



Timing relay, electronic ansprechverzögert 1 change-over contact, 1 time range 5...100 s 12-240 V AC/DC at 50/60 Hz AC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP25
<b>General technical data</b>	
product component	
• relay output	Yes
• semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.5 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
vibration resistance according to IEC 60068-2-6	10 ... 55 Hz / 0.35 mm
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
adjustable time	5 ... 100 s
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
recovery time	250 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	1 %; +/-
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
Substance Prohibitance (Date)	09/12/2014
<b>Control circuit/ Control</b>	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	12 ... 240 V
• at 60 Hz	12 ... 240 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1	
• at DC	12 ... 240 V
operating range factor control supply voltage rated	

<b>value at DC</b>	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	<p>0.8</p> <p>1.1</p>
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	<p>0.8</p> <p>1.1</p>
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	<p>0.8</p> <p>1.1</p>
<b>inrush current peak</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 240 V</li> </ul>	<p>0.4 A</p> <p>5 A</p>
<b>duration of inrush current peak</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 240 V</li> </ul>	<p>0.3 ms</p> <p>0.5 ms</p>
<b>Switching Function</b>	
<b>switching function</b>	
<ul style="list-style-type: none"> <li>ON-delay</li> <li>ON-delay/instantaneous contact</li> <li>passing make contact</li> <li>passing make contact/instantaneous contact</li> <li>OFF delay</li> </ul>	<p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>switching function</b>	
<ul style="list-style-type: none"> <li>flashing symmetrically with interval start/instantaneous</li> <li>flashing symmetrically with interval start</li> <li>flashing symmetrically with pulse start/instantaneous</li> <li>flashing symmetrically with pulse start</li> <li>flashing asymmetrically with interval start</li> <li>flashing asymmetrically with pulse start</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>switching function</b>	
<ul style="list-style-type: none"> <li>star-delta circuit with delay time</li> <li>star-delta circuit</li> </ul>	<p>No</p> <p>No</p>
<b>switching function with control signal</b>	
<ul style="list-style-type: none"> <li>additive ON-delay</li> <li>passing break contact</li> <li>passing break contact/instantaneous</li> <li>OFF delay</li> <li>OFF delay/instantaneous</li> <li>pulse delayed</li> <li>pulse delayed/instantaneous</li> <li>pulse-shaping</li> <li>pulse-shaping/instantaneous</li> <li>additive ON-delay/instantaneous</li> <li>ON-delay/OFF-delay/instantaneous</li> <li>passing make contact</li> <li>passing make contact/instantaneous contact</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<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> <li>retrotriggerable with switched-on control signal</li> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> <li>retriggerable with deactivated control signal</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>Short-circuit protection</b>	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
<b>Auxiliary circuit</b>	

<b>material of switching contacts</b>	AgSnO <sub>2</sub>
<b>number of NC contacts</b>	
• delayed switching	0
• instantaneous contact	0
<b>number of NO contacts</b>	
• delayed switching	0
• instantaneous contact	0
<b>number of CO contacts</b>	
• delayed switching	1
• instantaneous contact	0
<b>operational current of auxiliary contacts at AC-15</b>	
• at 24 V	3 A
• at 250 V	3 A
<b>operational current of auxiliary contacts at DC-13</b>	
• at 24 V	1 A
• at 125 V	0.2 A
• 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>switching capacity current with inductive load</b>	0.01 ... 3 A
<b>Inputs/ Outputs</b>	
<b>product function</b>	
• at the relay outputs switchover delayed/without delay	No
• non-volatile	No
<b>Electromagnetic compatibility</b>	
EMC emitted interference according to IEC 61812-1	ambience A (industrial sector)
EMC immunity according to IEC 61812-1	corresponds to degree of severity 3
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	4 kV contact discharge / 8 kV air discharge
<b>Safety related data</b>	
<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>type of insulation</b>	Basic insulation
<b>category according to EN 954-1</b>	none
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
• solid	1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• at AWG cables solid	1x (20 ... 12), 2x (20 ... 14)
• at AWG cables stranded	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	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	100 mm
width	17.5 mm
depth	90 mm
required spacing	
<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	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<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>	
relative humidity during operation	10 ... 95 %

Certificates/ approvals	
General Product Approval	EMC



[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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EG-Konf.

[Type Test Certificates/Test Report](#)



LRS



PRS

Marine / Shipping	other
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RINA



RMRS



DNV-GL

[Confirmation](#)

Further information
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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=3RP2513-1AW30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2513-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2513-1AW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2513-1AW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2513-1AW30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2513-1AW30/manual>

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