

# Dold Relay Timers

## Multi-Mode Relay Timers MK Series

### Overview

The MK series relay timers are timing relays designed for process control, machine tool control, safety control and many other types of applications. The timers are DIN-rail mountable with up to 8 functions in one unit.

Fleeting/single shot on make:

The relay switches on immediately when energized and switches off after the time delay, or when de-energized.

Fleeting/single shot on break:

When energizing nothing happens. When de-energized, the relay switches on for the adjusted time and switches off after the time is elapsed.

### Features

- Eight time ranges from 0.02 sec to 300hr selectable via rotational switches
- Voltage range 12– 240 VAC/VDC
- Eight functions can be set via rotational switch:
- Delay on energization (AV)
- Fleeting on make (EW)
- Delayed pulse (IE)
- Flasher, start with pulse (BI)
- Delay on de-energization (RV)
- Pulse forming function (IF)
- Fleeting on break (AW)
- Delay on energization and de-energization (AV / RV)



**MK7850N-82-200-61**

### Multi-Mode Relay Timers MK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<b>MK7850N-82-200-61</b>	\$64.00	Multi-mode	0.02 seconds to 300 hours selectable	12-240 VAC/VDC	2 changeover contacts, one programmable as instantaneous	<a href="#">PDF</a>

### Multi-Mode Relay Timers Specifications

Input Specifications	
Nominal Voltage	12–240 VAC/VDC
Nominal Consumption	12VAC ~ 1.5 VA 24VAC ~ 2VA 240VAC ~ 3VA 12VDC ~ 1W 24VDC ~ 1W 240VDC ~ 1W
Nominal Frequency	45 – 400 Hz
Contact Specifications	
Type	2 changeover contacts, one programmable as instantaneous
Contact Material	AgNi
Measured Nominal Voltage	250VAC
Switching Capacity (according to AC 15)	N.O. Contact 3A / 230VAC N.C. Contact 1A / 230VAC
Electrical Lifetime	1.5 x 10 <sup>5</sup> switching cycle (to AC 15 at 1A, 230VAC)
Switching Frequency	36,000 switching cycle / hr
Max Fuse Rating	4A
Mechanical Lifetime	≥ 30 x 10 <sup>6</sup> switching cycles
Time Circuit Specifications	
Time Ranges	8 time ranges in one unit, selectable via rotational switch 0.02 ~ 1 sec, 0.06 ~ 6 sec, 0.3 ~ 30 sec 0.03 ~ 3 min, 0.3 ~ 30 min, 3 ~ 300 min 0.3 ~ 30 hr, 3 ~ 300 hr
Time Setting	t1 - continuous, 1:100 on relative scale
Recovery Time	24VDC 15ms 240VDC 50ms 230VAC 80ms
Repeat Accuracy	± 0.5% of selected end of scale value +20ms
Voltage and Temperature Influence	≤ 1% with the complete operating range

### Multi-Mode Relay Timers Specifications

General Specifications	
Connection (screw terminal)	1 x 4mm <sup>2</sup> / 12AWG solid or 1 x 2.5 mm <sup>2</sup> / 14 AWG stranded ferruled or 2 x 1.5 mm <sup>2</sup> / 16 AWG stranded ferruled or 2 x 2.5 mm <sup>2</sup> / 14 AWG solid
Tightening Torque	0.8 N·m
Ambient Temperature	-40 to +60°C [-40 to +140°F]
Storage Temperature	-40 to +70°C [-40 to +158°F]
Relative Air Humidity	93% at 40°C
Protection Rating	Housing IP40 / Terminals IP20
Vibration Resistance	Amplitude 0.35 mm frequency 10 – 55Hz
Mounting	35mm Din-rail
Relay Indicator	Green LED: On, when supply connected Yellow LED "R/t": Shows status of output relay and time delay: -Continuously off: Output relay not active; no time delay -Continuously on: Output relay active no time delay -Flashing (short on, long off) output relay not active, time delay -Flashing (long on, short off) output relay active, time delay
Weight (g [oz])	150.0 [5.29]
Agency Approvals and Standards *	cULus, CE
UL Data	
Switching Capacity	Ambient temperature 60°C: Pilot duty B300 5A 250VAC G.P.
UL Specified Wire Connection	60°C / 75°C copper conductors only Screw terminals fixed: AWG 20 – 12 solid or stranded Torque 0.8 Nm

\*To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.