SIEMENS

Data sheet

3RP2512-1AW30



Timing relay, electronic slow-operating 1 change-over contact, 1 time range 1.5...30 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	
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
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	1 30 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	К
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	Vec
ON-delay	Yes
ON-delay/instantaneous contact	No
passing make contact	No
passing make contact/instantaneous contact	No
OFF delay	No
switching function	
 flashing symmetrically with interval start/instantaneous 	No
 flashing symmetrically with interval start 	No
 flashing symmetrically with pulse start/instantaneous 	No
 flashing symmetrically with pulse start 	No
 flashing asymmetrically with interval start 	No
 flashing asymmetrically with pulse start 	No
switching function	
 star-delta circuit with delay time 	No
• star-delta circuit	No
switching function with control signal	
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 pulse delayed/instantaneous	No
pulse-shaping	No
 pulse-shaping pulse-shaping/instantaneous 	No
additive ON-delay/instantaneous ON delay/OFE delay/instantaneous	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	
 retrotriggerable with deactivated control signal/instantaneous contact 	No
 retrotriggerable with switched-on control signal 	No
retrotriggerable with switched-on control signal retrotriggerable with switched-on control	No
signal/instantaneous contact	
 retriggerable with deactivated control signal 	No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary	fuse gL/gG: 4 A
switch required	
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
 delayed switching 	0

instantaneous contact	0
number of NO contacts	
 delayed switching 	0
instantaneous contact	0
number of CO contacts	
 delayed switching 	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	
 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
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
category according to EN 954-1	none
protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
type of insulation Connections/ Terminals	Basic insulation
	Basic insulation Yes
Connections/ Terminals product component removable terminal for auxiliary and	
Connections/ Terminals product component removable terminal for auxiliary and control circuit	Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ²
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ²
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ²
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ²
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 20 12
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12
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 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 	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12 20 14 0.6 0.8 N·m
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12 20 14 0.6 0.8 N·m
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 for AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing solid sinely 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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12 20 12 30 14 30 12 30 14 30 12 30 14 30 12 30 14 30 12 30 14 30 14 30 12 30 14 30 12 30 14 30 14 30 14 30 14 30 14 30 12 30 14 30 14 3
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12 any
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	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail
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 fastening method height	Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail 100 mm
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 fastening method height width	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

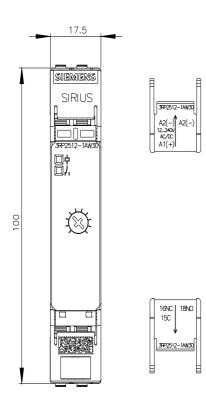
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	Ũ		0 mm		
— backwards			0 mm		
- upwards			0 mm		
— downwards			0 mm		
— at the side			0 mm		
 for grounded part 	ts		•		
— forwards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
— at the side			0 mm		
— downwards			0 mm		
 for live parts 			0 mm		
- forwards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
— downwards			0 mm		
— at the side			0 mm		
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ambient temperature			05 .00 %0		
during operation			-25 +60 °C		
during storage			-40 +85 °C		
during transport			-40 +85 °C		
relative humidity during	operation		10 95 %		
Approvals Certificates					
General Product App	roval			EMC	Declaration of Con- formity
Confirmation				~	
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Declaration of Con- formity	CCC Test Certificates	Marine / Shippir	EHL	RCM	CE EG-Konf.
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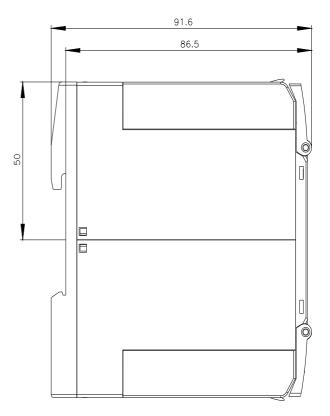
Further information

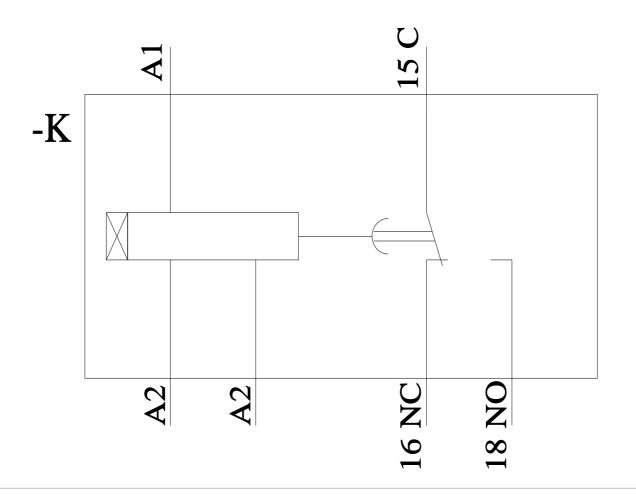
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification 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 com/cs/ww/en/view/109813875 https://support.industry.siemer 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=3RP2512-1AW30 Cax online generator .siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2512-1AW30 http://supp autor Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2512-1AW30&lang=en Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2512-1AW30/manual







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