

Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges 0.05 s...100 h 24 V AC/DC at 50/60 Hz AC with LED, screw terminal



Figure similar

<b>Product brand name</b>	SIRIUS
<b>Product designation</b>	timing relay
<b>Design of the product</b>	slow-operating
<b>Product type designation</b>	3RP25

General technical data	
<b>Product component</b>	
• Relay output	Yes
• semi-conductor output	No
<b>Product extension required remote control</b>	No
<b>Product extension optional remote control</b>	No
<b>Power loss [W] total typical</b>	2 W
<b>Insulation voltage</b>	
• for overvoltage category III according to IEC 60664	
— with degree of pollution 3 rated value	300 V
<b>Test voltage for isolation test</b>	2.5 kV
<b>Degree of pollution</b>	3

<b>Surge voltage resistance rated value</b>	4 000 V
<b>Protection class IP</b>	IP20
<b>Shock resistance</b>	
• acc. to IEC 60068-2-27	11g / 15 ms
<b>Vibration resistance</b>	
• acc. to IEC 60068-2-6	10 ... 55 Hz / 0.35 mm
<b>Mechanical service life (switching cycles)</b>	
• typical	10 000 000
<b>Electrical endurance (switching cycles)</b>	
• at AC-15 at 230 V typical	100 000
<b>Adjustable time</b>	0.05 s ... 100 h
<b>Relative setting accuracy relating to full-scale value</b>	5 %
<b>Thermal current</b>	5 A
<b>Recovery time</b>	150 ms
<b>Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</b>	K
<b>Reference code</b>	
• acc. to DIN EN 81346-2	K
• acc. to DIN EN 61346-2	K
<b>Relative repeat accuracy</b>	1 %

Control circuit/ Control	
<b>Type of voltage of the control supply voltage</b>	AC/DC
<b>Control supply voltage 1 at AC</b>	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
<b>Control supply voltage frequency 1</b>	50 ... 60 Hz
<b>Control supply voltage 1</b>	
• at DC rated value	24 V
<b>Operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85
• Full-scale value	1.1
<b>Operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• Full-scale value	1.1
<b>Operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• Full-scale value	1.1
<b>Inrush current peak</b>	
• at 24 V	2 A
<b>Duration of inrush current peak</b>	

• at 24 V

1 ms

## Switching Function

<b>Switching function</b>	
• ON-delay	Yes
• ON-delay/instantaneous contact	No
• passing make contact	No
• passing make contact/instantaneous contact	No
• OFF delay	No
<b>Switching function</b>	
• flashing symmetrically starting with interval/instantaneous	No
• flashing symmetrically starting with interval	No
• flashing symmetrically starting with pulse/instantaneous	No
• flashing symmetrically starting with pulse	No
• flashing asymmetrically starting with interval	No
• flashing asymmetrically starting with pulse	No
<b>Switching function</b>	
• star-delta circuit with delay time	No
• star-delta circuit	No
<b>Switching function with control signal</b>	
• additive ON delay	No
• passing break contact	No
• passing break contact/instantaneous	No
• OFF delay	No
• OFF delay/instantaneous	No
• pulse delayed	No
• pulse delayed/instantaneous	No
• pulse-shaping	No
• pulse-shaping/instantaneous	No
• additive ON delay/instantaneous	No
• ON-delay/OFF-delay/instantaneous	No
• passing make contact	No
• passing make contact/instantaneous contact	No
<b>Switching function of interval relay with control signal</b>	
• retrotriggerable with deactivated control signal/instantaneous contact	No
• retrotriggerable with activated control signal	No
• retrotriggerable with activated control signal/instantaneous contact	No
• retriggerable with deactivated control signal	No

## Short-circuit protection

### Design of the fuse link

- for short-circuit protection of the auxiliary switch required
- fuse gL/gG: 4 A

## Auxiliary circuit

### Material of switching contacts

AgSnO<sub>2</sub>

### Number of NC contacts

- delayed switching

0

### Number of NO contacts

- delayed switching

0

### Number of CO contacts

- delayed switching

2

### Operating current of auxiliary contacts at AC-15

- at 24 V
- at 250 V

3 A

3 A

### Operating current of auxiliary contacts at DC-13

- at 24 V
- at 125 V
- at 250 V

1 A

0.2 A

0.1 A

### Operating frequency with 3RT2 contactor maximum

5 000 1/h

### Contact reliability of auxiliary contacts

one incorrect switching operation of 100 million switching operations (17 V, 5 mA)

### Contact rating of auxiliary contacts according to UL

R300 / B300

### Influence of the surrounding temperature

1% in the whole temperature range to the set runtime

### Power supply influence

1% in the whole voltage range to the set runtime

### Switching capacity current with inductive load

0.01 ... 3 A

## Inputs/ Outputs

### Product function

- at the relay outputs Switchover delayed/without delay
- non-volatile

No

No

## Electromagnetic compatibility

### EMI immunity

- acc. to IEC 61812-1

EN 61000-6-2

### Conducted interference

- due to burst acc. to IEC 61000-4-4
- due to conductor-earth surge acc. to IEC 61000-4-5
- due to conductor-conductor surge acc. to IEC 61000-4-5

2 kV network connection / 1 kV control connection

2 kV

1 kV

### Field-bound parasitic coupling acc. to IEC 61000-4-3

10 V/m

### Electrostatic discharge acc. to IEC 61000-4-2

4 kV contact discharge / 8 kV air discharge

Safety related data	
Protection against electrical shock	finger-safe
Type of insulation	Basic insulation
Category acc. to EN 954-1	none

Connections/Terminals	
<b>Product function</b> <ul style="list-style-type: none"> <li>removable terminal for auxiliary and control circuit</li> </ul>	Yes
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
<b>Type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG conductors solid</li> <li>at AWG conductors stranded</li> </ul>	1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 1x (20 ... 12), 2x (20 ... 14) 1x (20 ... 12), 2x (20 ... 14)
<b>Connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> </ul>	0.5 ... 4 mm <sup>2</sup> 0.5 ... 4 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b> <ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> </ul>	20 ... 12 20 ... 14
<b>Tightening torque</b>	0.6 ... 0.8 N·m
<b>Design of the thread of the connection screw</b>	M3

Installation/ mounting/ dimensions	
<b>Mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail
<b>Height</b>	100 mm
<b>Width</b>	22.5 mm
<b>Depth</b>	90 mm
<b>Required spacing</b> <ul style="list-style-type: none"> <li>with side-by-side mounting               <ul style="list-style-type: none"> <li>forwards</li> <li>Backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>for grounded parts               <ul style="list-style-type: none"> <li>forwards</li> <li>Backwards</li> <li>upwards</li> <li>at the side</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

— downwards	0 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
• maximum	2 000 m
<b>Ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
<b>Relative humidity</b>	
• during operation	10 ... 95 %

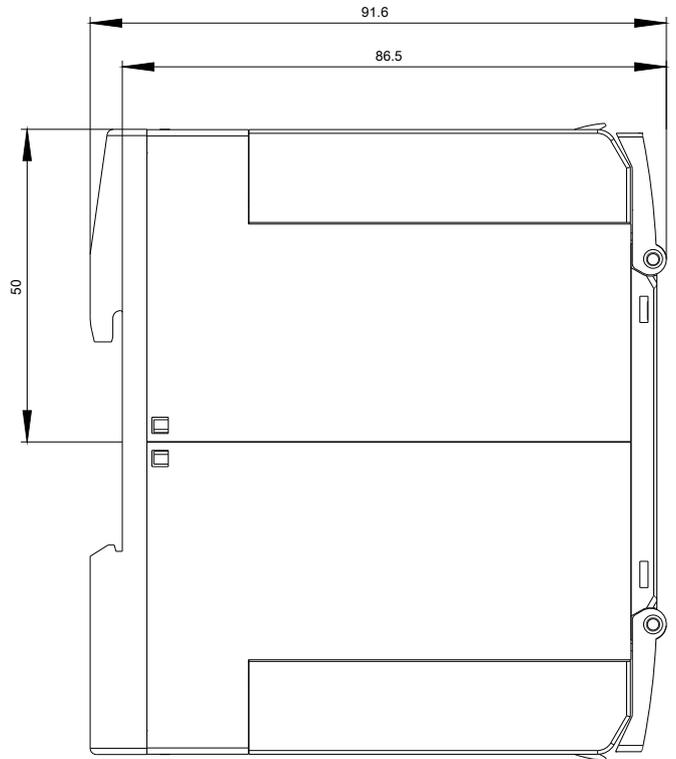
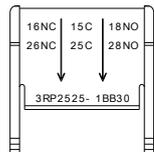
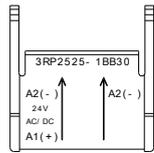
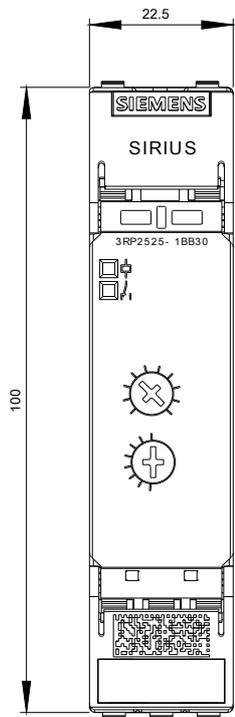
### Certificates/approvals

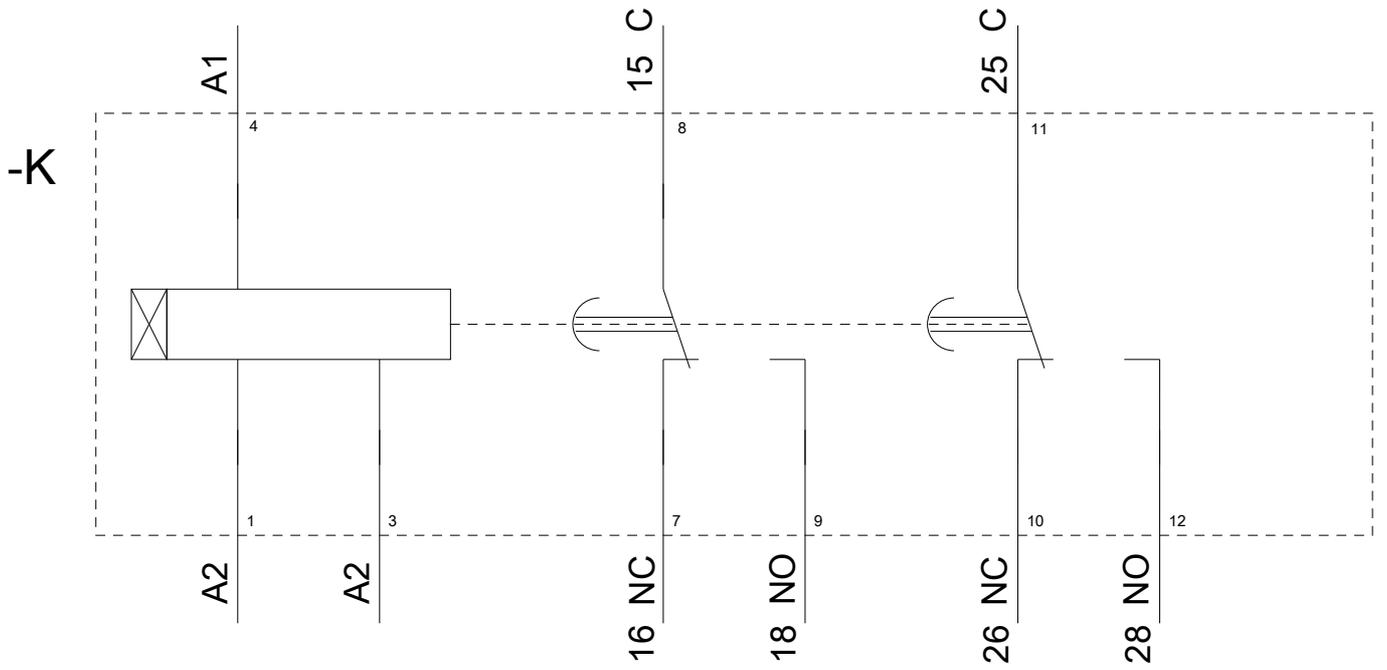
General Product Approval	Declaration of Conformity	Test Certificates
 CCC  CSA  UL	 EAC  CE EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

Marine / Shipping	other
 LRS  PRS  RINA  RMRS  DNV-GL	<a href="#">Confirmation</a>

### Further information

- Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>
- Industry Mall (Online ordering system)**  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2525-1BB30>
- Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-1BB30>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-1BB30>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2525-1BB30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2525-1BB30&lang=en)





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