SIEMENS

Data sheet 3RP2540-2BB30



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, Spring-type terminal (push-in)

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 (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 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 rated value	24 V	
at 60 Hz rated value	24 V	
control supply voltage frequency 1	50 60 Hz	
control supply voltage 1		

100 11 1	2414
at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
initial value	0.85
• full-scale value operating range factor control supply voltage rated	1.1
value at AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated	1.1
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
•	Yes
passing make contact	
passing make contact/instantaneous contact OFF dalay	No You
OFF delay Autitor function	Yes
switching function	N-
 flashing symmetrically with interval start/instantaneous 	No
flashing symmetrically with interval start	No
	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 star-delta circuit	No
switching function with control signal	NO.
additive ON-delay	No
additive ON-delay passing break contact	No
passing break contact/instantaneous	No No
OFF delay	No 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 	No
signal/instantaneous contact	
 retrotriggerable with switched-on control signal 	No
retrotriggerable with switched-on control	No
signal/instantaneous contact	N-
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
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
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	
 at the relay outputs switchover delayed/without delay 	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	
 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
 due to conductor-conductor surge according to IEC 61000-4-5 	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	
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	Yes
and control circuit	
type of electrical connection for auxiliary and control circuit	spring-loaded terminals (push-in)
type of connectable conductor cross-sections	
• solid	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm ²
 finely stranded without core end processing 	0.5 4 mm²
 at AWG cables solid 	20 12
at AWG cables stranded	20 12
connectable conductor cross-section	
• solid	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm ²
finely stranded without core end processing	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
stranded	20 12
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		
 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=3RP2540-2BB30

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2540-2BB30}$

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-2BB30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-2BB30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-2BB30/manual

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