

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
<u>RK7814-81-61</u>	\$36.50	On-delay	0.05 to 120 seconds selectable	24 VAC/VDC and 110-127 VAC	1 changeover contact	PDF

Fleeting (single shot) Relay Timer RK Series

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

Flasher Relay Timer RK Series

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

Multi-Mode Relay Timer RK Series

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

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Relay Timers RK Series Specifications				
Part Number	RK7814-81-61	RK7815-71-61	RK7816-81-61	RK7817-81-61
Input Specifications				
Nominal Voltage	24 VAC/VDC ¹ + 110-127 VAC ²			24 VAC/VDC ¹ + 110-127 VAC ²
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%			
Contact Specifications				
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 ⁷ switching cycles			
Electrical Lifetime	> 1x10 ⁵ switching cycles			
Time Circuit Specifications				
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
General Specifications				
Connection (fixed screw terminal)	0.34 – 2 x 2.5 mm ² / 22–14 AWG solid or 0.34 – 2 x 2.5 mm ² / 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			
UL Data				
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: ¹at terminals A3-A2 ²at 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.