## ORS SERIES



## (€¶1)®



#### Wiring Diagram



V = Voltage S1 = Initiate Switch

Relay contacts are isolated.

R<sub>T</sub> is used when external adjustment is ordered.

#### Description

The ORS Series' open PCB construction offers the user good economy without sacrificing performance and reliability. The output relay is available in isolated, 10A, DPDT or SPDT forms. The time delay may be ordered as factory fixed, onboard knob, or external adjustment. All connections are 0.25 in. (6.35 mm) male quick connect terminals.

#### Operation (Single Shot)

Input voltage must be applied before and during timing. Upon momentary or maintained closure of the initiate switch (leading edge triggered), the output relay energizes for a measured interval of time. At the end of the time delay, the output de-energizes. Opening or reclosing the initiate switch during timing has no affect on the time delay. The output will energize if the initiate switch is closed when input voltage is applied.

**Reset:** Reset occurs when the time delay is complete and the initiate switch is opened. Loss of input voltage resets the time delay and output.

## Features & Benefits

| FEATURES                                       | BENEFITS   |  |
|--|--|--|
| Open PCB construction                          | Reduces cost without sacrificing performance and reliability |  |
| Analog circuitry                               | Repeat accuracy + / - 2%,<br>Factory calibration + / - 10%   |  |
| Isolated, 10A, SPDT or<br>DPDT output contacts | Allows control of loads for AC or DC voltages                |  |
| Line voltage initiation                        | Separate control voltage is not required for operation       |  |

#### Accessories



P1004-12, P1004-12-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



**P0700-7 Versa-Knob** Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



**P1015-64** (AWG 14/16) **Female Quick Connect** These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



**P1015-18 Quick Connect to Screw Adapter** Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

Ordering Information

| MODEL        | INPUT<br>VOLTAGE | ADJUSTMENT | TIME DELAY | OUTPUT<br>FORM |
|--------------|------------------|------------|------------|----------------|
| ORS120A150SD | 120VAC           | Fixed      | 50s        | DPDT           |
| ORS230A150SD | 230VAC           | Fixed      | 50s        | DPDT           |

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



# ORS SERIES



## **Selection Guide**

| R <sub>T</sub> Selection Chart |           |          |          |           |        |  |  |  |
|--------------------------------|-----------|----------|----------|-----------|--------|--|--|--|
|                                | B-        |          |          |           |        |  |  |  |
|                                | 1.1       |          |          |           |        |  |  |  |
| 1                              | 2         | 3        | 4        | 5         | Megohm |  |  |  |
| 0.05                           | 0.5       | 0.6      | 1.2      | 3.0       | 0.0    |  |  |  |
| 0.5                            | 5.0<br>10 | 10<br>20 | 20<br>40 | 50<br>100 | 0.5    |  |  |  |
| 1.5                            | 15        | 30       | 60       | 150       | 1.5    |  |  |  |
| 2.0                            | 20        | 40       | 80       | 200       | 2.0    |  |  |  |
| 2.5                            | 25        | 50       | 100      | 250       | 2.5    |  |  |  |
| 3.0                            | 30        | 60       | 120      | 300       | 3.0    |  |  |  |

When selecting an external  $R_{T}$  add at least 20% for tolerance of unit and the  $R_{T}$ 

#### **Function Diagram**



V = Voltage S1 = Initiate Switch NO = Normally Open Contact NC = Normally Closed Contact TD = Time Delay R = Reset

#### **Specifications**

Time Delay Type Range Repeat Accuracy Tolerance (Factory Calibration)

Reset Time Initiate Time Time Delay vs Temp. & Voltage Input Voltage Tolerance 24VAC 120 & 230VAC AC Line Frequency Power Consumption Output Type Form Rating

Life Protection Isolation Voltage Mechanical Mounting

Dimensions

Termination Environmental Operating/Storage Temperature Weight Analog circuitry 0.05 - 300s in 5 adjustable ranges or fixed ±2% or 20ms, whichever is greater

Adjustable: guaranteed range Fixed:  $\pm 10\%$  $\leq 50ms$  $\leq 70ms$ 

 $\leq \pm 10\%$ 

24, 120, or 230VAC

-15% - 20% -20% - 10% 50/60 Hz 2.25W

Electromechanical relay Isolated, SPDT or DPDT 10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 120/240VAC Mechanical - 1x10<sup>7</sup>; Electrical - 1x10<sup>6</sup>

≥1500V RMS input to output

Surface mount with four #6 (M3.5 x 0.6) screws H 53.8 mm (2.12"); W 93.7 mm (3.69"); D 47.8 mm (1.88") 0.25 in. (6.35 mm) male quick connect terminals

-20° to 65°C / -30° to 85°C  $\approx$  2.7 oz (77 g)

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