



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 Prohibittance (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	

<ul style="list-style-type: none"> • at DC rated value 	24 V
operating range factor control supply voltage rated value at DC	
<ul style="list-style-type: none"> • initial value 	0.85
<ul style="list-style-type: none"> • full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> • initial value 	0.85
<ul style="list-style-type: none"> • full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> • initial value 	0.85
<ul style="list-style-type: none"> • full-scale value 	1.1
inrush current peak	
<ul style="list-style-type: none"> • at 24 V 	2 A
duration of inrush current peak	
<ul style="list-style-type: none"> • at 24 V 	1 ms
Switching Function	
switching function	
<ul style="list-style-type: none"> • ON-delay 	No
<ul style="list-style-type: none"> • ON-delay/instantaneous contact 	No
<ul style="list-style-type: none"> • passing make contact 	Yes
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 	No
<ul style="list-style-type: none"> • OFF delay 	Yes
switching function	
<ul style="list-style-type: none"> • flashing symmetrically with interval start/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically with interval start 	No
<ul style="list-style-type: none"> • flashing symmetrically with pulse start/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically with pulse start 	No
<ul style="list-style-type: none"> • flashing asymmetrically with interval start 	No
<ul style="list-style-type: none"> • flashing asymmetrically with pulse start 	No
switching function	
<ul style="list-style-type: none"> • star-delta circuit with delay time 	No
<ul style="list-style-type: none"> • star-delta circuit 	No
switching function with control signal	
<ul style="list-style-type: none"> • additive ON-delay 	No
<ul style="list-style-type: none"> • passing break contact 	No
<ul style="list-style-type: none"> • passing break contact/instantaneous 	No
<ul style="list-style-type: none"> • OFF delay 	No
<ul style="list-style-type: none"> • OFF delay/instantaneous 	No
<ul style="list-style-type: none"> • pulse delayed 	No
<ul style="list-style-type: none"> • pulse delayed/instantaneous 	No
<ul style="list-style-type: none"> • pulse-shaping 	No
<ul style="list-style-type: none"> • pulse-shaping/instantaneous 	No
<ul style="list-style-type: none"> • additive ON-delay/instantaneous 	No
<ul style="list-style-type: none"> • ON-delay/OFF-delay/instantaneous 	No
<ul style="list-style-type: none"> • passing make contact 	No
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 	No
switching function of interval relay with control signal	
<ul style="list-style-type: none"> • retrotriggerable with deactivated control signal/instantaneous contact 	No
<ul style="list-style-type: none"> • retrotriggerable with switched-on control signal 	No
<ul style="list-style-type: none"> • retrotriggerable with switched-on control signal/instantaneous contact 	No
<ul style="list-style-type: none"> • 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	AgSnO ₂

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 and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
• 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 mm ²
• finely stranded with core end processing	0.5 ... 4 mm ²
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
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
 EG-Konf.		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

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

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

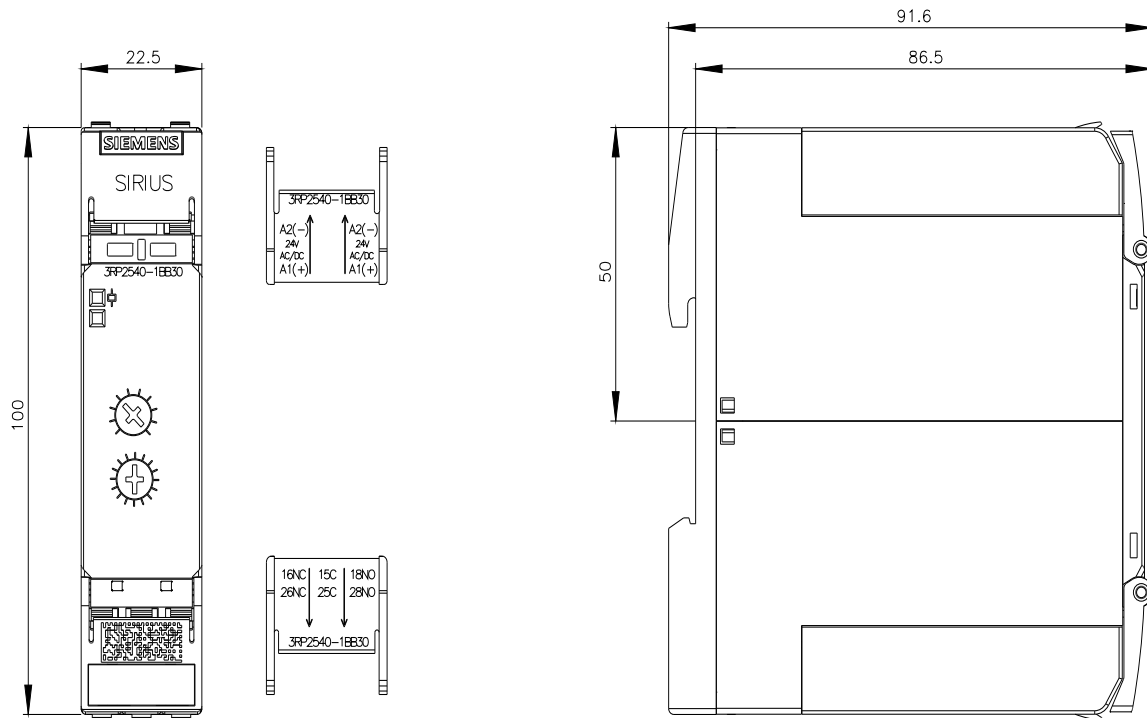
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1BB30>

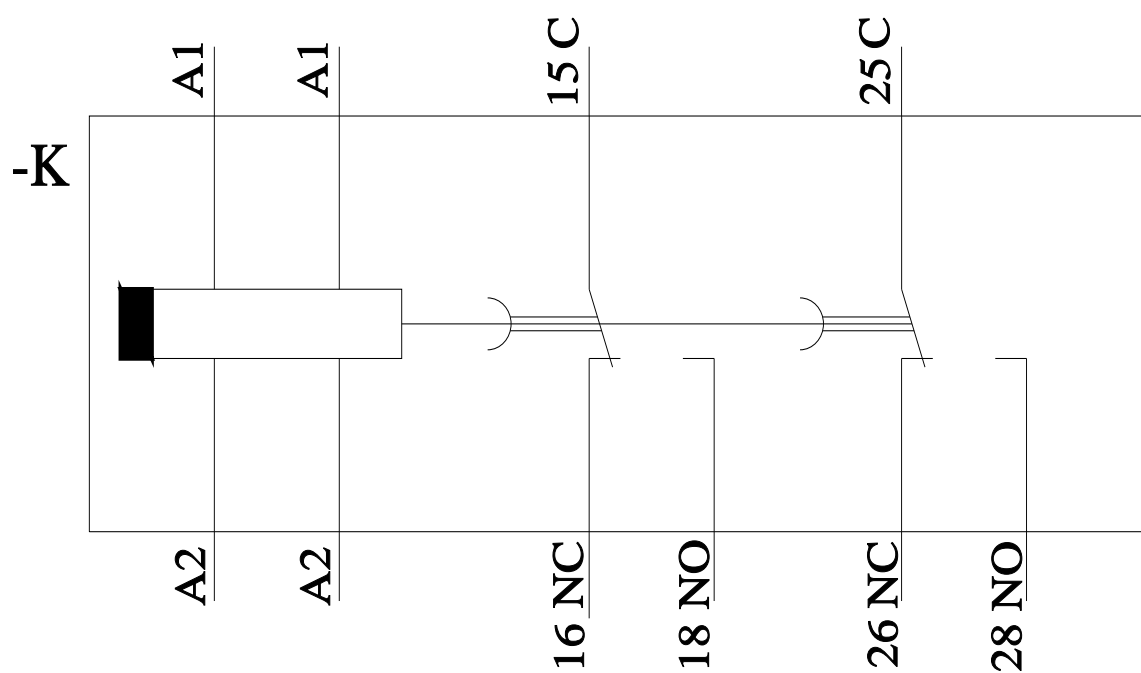
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

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>





last modified:

12/9/2021 [🔗](#)