SIEMENS

Data sheet 3RP2540-2AB30



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, 1 change-over contact 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 (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
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	
at DC rated value	24 V

certaing range factor control supply voltage rated value at DC inital value		
	• initial value	0.85
AC at 50 Hz - Initial value -	• full-scale value	1.1
suits cale value of the substance of the		
Caperating range factor control supply voltage rated value at A cal 46 Hz. Initial value 0.85 1.1 Initial value 2 A Value value 1 ms Value value value 1 ms Value valu	• initial value	0.85
AC at 60 Hz • Initial value • Initial-caile value • at 24 V duration of inrush current peak • at 24 V • at 24 V • Tims Switching Function • ON-delay • ON-delayinstantaneous contact • ON-delayinstantaneous contact • ON-delayinstantaneous contact • Passing make contact/ • passing make contact/ • Passing make contact/ • Initial-make symmetrically with interval startinestantaneous • Initial-make symmetrically with interval startinestantaneous • Initial-make symmetrically with interval startinestantaneous • Initial-make symmetrically with pulse start	full-scale value	1.1
a 12 42 V	initial value	
# at 24 V		1.1
at 24 V	-	
switching Function • ON-delay function • ON-delay instantaneous contact		2 A
switching function No delay (and the properties of the passing make contact) No (and the passing make contact) Yes • passing make contact (and the passing make contact) Yes • CFF delay Yes switching function *** • flashing symmetrically with interval start (instantaneous) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • flashing symmetrically with pulse start (and the shart) No • start-dela crecit with delay time (and the shart) No	·	1 ms
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• OFF delay • OFF delay symmetrically with interval start/instantaneous • flashing symmetrically with pulse start instantaneous • flashing symmetrically with pulse start instantaneous • flashing asymmetrically with pulse start instantaneous • stard-delta circuit with delay time • stard-delta circuit with delay time • stard-delta circuit • stard-delta circuit • stard-delta circuit • No • passing break contact • No • passing preak contact • No • passing preak contact/instantaneous • No • OFF delay • OFF delay • pulse delayed • pulse delayed • pulse delayed • pulse delayed/instantaneous • No • pulse-shaping/instantaneous • No • Dubles-shaping/instantaneous • No • Dubles-shaping/instantaneous • No • Dubles-shaping/instantaneous • No • passing make contact • passing make contact • retrotrigerable with delavithed-on control signal • retrigerable with delavithed-		Yes
### Switching function flashing symmetrically with interval start		
• flashing symmetrically with interval start / No • flashing symmetrically with pulse start / No • flashing symmetrically with pulse start / No • flashing symmetrically with pulse start / No • flashing asymmetrically with pulse start / No • star-delta circuit with delay time / No • star-delta circuit / No • switching function with control signal • additive ON-delay / No • passing break contact / No • pulse delayed / No • pulse-shaping make contact / No • passing make contact / No • retrotrigegrable with switched-on control signal / ertotrigegrable with switched-on control signal / ertotrigegrable with switched-on control signal / ertotrigegrable with switched-on control signal / No • retrotrigegrable with	OFF delay	Yes
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• flashing symmetrically with pulse start • flashing asymmetrically with pulse start • flashing asymmetrically with pulse start • flashing asymmetrically with pulse start • flashing symmetrically with pulse start ***star-delta circuit with delay time • star-delta circuit with delay time • star-delta circuit with control signal • additive ON-delay • passing break contact on to start • passing break contact on to start • passing break contact/instantaneous • OFF delay • OFF delay • OFF delay • pulse delayed/instantaneous • pulse delayed/instantaneous • pulse-shaping • pulse-shaping/instantaneous • pulse-shaping/instantaneous • pulse-shaping/instantaneous • ON-delay/OFF-delay/instantaneous • ON-delay/OFF-delay/instantaneous • ON-delay/OFF-delay/instantaneous • ON-delay/OFF-delay/instantaneous • No • passing make contact • passing make contact ontact/instantaneous contact • passing make contact/instantaneous contact • retrotriggerable with deactivated control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control s		
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design of the fuse link for short-circuit protection of the auxiliary switch required Auxiliary circuit material of switching contacts number of NC contacts • delayed switching 0		No
Auxiliary circuit material of switching contacts number of NC contacts • delayed switching 0	Short-circuit protection	
material of switching contacts number of NC contacts ● delayed switching AgSnO2 0	switch required	fuse gL/gG: 4 A
number of NC contacts • delayed switching 0	Auxiliary circuit	
• delayed switching 0	material of switching contacts	AgSnO2
	number of NC contacts	
• instantaneous contact 0	delayed switching	0
	• instantaneous contact	0

number of NO contacts	
 delayed switching 	0
instantaneous contact	0
number of CO contacts	
 delayed switching 	1
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	1 kV
61000-4-5	
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 and	Yes
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 mm²
 finely stranded without core end processing 	0.5 4 mm²
 for AWG cables solid 	20 12
for AWG cables stranded	20 12
connectable conductor cross-section	
• solid	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
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 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



Confirmation







EMC

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).

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=3RP2540-2AB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-2AB30

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

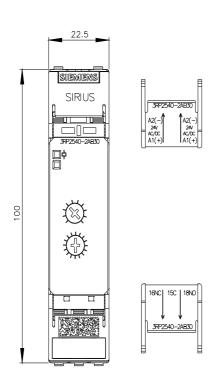
https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-2AB30

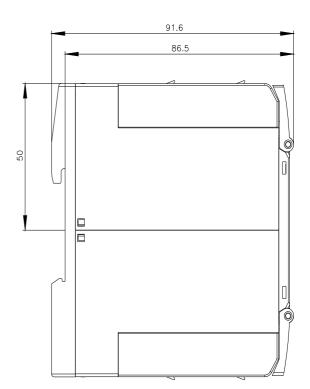
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

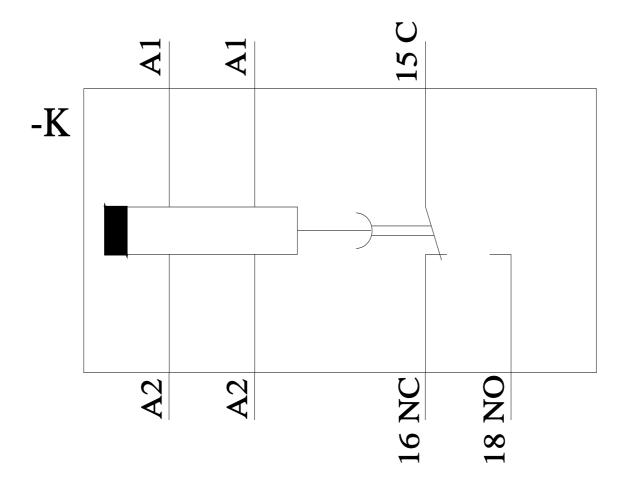
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-2AB30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-2AB30/manual







last modified: 11/21/2022 🖸

