

# Dold Relay Timers

## Relay Timers RK Series

### Overview

The RK series timers are timing relays that have been designed to be economical and compact to meet the demands of all the modern time control needs. With a few variants of single function and a multi-function model, the RK series covers all common timing functions, time ranges and voltage needs. These timers are suitable for time-dependent control needs in most industrial automation and building automation systems.

### Features

#### RK7814

- 4 time ranges up to 120 sec
- LED indicator for state of contact
- Dual-voltage version 110 – 127VAC + 24 VAC/VDC
- 1 changeover contact

#### RK7815, RK7816

- Time ranges up to 10 sec
- LED indicator for state of contact
- 1 changeover contact
- Dual voltage version 110 – 127 VAC + 24 VAC/VDC

#### RK7817

- 8 time ranges adjustable from 0.02 sec to 300 hr via rotational switches
  - Dual-voltage-version 110 – 127VAC + 24 VAC/VDC
  - 1 changeover contact
- 8 selectable functions via rotational switches
- 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)



**RK7814-81-61**



**RK7815-71-61**



**RK7816-81-61**



**RK7817-81-61**

### On-Delay Relay Timer RK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<b><u>RK7814-81-61</u></b>	\$36.50	On-delay	0.05 to 120 seconds selectable	24 VAC/VDC and 110-127 VAC	1 changeover contact	<a href="#">PDF</a>

### Fleeting (single shot) Relay Timer RK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<b><u>RK7815-71-61</u></b>	\$34.00	Fleeting (single-shot)	1 to 10 seconds	24 VAC/VDC and 110-127 VAC	1 changeover contact	<a href="#">PDF</a>

### Flasher Relay Timer RK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<b><u>RK7816-81-61</u></b>	\$34.00	Flasher	1 to 10 seconds	24 VAC/VDC and 110-127 VAC	1 changeover contact	<a href="#">PDF</a>

### Multi-Mode Relay Timer RK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<b><u>RK7817-81-61</u></b>	\$43.50	Multi-mode	0.02 seconds to 300 hours selectable	24 VAC/VDC and 110-127 VAC	1 changeover contact	<a href="#">PDF</a>

# Dold Relay Timers

Relay Timers RK Series Specifications				
Part Number	RK7814-81-61	RK7815-71-61	RK7816-81-61	RK7817-81-61
<b>Input Specifications</b>				
Nominal Voltage	24 VAC/VDC <sup>1</sup> + 110-127 VAC <sup>2</sup>		24 VAC/VDC <sup>1</sup> + 110-127 VAC <sup>2</sup>	
Nominal Consumption	24VAC ~ 1VA 230VAC ~ 6VA 24VDC ~ 0.4 W		24VAC ~ 1VA 230VAC ~ 7.5 VA 24VDC ~ 0.5 W	
Nominal Frequency	50/60 Hz			
Frequency Range	± 5%			
<b>Contact Specifications</b>				
Type	1 changeover contact			
Switching Capacity (according to AC 15)	N.O. Contact 2A / 230VAC N.C. Contact 1A / 230VAC			
Max Wire Size	22–14 AWG solid or stranded			
Mechanical Lifetime	> 1x10 <sup>7</sup> switching cycles			
Electrical Lifetime	> 1x10 <sup>5</sup> switching cycle			
<b>Time Circuit Specifications</b>				
Time Ranges	0.05 ~ 0.5 sec, 0.2 ~ 2 sec, 1.5 ~ 15 sec, 12 ~ 120 sec	1 ~ 10 sec	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 (* 0.08 s for AV and IE functions)	
Time Setting	Infinite, 1:10 on relative scale		Infinite, 1:100 on relative scale	
Recovery Time	< 100ms			
Repeat Accuracy	≤ 0.5% of set time delay + 10ms		≤ 0.8% of set time delay + 20ms	
Voltage Influence	≤ 1%			
Temperature Influence	0.25 % / K		≤ 2% at range 0 – 60°C ≤ 5% at range -20 – 0°C	
<b>General Specifications</b>				
Connection (fixed screw terminal)	0.34 – 2 x 2.5 mm <sup>2</sup> / 22–14 AWG solid or 0.34 – 2 x 2.5 mm <sup>2</sup> / 22–14 AWG stranded wire with and without ferrules			
Tightening Torque	0.5 N·m			
Ambient Temperature	-40 to +60°C [-40 to +140°F]		-20 to +60°C [-4 to +140°F]	
Storage Temperature	-40 to +70°C [-40 to +158°F]		-25 to +70°C [-13 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	On, when corresponding output relay is active (contact 15–18 closed)		Green LED: On, when supply connected Yellow LED "R/I": Shows status of output relay and time delay (15-16-18): -Continuous off: Output relay not active;no time delay -Continuous on: Output relay active no time delay -Flashing (short on, long off) Time delay: output relay not active -Flashing (long on, short off) Time delay: output relay active	
Weight (g [oz])	65.0 [2.29]	60.0 [2.11]	70.0 [2.46]	
Agency Approvals and Standards *	cULus, CE			
<b>UL Data</b>				
Switching Capacity	Ambient temperature 60°C: Pilot duty B300 4A 240VAC G.P. 4A 30VDC G.P.			
UL Specified Wire Connection	60°C / 75°C copper conductors only AWG 22 – 14 solid or stranded Torque 0.5 N·m			

Notes: <sup>1</sup>at terminals A3-A2 <sup>2</sup> at terminals A1-A2

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