## **SIEMENS**

Data sheet 3RP2511-1AW30



Timing relay, electronic slow-operating 1 change-over contact, 1 time range 0.5...10 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
General technical data	
product component	
<ul> <li>relay output</li> </ul>	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
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.5 10 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
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8
Control circuit/ Control	
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 value at	

DC	
initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
full-scale value	1.1
inrush current peak	
• at 24 V	0.4 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms
Switching Function	
switching function	
ON-delay	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
passing make contact	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
OFF delay	No
switching function	
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with interval start</li> </ul>	No
<ul> <li>flashing symmetrically with pulse start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with pulse start</li> </ul>	No
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
<ul> <li>flashing asymmetrically with pulse start</li> </ul>	No
switching function	
<ul> <li>star-delta circuit with delay time</li> </ul>	No
star-delta circuit	No
switching function with control signal	
<ul> <li>additive ON-delay</li> </ul>	No
passing break contact	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	No
OFF delay/instantaneous	No
pulse delayed	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
• pulse-shaping	No
<ul><li>pulse-shaping/instantaneous</li></ul>	No
<ul> <li>additive ON-delay/instantaneous</li> </ul>	No
ON-delay/OFF-delay/instantaneous	No
passing make contact	No 
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	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	AgSnO2
number of NC contacts	
delayed switching	0

• instantaneous contact	0
number of NO contacts	
<ul> <li>delayed switching</li> </ul>	0
instantaneous contact	0
number of CO contacts	
<ul> <li>delayed switching</li> </ul>	1
instantaneous contact	0
operational current of auxiliary contacts at AC-15	
● at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts at DC-13	
● at 24 V	1 A
● at 125 V	0.2 A
● at 250 V	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
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
at the relay outputs switchover delayed/without delay	No
• non-volatile	No
Electromagnetic compatibility	
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
conducted interference	osinooponido to dograd di cortaini, o
due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
01000-4-3	
field-based interference according to IEC 61000-4-3	10 V/m
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	10 V/m 4 kV contact discharge / 8 kV air discharge
field-based interference according to IEC 61000-4-3	
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529	4 kV contact discharge / 8 kV air discharge
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1	4 kV contact discharge / 8 kV air discharge
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529	4 kV contact discharge / 8 kV air discharge  none IP20
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation	4 kV contact discharge / 8 kV air discharge  none IP20
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and	4 kV contact discharge / 8 kV air discharge  none IP20 Basic insulation
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit	4 kV contact discharge / 8 kV air discharge  none IP20 Basic insulation  Yes
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	1 kV contact discharge / 8 kV air discharge  none IP20 Basic insulation  Yes screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
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electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Safety related data  category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • for AWG cables solid • for AWG cables stranded  connectable conductor cross-section • solid • finely stranded with core end processing  AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw  Installation/ mounting/ dimensions mounting position	none IP20 Basic insulation  Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)  0.5 4 mm² 0.5 4 mm² 0.5 4 mm²  20 12 20 14 0.6 0.8 N·m M3
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electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Safety related data  category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	none IP20 Basic insulation  Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12 20 14 0.6 0.8 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 100 mm

<ul> <li>with side-by-side mounting</li> </ul>	
— 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
<ul> <li>for live parts</li> </ul>	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	10 95 %

(M)

**General Product Approval** 

Confirmation







**EMC** 



**Declaration of Con-**

formity

Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report









Marine / Shipping

other





Confirmation

## urther information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RP2511-1AW30

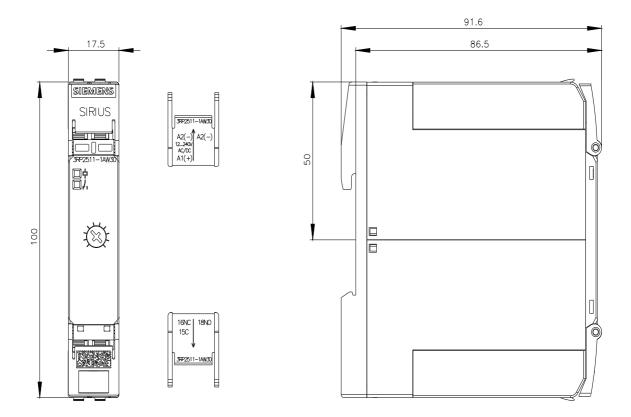
Cax online generator

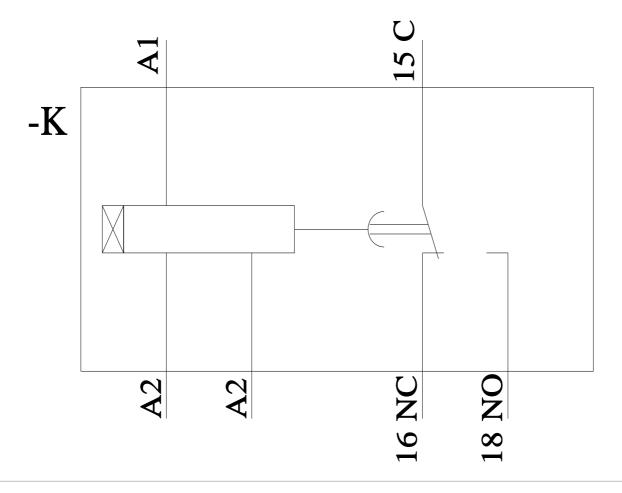
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2511-1AW30

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

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RP2511-1AW30&lang=en

Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RP2511-1AW30/manual





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