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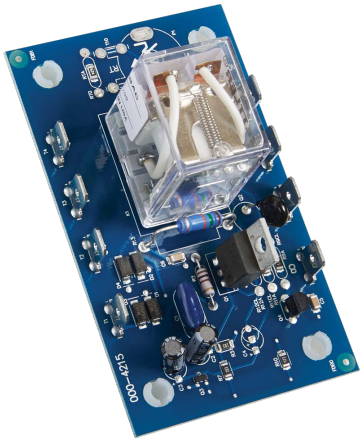
ORM SERIES



Description

The ORM Series features open PC board construction for reduced cost. It has isolated, 10A, DPDT relay contacts and all connections are 0.25 in (6.35 mm) male quick connect terminals. The time delay may be ordered as factory fixed, onboard knob, or external adjustment. Time delays from 0.05 - 300 seconds.

Operation (Delay-on-Make)

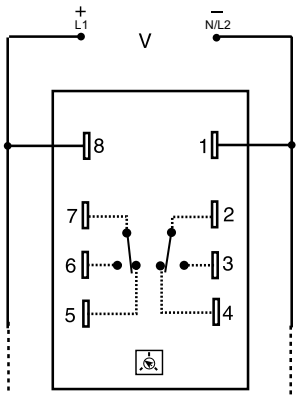
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output energizes and remains energized until voltage is removed.

Reset: Removing input voltage resets the time delay and output.

Features & Benefits

FEATURES	BENEFITS
Analog circuitry with electromechanical relay	Repeat Accuracy + / - 2%
Isolated 10A, DPDT output contacts	Allows control of loads for AC or DC voltages
Open PCB contruction	Reduces cost for OEM applications

Wiring Diagram



V = Voltage

RT is used when external adjustment is ordered.
Relay contacts are isolated.

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 VOLTAGE	ADJUSTMENT	TIME DELAY
ORM120A17	120VAC	Fixed	7s
ORM120A25	120VAC	Onboard knob	3 - 300s
ORM230A17	230VAC	Fixed	7s
ORM24D13.5	24VDC/28VDC	Fixed	3.5s
ORM24D22	24VDC	Onboard knob	0.5 - 30s

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

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Specifications

Time Delay

Type	Analog circuitry
Range	0.05 - 300s in 5 adjustable ranges or fixed
Repeat Accuracy	±2% or 20ms, whichever is greater
Tolerance	Adjustable: guaranteed range Fixed: ±10%
Recycle Time	After timing - ≤ 16ms; During timing - 0.1% of max. time delay or 75ms, whichever is greater
Time Delay vs Temp. & Voltage	≤ ±10%

Input

Voltage	24 or 110VDC; 24, 120, or 230VAC
Tolerance	
24VDC/AC	-15% - 20%
110 to 230VAC/DC	-20% - 10%
AC Line Frequency	50/60 Hz
Power Consumption	2.25W

Output

Type	Electromechanical relay
Form	DPDT, Isolated
Rating	10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 120/240VAC
Life	Mechanical - $1x10^7$; Electrical - $1x10^6$

Protection

Polarity	DC units are reverse polarity protected
Isolation Voltage	≥1500V RMS input to output

Mechanical

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

Environmental

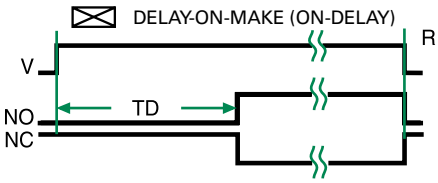
Operating/Storage Temperature	-20° to 65°C / -30° to 85°C
Weight	≅ 2.7 oz (77 g)

Selection Guide

R_T Selection Chart					
Desired Time Delay*					R_T
Seconds					
1	2	3	4	5	Megohm
0.05	0.5	0.6	1.2	3.0	0.0
0.5	5.0	10	20	50	0.5
1.0	10	20	40	100	1.0
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
NO = Normally Open Contact
NC = Normally Closed Contact
TD = Time Delay
R = Reset
= Undefined Time