

Timing relay, electronic ansprechverzögert 1 NO (semiconductor) 2-wire 4 time ranges 0.05...240 s 12-240 V AC/DC screw terminal



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	No
• semi-conductor output	Yes
<b>Product extension required remote control</b>	No
<b>Product extension optional remote control</b>	No
<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 ... 240 s
<b>Relative setting accuracy relating to full-scale value</b>	5 %
<b>Thermal current</b>	0.6 A
<b>Recovery time</b>	250 ms
<b>Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</b>	K
<b>Reference code acc. to DIN EN 81346-2</b>	K
<b>Reference code acc. to DIN EN 61346-2</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	0.85
• 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	0.1 A
• at 240 V	1 A
<b>Duration of inrush current peak</b>	
• at 24 V	0.01 ms
• at 240 V	0.04 ms

### Switching Function

<b>Switching function</b>	
• ON-delay	Yes
• ON-delay/instantaneous contact	No

<ul style="list-style-type: none"> <li>• passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• 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
<b>Switching function with control signal</b>	
<ul style="list-style-type: none"> <li>• additive ON delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing break contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing break contact/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• OFF delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• OFF delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse delayed</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse delayed/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse-shaping</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse-shaping/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• additive ON delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact/instantaneous contact</li> </ul>	No
<b>Switching function of interval relay with control signal</b>	
<ul style="list-style-type: none"> <li>• retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• retrotriggerable with activated control signal</li> </ul>	No
<ul style="list-style-type: none"> <li>• retrotriggerable with activated control signal/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• retriggerable with deactivated control signal</li> </ul>	No
<b>Short-circuit protection</b>	
<b>Design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 4 A
<b>Auxiliary circuit</b>	
<b>Number of NC contacts</b>	

<ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	0
<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	1
<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	0
<b>Operating frequency with 3RT2 contactor maximum</b>	5 000 1/h
<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 ... 0.6 A

### Inputs/ Outputs

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• at the relay outputs Switchover delayed/without delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• non-volatile</li> </ul>	No
<b>Residual current</b>	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	5 mA

### Electromagnetic compatibility

<b>EMI immunity</b>	
<ul style="list-style-type: none"> <li>• acc. to IEC 61812-1</li> </ul>	EN 61000-6-2
<b>Conducted interference</b>	
<ul style="list-style-type: none"> <li>• due to burst acc. to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
<ul style="list-style-type: none"> <li>• due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	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>Category acc. to EN 954-1</b>	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> </ul>	1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• at AWG conductors solid</li> </ul>	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> <li>• at AWG conductors stranded</li> </ul>	1x (20 ... 12), 2x (20 ... 14)

<b>Connectable conductor cross-section</b>	
• solid	0.5 ... 4 mm <sup>2</sup>
• finely stranded with 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 ... 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>	17.5 mm
<b>Depth</b>	90 mm
<b>Required spacing</b>	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— at the side	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>Relative humidity</b>	
• during operation	10 ... 95 %

### Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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[Miscellaneous](#)

Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)



LRS



PRS



RINA



RMRS



DNV-GL  
DNVGL.COM/AF

other
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[Confirmation](#)

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

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2527-1EW30>

**Cax online generator**

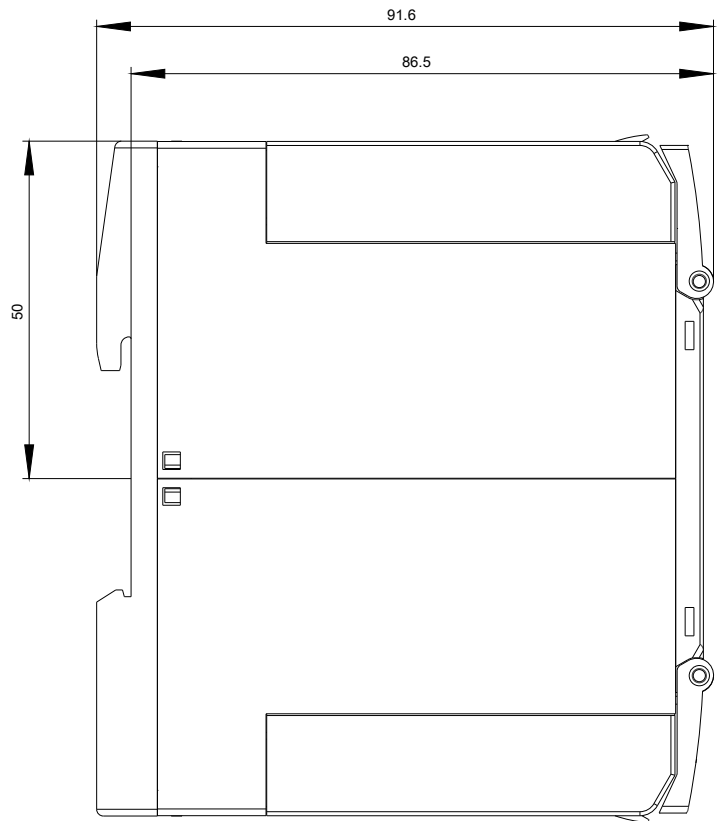
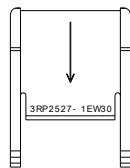
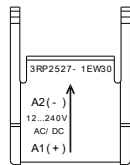
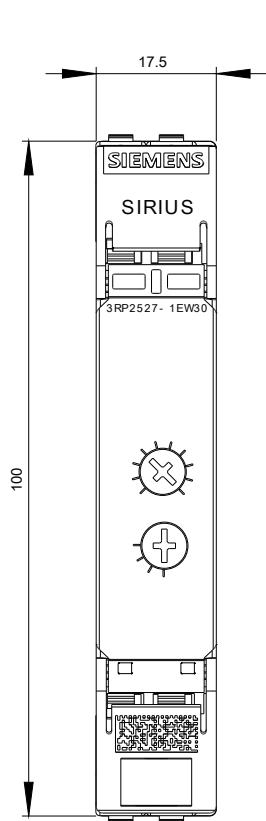
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2527-1EW30>

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

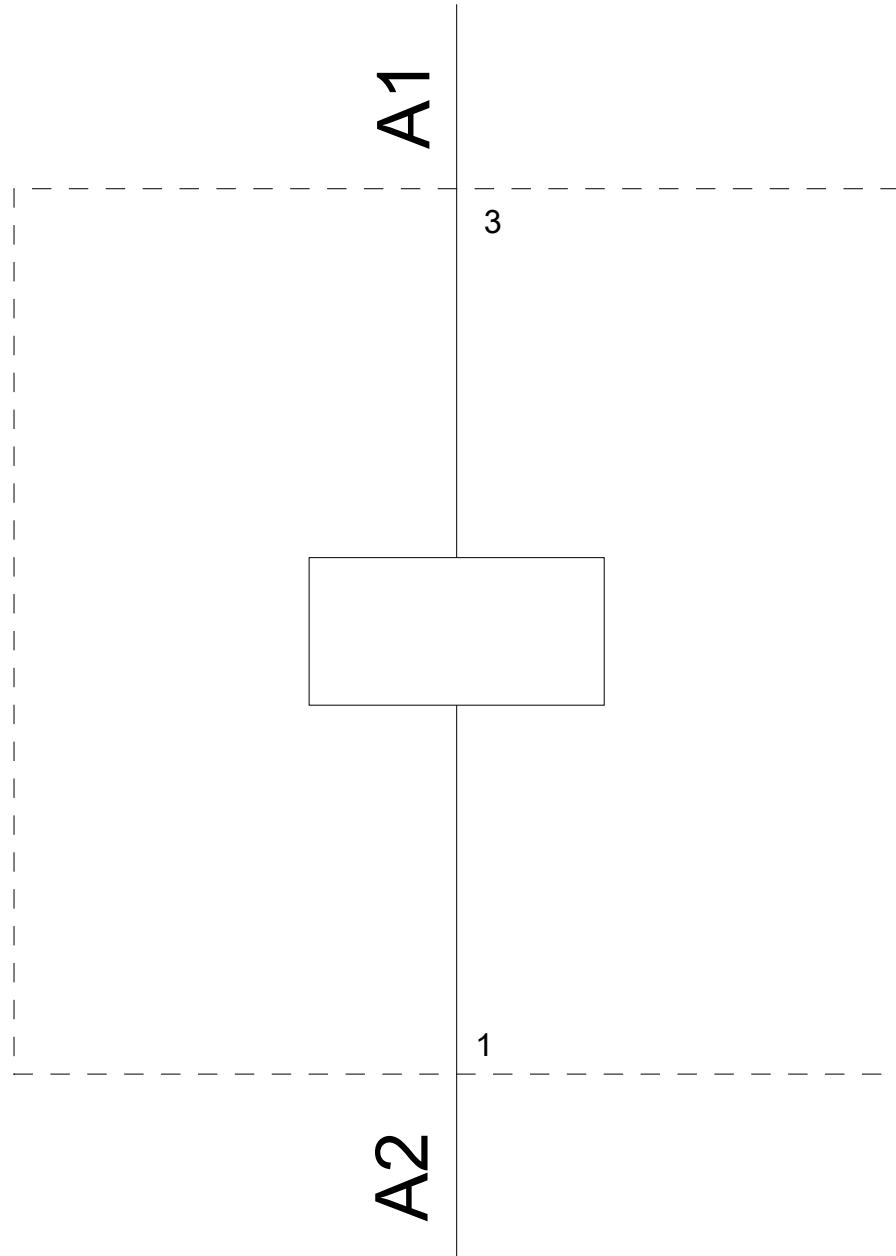
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2527-1EW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2527-1EW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2527-1EW30&lang=en)



**-K**



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