## **SIEMENS**

Data sheet 3RP2540-1BB30



Timing relay, electronic OFF delay without control signal or smooth passing make contact non-volatile 7 time ranges 0.05...600 s 24 V AC/DC, 2 change-over contacts 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	
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
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	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 rated value	24 V
at 60 Hz rated value	24 V
control supply voltage frequency 1	50 60 Hz

agentical augmbio valtage 4	
control supply voltage 1	24 V
at DC rated value     persting range factor control cumply voltage rated value at	24 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	2 A
duration of inrush current peak	
• at 24 V	1 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	
<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	
additive ON-delay	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
• 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
<ul> <li>passing make contact/instantaneous contact</li> </ul>	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	
material of switching contacts	AgSnO2
number of NC contacts	

<ul> <li>delayed switching</li> </ul>	0
instantaneous contact	0
number of NO contacts	
<ul> <li>delayed switching</li> </ul>	0
instantaneous contact	0
number of CO contacts	
<ul> <li>delayed switching</li> </ul>	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
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) $$
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	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> <li>due to burst according to IEC 61000-4-4</li> </ul>	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	1 kV
61000-4-5	
	40.1//
field-based interference according to IEC 61000-4-3	10 V/m
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	10 V/m 4 kV contact discharge / 8 kV air discharge
-	
electrostatic discharge according to IEC 61000-4-2	
electrostatic discharge according to IEC 61000-4-2 Safety related data	4 kV contact discharge / 8 kV air discharge
electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529	4 kV contact discharge / 8 kV air discharge
electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation	4 kV contact discharge / 8 kV air discharge  IP20  Basic insulation
electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1	4 kV contact discharge / 8 kV air discharge  IP20  Basic insulation
electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529  type of insulation  category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and	4 kV contact discharge / 8 kV air discharge  IP20  Basic insulation none
electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit	4 kV contact discharge / 8 kV air discharge  IP20 Basic insulation none  Yes
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electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529  type of insulation category according to EN 954-1  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	IP20 Basic insulation none  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  any screw and snap-on mounting onto 35 mm DIN rail 100 mm 22.5 mm
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• 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 0 mm - upwards - at the side 0 mm — downwards  $0 \, \text{mm}$ • 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 -40 ... +85 °C • during storage -40 ... +85 °C • during transport 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

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

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

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=3RP2540-1BB30

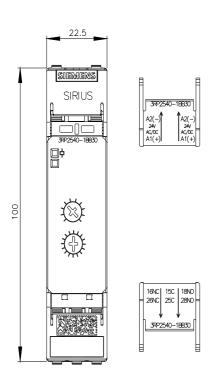
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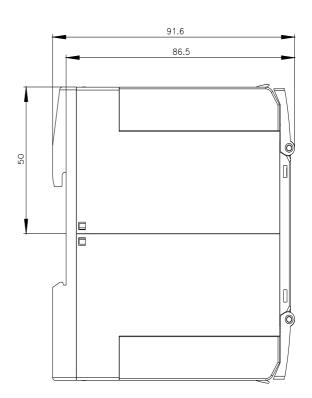
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1BB30

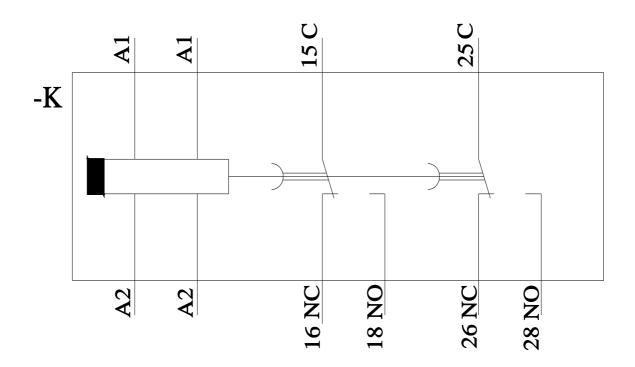
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1BB30

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







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