

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

### Multi-Mode Relay Timers Specifications

General Specifications	
<b>Connection (screw terminal)</b>	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
<b>Tightening Torque</b>	0.8 N·m
<b>Ambient Temperature</b>	-40 to +60°C [-40 to +140°F]
<b>Storage Temperature</b>	-40 to +70°C [-40 to +158°F]
<b>Relative Air Humidity</b>	93% at 40°C
<b>Protection Rating</b>	Housing IP40 / Terminals IP20
<b>Vibration Resistance</b>	Amplitude 0.35 mm frequency 10 – 55Hz
<b>Mounting</b>	35mm Din-rail
<b>Relay Indicator</b>	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
<b>Weight (g [oz])</b>	150.0 [5.29]
<b>Agency Approvals and Standards *</b>	cULus, CE
UL Data	
<b>Switching Capacity</b>	Ambient temperature 60°C: Pilot duty B300 5A 250VAC G.P.
<b>UL Specified Wire Connection</b>	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.