SIEMENS

Data sheet 3RP2540-1BW30



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, 2 change-over contacts at 50/60 Hz AC 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 acc. to IEC 60068-2-27	11g / 15 ms
vibration resistance acc. 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 acc. 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)	12.09.2014
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
control supply voltage 1	

• at DC	12 240 V
operating range factor control supply voltage rated	
value at DC	0.05
• 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
ON-delay/instantaneous contact	No
passing make contact	Yes
passing make contact/instantaneous contact	No V
OFF delay	Yes
switching function	No
 flashing symmetrically with interval start/instantaneous 	No
flashing symmetrically with interval start	No
flashing symmetrically with pulse	No
start/instantaneous	
 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	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
pulse delayed/instantaneous	No
• pulse-shaping	No
pulse-shaping/instantaneous	No
additive ON-delay/instantaneous ON delay/OFF delay/instantaneous	No No
ON-delay/OFF-delay/instantaneous	No No
passing make contact passing make contact/instantaneous contact	No No
passing make contact/instantaneous contact cuitching function of interval relay with control signal.	No
switching function of interval relay with control signal	No
retrotriggerable with deactivated control signal/instantaneous contact	No
retrotriggerable with switched-on control signal	No
 retrotriggerable with switched-on control signal/instantaneous contact 	No
retriggerable with deactivated control signal	No
Short-circuit protection	110
	fuse at /aG: 4.A
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
assumery officer required	

Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	2
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
oonwood on warman, oonwood	V, 5 mA)
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
at the relay outputs switchover delayed/without	No
delay	
non-volatile	Yes
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 61812-1	ambience A (industrial sector)
EMC immunity acc. to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV network connection / 1 kV control connection
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
due to conductor-conductor surge acc. to IEC	1 kV
61000-4-5	
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front acc. to IEC 60529	IP20
type of insulation	Basic insulation
category acc. to EN 954.1	none
category acc. to EN 954-1	none
Connections/ Terminals	none
Connections/ Terminals	Yes
Connections/ Terminals product component removable terminal for auxiliary	
Connections/ Terminals product component removable terminal for auxiliary and control circuit	Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	Yes
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 screw-type 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 screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
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 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)
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 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)
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 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)
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 • at AWG cables solid • at AWG cables stranded connectable conductor cross-section	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)
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 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
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 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
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 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
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 • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded	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
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 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
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 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
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 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
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 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
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 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
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 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
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 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 standard mounting rail
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 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 standard mounting rail 100 mm

 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



Declaration of

Conformity

Declaration of Conformity Test Certificates	Marine / Shipping
---	-------------------

Miscellaneous

Type Test Certificates/Test Report









Marine / Shipping other





Confirmation

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=3RP2540-1BW30

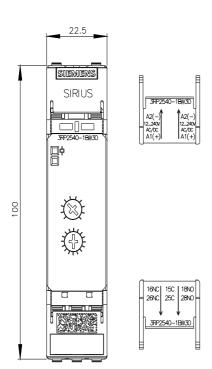
Cax online generator

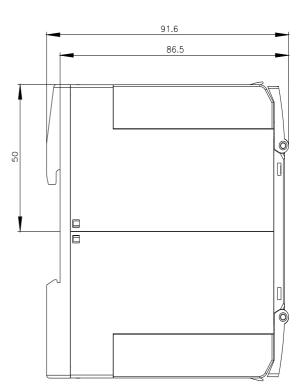
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1BW30

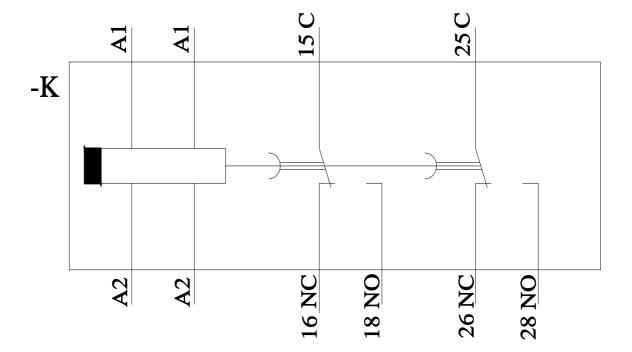
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1BW30

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







last modified: 12/9/2021 🖸