## **SIEMENS**

Data sheet 3RP2540-2BW30



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 at 50/60 Hz AC, 2 change-over contacts with LED Spring-type terminal (push-in)

product brand name	SIRIUS
product designation	timing relay
design of the product	OFF-delay without control signal, non-volatile, passing make contact
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
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	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	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.168 kg
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

	40 040 //
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
<ul> <li>ON-delay/instantaneous contact</li> </ul>	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
<ul> <li>flashing symmetrically with pulse start</li> <li>flashing asymmetrically with interval start</li> </ul>	No No
flashing asymmetrically with nulse start	No
switching function	140
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
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul><li>pulse-shaping</li></ul>	No
<ul><li>pulse-shaping/instantaneous</li></ul>	No
<ul> <li>additive ON-delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	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
retrotriggerable with switched-on control signal	No
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
<ul> <li>retriggerable with deactivated control signal</li> </ul>	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	
<ul> <li>delayed switching</li> </ul>	0
• instantaneous contact	0
number of NO contacts	
delayed switching	0
• instantaneous contact	0
number of CO contacts	
delayed switching	2
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
	5 000 1/h
operating frequency with 3RT2 contactor maximum	
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
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	Yes
Electromagnetic compatibility	165
	ambiance A (industrial contar)
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	013/
• 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
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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	The contact disortal go / 5 he air disortal go
category according to EN 954-1	none
category according to £14 354-1	HOLIC
Flectrical Safety	
Electrical Safety	IP20
protection class IP on the front according to IEC 60529	IP20
protection class IP on the front according to IEC 60529 type of insulation	IP20 Basic insulation
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protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit	Basic insulation  Yes
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	Basic insulation
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	Yes spring-loaded terminals (push-in)
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	Yes spring-loaded terminals (push-in)  0.5 4 mm <sup>2</sup>
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	Yes  spring-loaded terminals (push-in)  0.5 4 mm² 0.5 2.5 mm²
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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		
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 Approval		







Confirmation





EMV Test Certificates Marine / Shipping



<u>KC</u>

Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping other Environment









Confirmation

Environmental Confirmations

## Further information

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=3RP2540-2BW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-2BW30

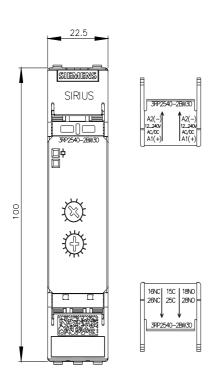
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

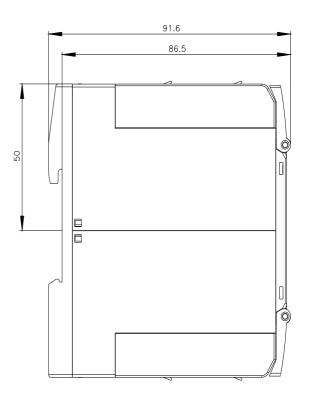
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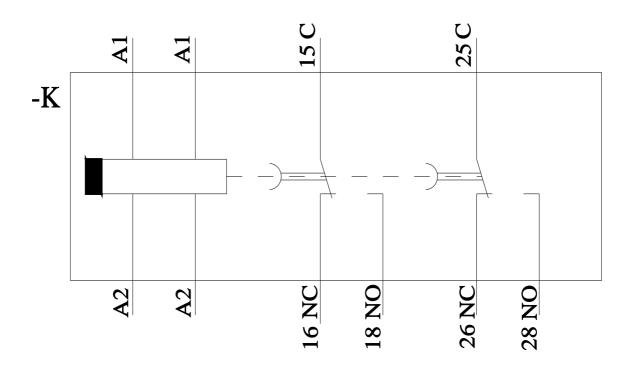
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2540-2BW30&lang=en

**Characteristic: Derating** 







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