

Dold Relay Timers

MK Series Multi-mode Relay Timer

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 Timer						
Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
MK7850N-82-200-61		Multi-mode	0.02 seconds to 300 hours selectable	12–240 VAC/VDC	2 changeover contacts, one programmable as instantaneous	PDF

Multi-mode Relay Timer Specifications Table	
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 ⁵ switching cycle (to AC 15 at 1A, 230VAC)
Switching Frequency	36,000 switching cycle / hr
Max Fuse Rating	4A
Mechanical Lifetime	≥ 30 x 10 ⁶ 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 Timer Specifications Table	
General Specifications	
Connection (screw terminal)	1 x 4mm ² / 12AWG solid or 1 x 2.5 mm ² / 14 AWG stranded ferruled or 2 x 1.5 mm ² / 16 AWG stranded ferruled or 2 x 2.5 mm ² / 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