## **SIEMENS**

Data sheet 3RP2512-1AW30



Timing relay, electronic ansprechverzögert 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	
<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 acc. to IEC 60068-2-27	11g / 15 ms
vibration resistance acc. 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	1 30 s
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
recovery time	250 ms
reference code acc. 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)	12.09.2014
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	

under at DO	
value at DC  ● initial value	0.0
full-scale value	0.8
operating range factor control supply voltage rated	1.1
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
ON-delay/instantaneous contact	No
<ul> <li>passing make contact</li> </ul>	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
flashing asymmetrically with pulse start	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
<ul> <li>passing break contact</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	No
OFF delay/instantaneous	No No
pulse delayed     pulse delayed/instantaneous	No No
pulse delayed/instantaneous     pulse shaping	No No
pulse-shaping     pulse-shaping/instantaneous	No No
pulse-shaping/instantaneous     additive ON-delay/instantaneous	No No
additive ON-delay/instantaneous     ON-delay/OFF-delay/instantaneous	No
<ul><li>ON-delay/OFF-delay/instantaneous</li><li>passing make contact</li></ul>	No
passing make contact     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	No
signal/instantaneous contact  • retriggerable with deactivated control signal	
	No
Short-circuit protection	Fig. at 150, 4.4
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	

metarial of avitabina applicate	A-C-02
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	
<ul> <li>at the relay outputs switchover delayed/without delay</li> </ul>	No
non-volatile	No
Electromagnetic compatibility	INO
EMC emitted interference acc. to IEC 61812-1	ambience A (industrial sector)
EMC immunity acc. to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
• 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
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front acc. to IEC 60529	IP20
type of insulation	Basic insulation
category acc. to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG cables solid	1x (20 12), 2x (20 14)
<ul> <li>at AWG cables stranded</li> </ul>	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
stranded	20 14
tightening torque	0.6 0.8 N·m
design of the thread of the connection screw	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><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	
<ul> <li>for grounded parts</li> </ul>		
— 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		
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 %	
Certificates/ approvals		
General Product Approval		EMC



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



**Miscellaneous** 

Type Test Certificates/Test Report







Marine / Shipping

other





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=3RP2512-1AW30

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2512-1AW30}$ 

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RP2512-1AW30">https://support.industry.siemens.com/cs/ww/en/ps/3RP2512-1AW30</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2512-1AW30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2512-1AW30&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP2512-1AW30/manual

last modified: 12/9/2021 **C**