## **SIEMENS**

Data sheet 3RP2540-1AW30



Timing relay, electronic OFF delay without control signal or smooth passing make contact non-volatile 7 time ranges 0.05...600 s 12-240 V AC/DC, 1 change-over contact at 50/60 Hz AC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	rückfallverzögert ohne Steuersignal, nullspannungssicher, einschaltwischend
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	0.05 600 s
relative setting accuracy relating to full-scale value	5 %
thermal current	5 A
minimum ON period	250 ms
recovery time	250 ms
reference code acc. to IEC 81346-2	K
relative repeat accuracy	1 %
Substance Prohibitance (Date)	12.09.2014 00:00:00
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	
value at DC	0.05
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.85
• 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	No
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
OFF delay	Yes
<ul><li>switching function</li><li>flashing symmetrically with interval</li></ul>	No
start/instantaneous	N.
flashing symmetrically with interval start	No 
<ul> <li>flashing symmetrically with pulse start/instantaneous</li> </ul>	No
flashing symmetrically with pulse start	No
flashing asymmetrically with interval start	No 
flashing asymmetrically with pulse start	No
switching function	No.
<ul> <li>star-delta circuit with delay time</li> <li>star-delta circuit</li> </ul>	No No
switching function with control signal	No
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/instantaneous	No
pulse-shaping	No
pulse-shaping/instantaneous	No
additive ON-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	
<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	

	A = 0 = 00
material of switching contacts	AgSnO2
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
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)
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
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
•	No
<ul> <li>at the relay outputs switchover delayed/without delay</li> </ul>	No
non-volatile	Yes
Electromagnetic compatibility	
	- making and A. (in description of a start)
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	
<ul> <li>due to burst acc. to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
<ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	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)
finely stranded with core end processing	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG cables solid	1x (20 12), 2x (20 14)
at AWG cables stranded     at AWG cables stranded	1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
connectable conductor cross-section	17 (20 12), 27 (20 17)
	0.5 4 mm <sup>2</sup>
solid     finally stranded with core and processing.	0.5 4 mm <sup>2</sup>
finely stranded with core end processing	0.5 4 mm²
AWG number as coded connectable conductor cross section	00 40
• 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	22.5 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
<ul> <li>during storage</li> </ul>	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	10 95 %



Certificates/ approvals

**General Product Approval** 









**EMC** 

**Miscellaneous** 

**Declaration of** 

Conformity

**Declaration of** Conformity

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report









Marine / Shipping

other





Confirmation

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=3RP2540-1AW30

Cax online generator

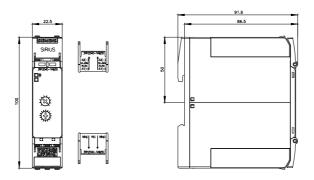
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2540-1AW30}$ 

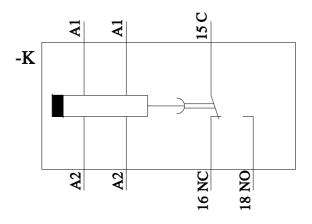
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30

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

Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30/manual





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