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 (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	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	corresponds to degree or severity s
	2 kV network connection / 1 kV control connection
 due to burst according to IEC 61000-4-4 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	IP20
60529	
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	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
 finely stranded with core end processing 	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG cables solid	1x (20 12), 2x (20 14)
at AWG cables stranded	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
finely stranded with core end processing	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
stranded	20 14
tightening torque	0.6 0.8 N·m
design of the thread of the connection screw	M3
	1110
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=3RP2540-1BB30

Cax online generator

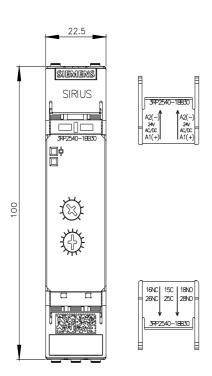
 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2540-1BB30}$

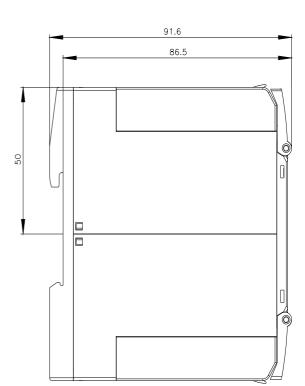
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1BB30

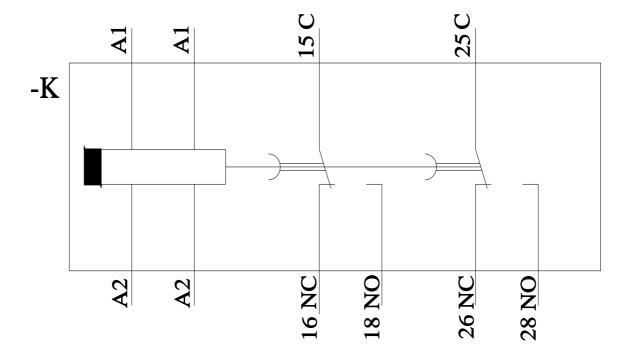
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1BB30&lang=en

Characteristic: Derating

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







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