



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	Yes
• relay output	No
• 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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 ... 600 s
adjustable time note	minimum value at function N = 0.5 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 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

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 0.85
- 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
- ON-delay/instantaneous contact No
- passing make contact Yes
- passing make contact/instantaneous contact No
- OFF delay Yes

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/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

- retrotriggerable with deactivated control signal/instantaneous contact No
- retrotriggerable with switched-on control signal No
- retrotriggerable with switched-on control signal/instantaneous contact 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

<ul style="list-style-type: none"> instantaneous contact 	0
number of NO contacts	
<ul style="list-style-type: none"> delayed switching instantaneous contact 	0
number of CO contacts	
<ul style="list-style-type: none"> delayed switching instantaneous contact 	1
operational current of auxiliary contacts at AC-15	0
<ul style="list-style-type: none"> at 24 V at 250 V 	3 A
operational current of auxiliary contacts at DC-13	3 A
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	1 A
operating frequency with 3RT2 contactor maximum	0.2 A
contact reliability of auxiliary contacts	0.1 A
switching capacity current with inductive load	5 000 1/h
	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
	0.01 ... 3 A

Inputs/ Outputs

product function	
<ul style="list-style-type: none"> at the relay outputs switchover delayed/without delay non-volatile 	No
	Yes

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	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 	2 kV network connection / 1 kV control connection
field-based interference according to IEC 61000-4-3	2 kV
electrostatic discharge according to IEC 61000-4-2	1 kV
	10 V/m
	4 kV contact discharge / 8 kV air discharge

Safety related data

protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
category according 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	
<ul style="list-style-type: none"> solid finely stranded with core end processing at AWG cables solid at AWG cables stranded 	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
connectable conductor cross-section	1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> solid finely stranded with core end processing 	1x (20 ... 12), 2x (20 ... 14)
AWG number as coded connectable conductor cross section	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> solid stranded 	0.5 ... 4 mm ²
tightening torque	0.5 ... 4 mm ²
design of the thread of the connection screw	0.6 ... 0.8 N·m
	M3

Installation/ mounting/ dimensions

mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	100 mm
width	22.5 mm
depth	90 mm
required spacing	

- with side-by-side mounting
 - 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
- 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	
• during operation	-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



[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=3RP2540-1AW30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1AW30>

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

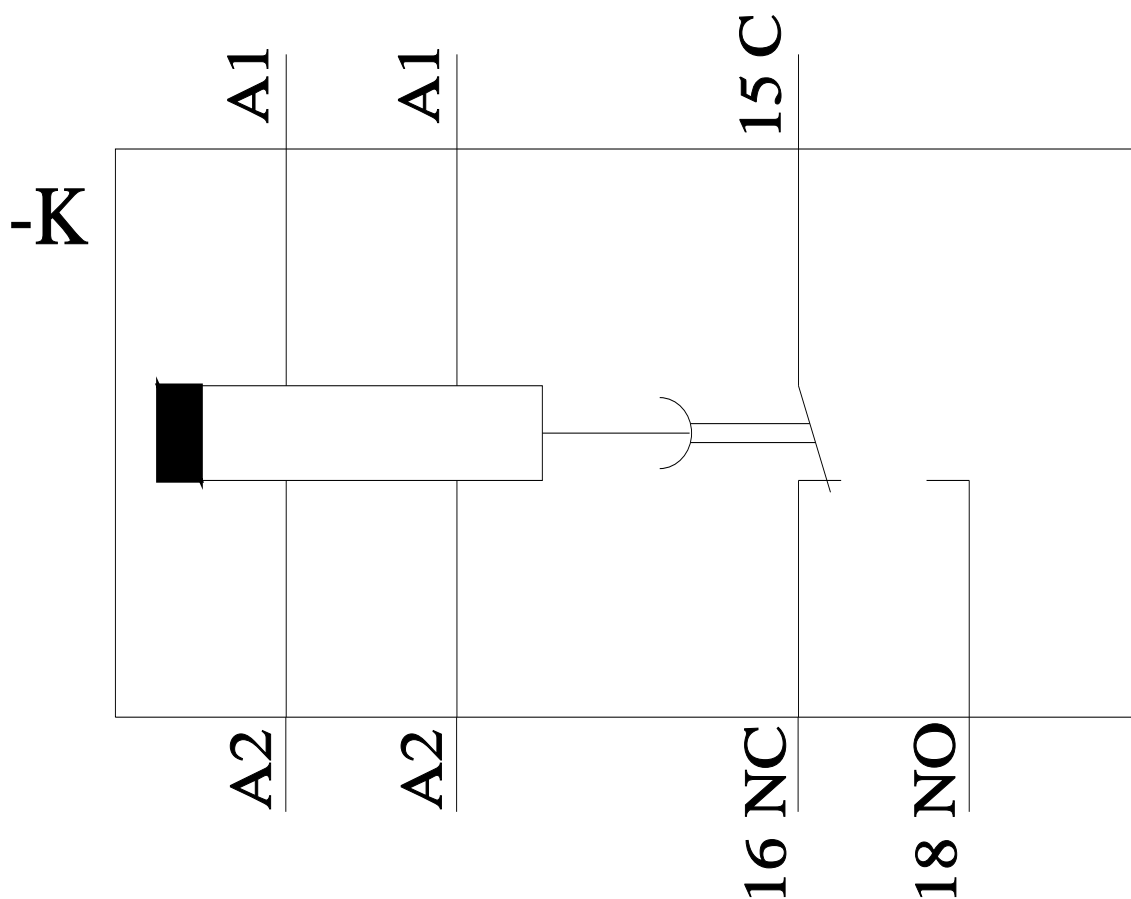
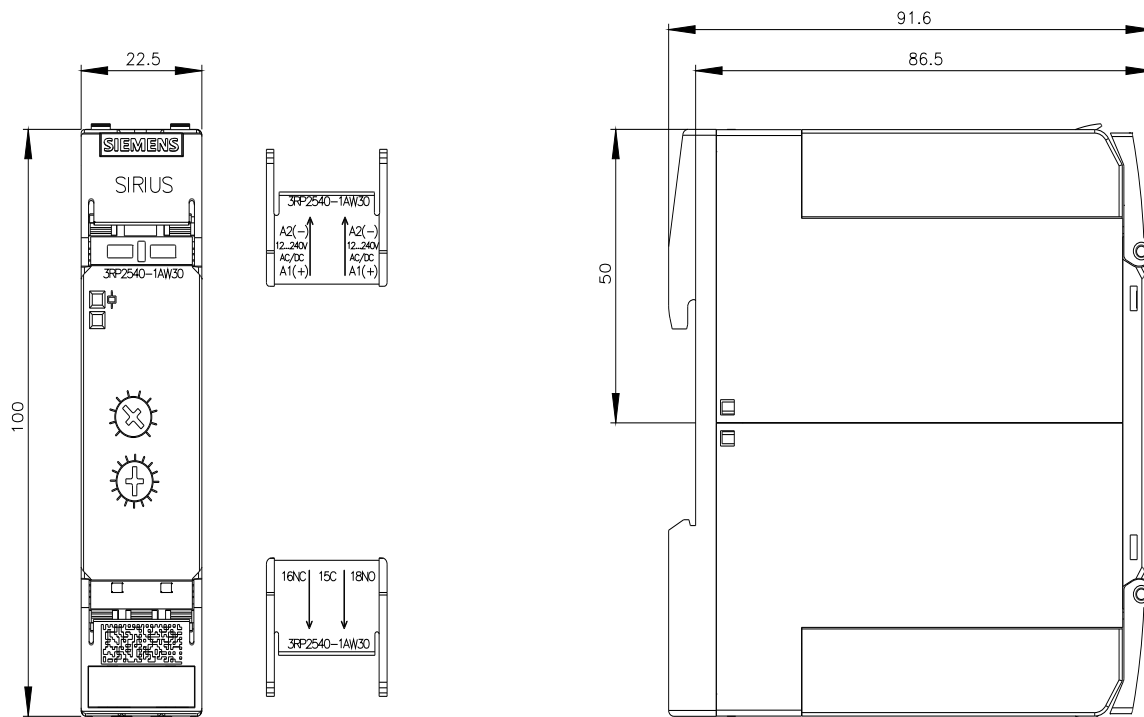
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1AW30&lang=en

Characteristic: Derating

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



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