for duplexing applications.
ARP43S	120VAC	DPDT	8-pin cross-wired for duplexing applications. Rotary switch allows user to lock internal relay to one specific load.
ARP61S	230VAC	SPDT	8-pin for alternating applications. Rotary switch allows user to lock internal relay to one specific load.
ARP62S	230VAC	DPDT	11-pin for alternating applications. Rotary switch allows user to lock internal relay to one specific load.
ARP63S	230VAC	DPDT	8-pin cross-wired for duplexing applications. Rotary switch allows user to lock internal relay to one specific load.

If you don't find the part you need, call us for a custom product 800-843-8848

## ARP SERIES

### Accessories



#### **BZ1 Front Panel Mount Kit**

Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.



#### **NDS-8 Octal 8-pin Socket**

8-pin 35mm DIN rail or surface mount. Rated at 10A @ 300VAC. Surface mounted with two #6 (M 3.5 x 0.6) screws or snaps onto a 35 mm DIN rail. Uses PSC8 hold-down clips.



#### **NDS-11 11-pin Socket**

1-pin 35mm DIN rail or surface mount. Rated at 10A @ 300VAC. Surface mounted with two #6 (M 3.5 x 0.6) screws or snaps onto a 35 mm DIN rail. Uses PSC11 hold-down clips.



#### **PSC8 or PSC11 Hold-down Clips**

Securely mounts plug-in controls in any position. Provides protection against vibration. Use PSC8 with NDS-8 Octal Socket or PSC11 with NDS-11 Socket. Sold in pairs.



#### **C103PM (AL) DIN Rail**

35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

### Specifications

#### **Input**

#### **Tolerance**

#### **24VAC**

-15% to 20%

#### **120 & 230VAC**

-20% to 10%

#### **AC Line Frequency**

50/60Hz

#### **Output**

#### **Type**

Electromechanical relay

#### **Form**

SPDT, DPDT, or cross-wired DPDT

#### **Rating**

10A resistive @ 120/240VAC & 28 VDC;

1/3 hp @ 120/240VAC

250VAC

#### **Maximum Voltage**

#### **Life**

Mechanical -  $1 \times 10^7$ ; Electrical -  $1 \times 10^6$

#### **Protection**

#### **Isolation Voltage**

$\geq 1500V$  RMS input to output

#### **Mechanical**

#### **Mounting**

Plug-in socket

#### **Dimensions**

**H** 60.7 mm (2.39"); **W** 45.2 mm (1.78");

**D** 81.3 mm (3.2")

#### **Termination**

Octal 8-pin or magnal 11-pin

#### **Environmental**

#### **Operating/Storage**

#### **Temperature**

-20° to 60°C / -30° to 85°C

#### **Weight**

5.6 oz (159 g) approx.

NOTE: Unit does not have debounce time delay.