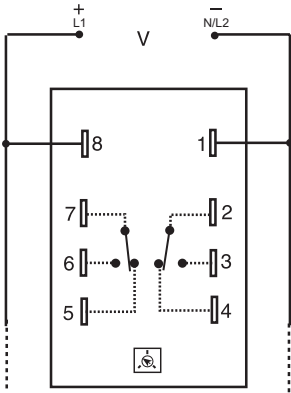


The ORM Series features open PC board construction for reduced cost. It has isolated, 10A, DPDT relay contacts and all connections are 0.25 in (6.35 mm) male quick connect terminals. The time delay may be ordered as factory fixed, onboard knob, or external adjustment. Time delays from 0.05 - 300 seconds.

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.

For more information see:
Appendix A, pages 156-164 for function descriptions and diagrams.
Appendix B, page 165, Figure 11 for dimensional drawing.

Connection:






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

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.

Features:

- Time delays from 0.05s - 300s in 5 ranges or fixed
 - Low cost open PCB construction
 - 10A, DPDT output contacts
 - ±2% repeat accuracy
 - ±10% factory calibration
 - Factory fixed, onboard or external adjust
- Approvals:   

Auxiliary Products:

- **External adjust potentiometer:**
P/N: P1004-12
P/N: P1004-12-X
- **Female quick connect:**
P/N: P1015-64 (AWG 14/16)
- **Quick connect to screw adaptor:**
P/N: P1015-18
- **Versa-knob:** P/N: P0700-7

Available Models:

ORM120A110	ORM120A25
ORM120A115	ORM230A17
ORM120A145	ORM24D13.5
ORM120A17	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

ORM	X	X	X
	Input Voltage	Adjustment	Time Delay*
	24A - 24VAC	1 - Fixed	1 - 0.05 - 3s
	24D - 24VAC/28VDC	2 - Onboard knob	2 - 0.5 - 30s
	110D - 110VDC	3 - External adjust	3 - 0.6 - 60s
	120A - 120VAC		4 - 1.2 - 120s
	230A - 230VAC		5 - 3 - 300s

*If fixed delay is selected, insert delay (0.05 - 300) in seconds.

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
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)