

# Dold Relay Timers

## RK Series Relay Timers

### 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

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<a href="#">RK7814-81-61</a>		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

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

### Flasher Relay Timer

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

### Multi-mode Relay Timer

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<a href="#">RK7817-81-61</a>		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

RK Series Relay Timers Specifications Table				
Part Number	RK7814-81-61	RK7815-71-61	RK7816-81-61	RK7817-81-81
<b>Input Specifications</b>				
<b>Nominal Voltage</b>	24 VAC/VDC <sup>1</sup> + 110-127 VAC <sup>2</sup> Notes: <sup>1</sup> at terminals A3-A2 <sup>2</sup> at terminals A1-A2		24 VAC/VDC <sup>1</sup> + 110-127 VAC <sup>2</sup> Notes: <sup>1</sup> at terminals A3-A2 <sup>2</sup> at terminals A1-A2	
<b>Nominal Consumption</b>	24VAC ~ 1VA 230VAC ~ 6VA 24VDC ~ 0.4 W		24VAC ~ 1VA 230VAC ~ 7.5 VA 24VDC ~ 0.5 W	
<b>Nominal Frequency</b>	50/60 Hz			
<b>Frequency Range</b>	± 5%			
<b>Contact Specifications</b>				
<b>Type</b>	1 changeover contact			
<b>Switching Capacity (according to AC 15)</b>	N.O. Contact 2A / 230VAC N.C. Contact 1A / 230VAC			
<b>Max Wire Size</b>	22–14 AWG solid or stranded			
<b>Mechanical Lifetime</b>	> 1x10 <sup>7</sup> switching cycles			
<b>Electrical Lifetime</b>	> 1x10 <sup>5</sup> switching cycle			
<b>Time Circuit Specifications</b>				
<b>Time Ranges</b>	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)	
<b>Time Setting</b>	Infinite, 1:10 on relative scale		Infinite, 1:100 on relative scale	
<b>Recovery Time</b>	< 100ms			
<b>Repeat Accuracy</b>	≤ 0.5% of set time delay + 10ms		≤ 0.8% of set time delay + 20ms	
<b>Voltage Influence</b>	≤ 1%			
<b>Temperature Influence</b>	0.25 % / K		≤ 2% at range 0 – 60°C ≤ 5% at range -20 – 0°C	
<b>General Specifications</b>				
<b>Connection (fixed screw terminal)</b>	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			
<b>Tightening Torque</b>	0.5 N·m			
<b>Ambient Temperature</b>	-40 to +60°C [-40 to +140°F]		-20 to +60°C [-4 to +140°F]	
<b>Storage Temperature</b>	-40 to +70°C [-40 to +158°F]		-25 to +70°C [-13 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>	On, when corresponding output relay is active (contact 15–18 closed)		Green LED: On, when supply connected Yellow LED "R/t": 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	
<b>Weight (g [oz])</b>	65.0 [2.29]	60.0 [2.11]	70.0 [2.46]	
<b>Agency Approvals and Standards</b>	cULus, CE			
<b>UL Data</b>				
<b>Switching Capacity</b>	Ambient temperature 60°C: Pilot duty B300 4A 240VAC G.P. 4A 30VDC G.P.			
<b>UL Specified Wire Connection</b>	60°C / 75°C copper conductors only AWG 22 – 14 solid or stranded Torque 0.5 N·m			