

# 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	
<b>Input Specifications</b>	
<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
<b>Contact Specifications</b>	
<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
<b>Time Circuit Specifications</b>	
<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	
<b>General Specifications</b>	
<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
<b>UL Data</b>	
<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.

# Dold Relay Timers

## Cyclic Relay Timers MK Series

### Features

- 8 time ranges from 0.05 sec to 300hr selectable via rotational switches
- Impulse and break time separately adjustable
- Selectable start with impulse or break
- Voltage range 12–240 VAC/VDC
- Adjustment aid for quick setting of long time values
- Suitable for 2-wire proximity sensor control
- LED indicators for operation, contact position, and time delay
- 2 changeover contacts



**MK7854N-82-61**

Cyclic Relay Timers MK Series						
Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<a href="#">MK7854N-82-61</a>	\$80.00	Cyclic	0.05 seconds to 300 hours selectable	12-240 VAC/VDC	2 changeover contacts	<a href="#">PDF</a>

Cyclic Relay Timers Specifications	
<b>Input Specifications</b>	
<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>Contact Specifications</b>	
<b>Type</b>	2 changeover contacts
<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
<b>Time Circuit Specifications</b>	
<b>Time Ranges</b>	8 time ranges in one unit, selectable via rotational switch 0.05 ~ 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, t2 - 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
<b>Voltage and Temperature Influence</b>	≤ 1% with the complete operating range

Cyclic Relay Timers Specifications	
<b>General Specifications</b>	
<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 voltage connected Yellow LED "R/t": Shows status of output relay and time delay: -Flashing (short on, long off) : Output relay not active; time delay t2 (break time) -Flashing (long on, short off) output relay active; time delay t1 (pulse time)
<b>Weight (g [oz])</b>	150.0 [5.29]
<b>Agency Approvals and Standards *</b>	cULus, CE
<b>UL Data</b>	
<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

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# Dold Relay Timers

## Off-Delay Relay Timers MK Series

### Features

- 8 time ranges from 0.05 sec to 300 hr selectable via rotational switch
- Voltage range 12–240 VAC/VDC for auxiliary supply and control input
- Adjustment aid for quick setting of long time values
- Input for interruption of timing
- LED indicators for operation, contact position and time delay
- 2 changeover contacts



**MK9962N-82-61**

### Off-Delay Relay Timers MK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<a href="#">MK9962N-82-61</a>	\$74.00	Off-delay	0.05 seconds to 300 hours selectable	12-240 VAC/VDC	2 changeover contacts	<a href="#">PDF</a>

### Off-Delay 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
Contact Specifications	
<b>Type</b>	2 changeover contacts
<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>	6,000 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 0.05 ~ 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>	Continuous, 1:100 on relative scale
<b>Minimum on Time</b>	AC 50 Hz - 15ms DC - 5 ms
<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

### Off-Delay Relay Timers Specifications

General Specifications	
<b>Connection (cage clamp 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 auxiliary voltage connected Yellow LED "R/I": shows status of output relay and time delay: - LED off output relay not active; no time delay - LED continuously on output relay active; no time delay (B1 input active) - LED flashing output relay active; long on, short off - 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

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# Dold Relay Timers

## On-Delay Relay Timers MK Series

### Features

- 8 time ranges from 0.05 sec to 300 hr selectable via rotational switch
- Voltage range 12-240 VAC/VDC for auxiliary supply and control input
- Adjustment aid for quick setting of long time values
- Input for interruption of timing
- LED indicators for operation, contact position, and time delay
- 2 changeover contacts



**MK9906N-82-61**

### On-Delay Relay Timers MK Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
<a href="#">MK9906N-82-61</a>	\$60.00	On-delay	0.05 seconds to 300 hours selectable	12-240 VAC/VDC	2 changeover contacts one programmable as instantaneous	<a href="#">PDF</a>

### On-Delay 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
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 0.05 ~ 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>	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

### On-Delay Relay Timers Specifications

General Specifications	
<b>Connection (cage clamp 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>	-4 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 0.35mm frequency 10 – 55Hz
<b>Mounting</b>	35mm Din-rail
<b>Relay Indicator</b>	Green LED: On, when voltage connected Yellow LED "R/t": Shows status of output relay and time delay: - Flashing (long on, short off) output relay not active; time delay - Continuously on: output relay active after 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

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# Dold Relay Timers

## Off-Delay Relay Timers MK Series

### Features

- Release delay, without control signal
- No voltage safe
- Delay up to 3, 30 or 300 sec
- Repeat accuracy  $\leq \pm 0.5\%$
- No recovery time
- Voltage range 24–240 VAC/VDC
- LED display for power supply
- 2 changeover contacts



**MK7873N-82-61-3S**

Off-Delay Relay Timers MK Series						
Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Links
<a href="#">MK7873N-82-61-3S</a>	\$96.00	Off-delay	0.15 to 3 seconds	24-240 VAC/VDC	2 changeover contacts	<a href="#">PDF</a>
<a href="#">MK7873N-82-61-30S</a>	\$96.00	Off-delay	1.5 to 30 seconds	24-240 VAC/VDC	2 changeover contacts	<a href="#">PDF</a>
<a href="#">MK7873N-82-61-300S</a>	\$96.00	Off-delay	15 to 300 seconds	24-240 VAC/VDC	2 changeover contacts	<a href="#">PDF</a>

Off-Delay Relay Timers Specifications	
<b>Input Specifications</b>	
Nominal Voltage	24–240 VAC/VDC
Operating Voltage Range	24–240 VAC/VDC 19.2–264 VAC 21.6–300 VDC
Nominal Consumption	0.8W
Nominal Frequency	45 – 400 Hz
<b>Contact Specifications</b>	
Type	2 changeover contacts
Contact Material	AgSnO <sub>2</sub> +0.2 μm AU
Measured Nominal Voltage	250VAC
Switching Capacity (according to AC 15)	N.O. Contact 3A / 230VAC N.C. Contact 1A / 230VAC
Electrical Lifetime	8 x 10 <sup>8</sup> switching cycles
Switching Frequency	time ranges $\leq 10$ sec - 1400 switching cycles per hr time ranges $\geq 30$ sec - 700 switching cycles per hr
Max Fuse Rating	6A
Mechanical Lifetime	30 x 10 <sup>6</sup> switching cycles
<b>Time Circuit Specifications</b>	
Time Ranges	<a href="#">MK7873N-82-61-3S</a> = 0.15 - 3 sec <a href="#">MK7873N-82-61-30S</a> = 1.5 - 30 sec <a href="#">MK7873N-82-61-300S</a> = 15 - 300 sec
Time Setting	Stepless
Minimum Switch-on Time	24VDC 150ms 200VAC 25ms
Recovery Time	0
Repeat Accuracy	$\leq 0.5\%$ of set value
Voltage Influence	$\leq 0.5\%$
Temperature Influence	$< 0.2\%$ / K

Off-Delay Relay Timers Specifications	
<b>General Specifications</b>	
Connection (Integrated Screw terminals)	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
Tightening Torque	0.8 N·m
Ambient Temperature	-20 to +60°C [-4 to +140°F]
Storage Temperature	-25 to +60°C [-13 to +140°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	LED: on, when supply connected
Weight (g [oz])	132.0 [4.65]
Agency Approvals and Standards *	cULus, CE
<b>UL Data</b>	
Switching Capacity	Ambient temperature 60°C: Pilot duty B300 5A 250VAC G.P. 5A 24VDC 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

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# 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

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