

Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges 0.05 s...100 h 12-240 V AC/DC at 50/60 Hz AC with LED, Spring-type terminal (Push-In)



product brand name	SIRIUS
Product designation	timing relay
Design of the product	slow-operating
Product type designation	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
• — insulation voltage 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
• recovery time	250 ms
<b>Reference code acc. to DIN EN 81346-2</b>	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	12 ... 240 V
• at 60 Hz	12 ... 240 V
<b>control supply voltage frequency 1</b>	50 ... 60 Hz
<b>Control supply voltage 1</b>	
• at DC	12 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.8
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.8
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.8
• full-scale value	1.1
<b>Inrush current peak</b>	
• at 24 V	0.3 A
• at 240 V	5 A
<b>Duration of inrush current peak</b>	
• at 24 V	0.3 ms
• at 240 V	0.5 ms

### Switching Function

• switching function ON-delay	Yes
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<ul style="list-style-type: none"> <li>• switching function ON-delay/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• switching function passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• switching function passing make contact/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function OFF delay</li> </ul>	No
<b>Switching function</b>	
<ul style="list-style-type: none"> <li>• flashing symmetrically starting with interval/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically starting with interval</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically starting with pulse/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically starting with pulse</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing asymmetrically starting with interval</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing asymmetrically starting with pulse</li> </ul>	No
<b>Switching function</b>	
<ul style="list-style-type: none"> <li>• star-delta circuit with delay time</li> </ul>	No
<ul style="list-style-type: none"> <li>• star-delta circuit</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal additive ON delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal passing break contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal passing break contact/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal OFF delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal OFF delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal pulse delayed</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal pulse delayed/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• switching function with control signal pulse-shaping</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal pulse-shaping/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal additive ON delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• Switching function with control signal passing make contact/instantaneous contact</li> </ul>	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

<b>Design of the fuse link</b>	
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A

### Auxiliary circuit

<b>Material of switching contacts</b>	AgSnO2
<b>Number of NC contacts</b>	
• delayed switching	0
<b>Number of NO contacts</b>	
• delayed switching	0
<b>Number of CO contacts</b>	
• delayed switching	2
• operating current of auxiliary contacts at AC-15 at 24 V	3 A
• operating current of auxiliary contacts at AC-15 at 250 V	3 A
• operating current of auxiliary contacts at DC-13 at 24 V	1 A
• operating current of auxiliary contacts at DC-13 at 125 V	0.2 A
• operating current of auxiliary contacts at DC-13 at 250 V	0.1 A
<b>operating frequency with 3RT2 contactor maximum</b>	5 000 1/h
<b>contact reliability of auxiliary contacts</b>	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
<b>Contact rating of auxiliary contacts according to UL</b>	R300 / B300
<b>influence of the surrounding temperature</b>	1% in the whole temperature range to the set runtime
<b>Power supply influence</b>	1% in the whole voltage range to the set runtime
<b>Switching capacity current with inductive load</b>	0.01 ... 3 A

### Inputs/ Outputs

• Product function at the relay outputs Switchover delayed/without delay	No
• Product function non-volatile	No

### Electromagnetic compatibility

<b>EMI immunity</b>	
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• acc. to IEC 61812-1	EN 61000-6-2
<b>Conducted interference</b>	
• due to burst acc. to IEC 61000-4-4	2 kV network connection / 1 kV control connection
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>	10 V/m
<b>Electrostatic discharge acc. to IEC 61000-4-2</b>	4 kV contact discharge / 8 kV air discharge

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

Connections/ Terminals	
<b>Product function</b>	
• removable terminal for auxiliary and control circuit	Yes
• Type of electrical connection for auxiliary and control current circuit	spring-loaded terminals (push-in)
• type of connectable conductor cross-sections solid	0.5 ... 4 mm <sup>2</sup>
• Type of connectable conductor cross-sections finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>
• Type of connectable conductor cross-sections finely stranded without core end processing	0.5 ... 4 mm <sup>2</sup>
• Type of connectable conductor cross-sections at AWG conductors solid	20 ... 12
• Type of connectable conductor cross-sections at AWG conductors stranded	20 ... 12
• connectable conductor cross-section solid	0.5 ... 4 mm <sup>2</sup>
• connectable conductor cross-section finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>
• connectable conductor cross-section finely stranded without core end processing	0.5 ... 4 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
• solid	20 ... 12
• stranded	20 ... 12

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 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 0 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> </ul>	



**Ambient conditions**

<b>Installation altitude at height above sea level</b>	
<ul style="list-style-type: none"> <li>• maximum 2 000 m</li> </ul>	
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation -25 ... +60 °C</li> <li>• during storage -40 ... +85 °C</li> <li>• during transport -40 ... +85 °C</li> </ul>	
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• during operation 10 ... 95 %</li> </ul>	

**Certificates/ approvals**

General Product Approval			EMC	Declaration of Conformity	
 CCC	 CSA	 UL		 RCM	 EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping			
<a href="#">Miscellaneous</a>	<a href="#">Type Test Certificates/Test Report</a>	 BUREAU VERITAS	 LRS	 PRS	 RINA

Marine / Shipping	other
 RMRS	 DNV-GL DNVGL.COM/AF

[Confirmation](#)

#### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<https://www.siemens.com/ic10>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2525-2BW30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-2BW30>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

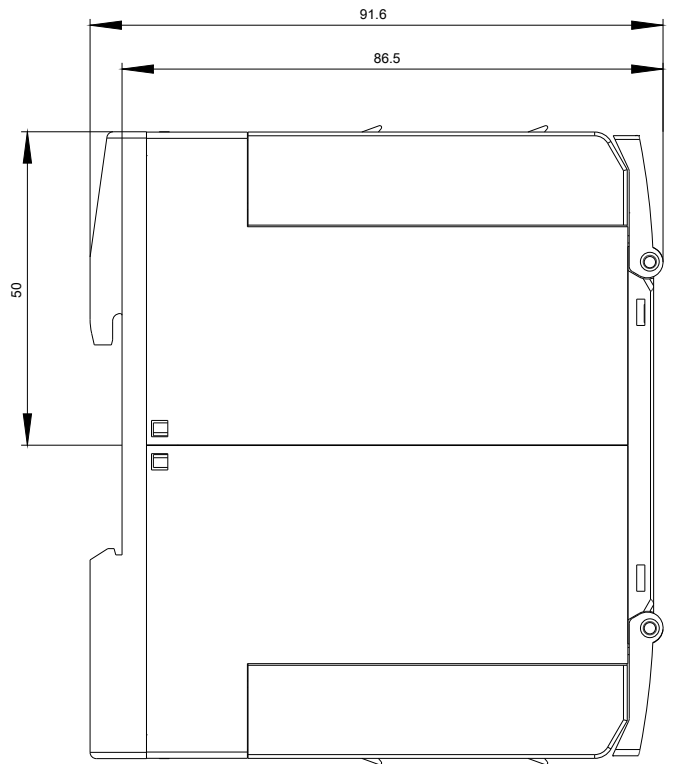
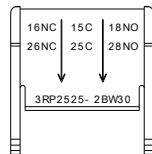
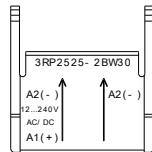
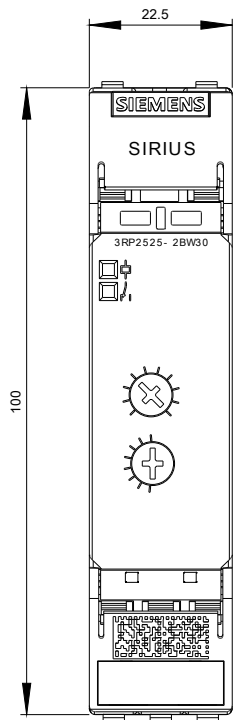
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BW30>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

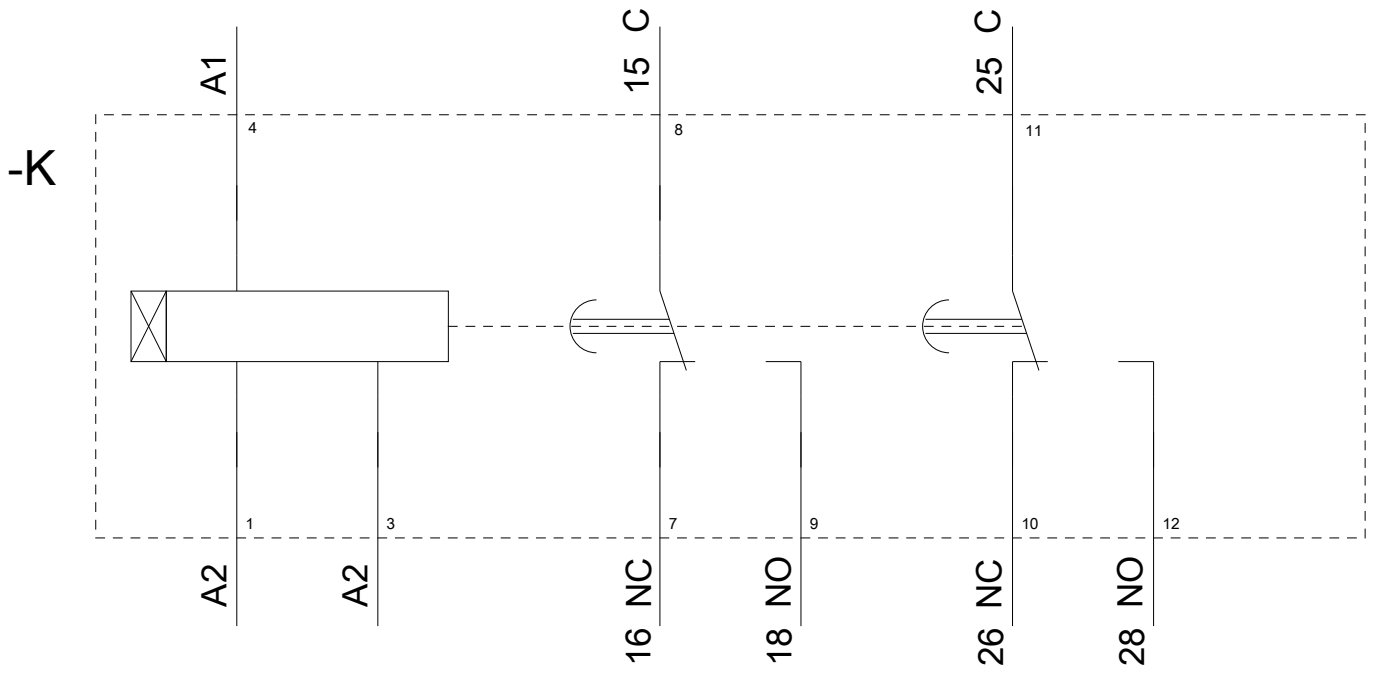
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2525-2BW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2525-2BW30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BW30/manual>







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