SIEMENS

Data sheet 3RP2540-1AW30



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, 1 change-over contact at 50/60 Hz AC with LED, Screw terminal

product brand name	SIRIUS	
product designation	timing relay	
design of the product	OFF-delay without control signal, non-volatile, passing make contact	
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	
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8	
Weight	0.169 kg	
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	
• 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	N.
ON-delay	No No
ON-delay/instantaneous contact	No
passing make contact	Yes
passing make contact/instantaneous contact	No
OFF delay	Yes
switching function	Na
flashing symmetrically with interval start/instantaneous	No No
flashing symmetrically with interval start	No No
flashing symmetrically with pulse start/instantaneous	No No
flashing symmetrically with pulse start flashing symmetrically with integral start	No No
flashing asymmetrically with interval start flashing asymmetrically with pulse start	No No
flashing asymmetrically with pulse start switching function	INO
star-delta circuit with delay time	No
star-delta circuit star-delta circuit	No
switching function with control signal	140
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	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 signal/instantaneous contact 	No
retrotriggerable with switched-on control signal	No
retrotriggerable with switched-on control	No
signal/instantaneous contact	
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

material of switching contacts	AgSnO2
material of switching contacts number of NC contacts	AyonU2
	0
delayed switching instantaneous contact	
instantaneous contact number of NO contacts	0
	0
delayed switching instantaneous contact	0
instantaneous contact number of CO contacts	0
	1
delayed switching instantaneous contact	0
instantaneous contact operational current of auxiliary contacts at AC-15	O
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1A
• 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	
category according to EN 954-1	none
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
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 mm²), 2x (0.5 2.5 mm²)
 finely stranded with core end processing 	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
 for AWG cables solid 	1x (20 12), 2x (20 14)
for 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
Installation/ mounting/ dimensions	
mounting position	any
factoring motherd	screw and snap-on mounting onto 35 mm DIN rail
fastening method	Solew and shap on mounting one of him birthan

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 %
Approvals Certificates	
Ganaral Product Approval	

General Product Approval







Confirmation





EMV Test Certificates Marine / Shipping



<u>KC</u>

Special Test Certificate Type Test Certificates/Test Report





Marine / Shipping other Environment









Confirmation

Environmental Confirmations

Further information

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=3RP2540-1AW30

Cax online generator

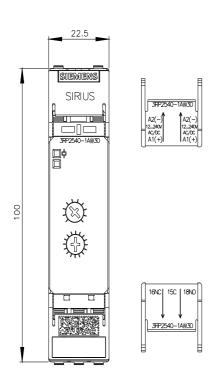
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2540-1AW30}$

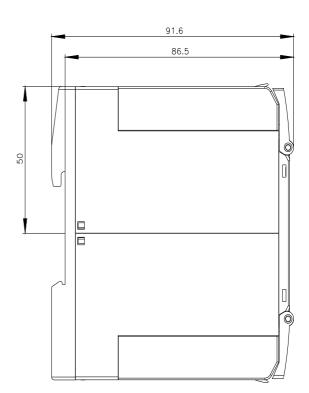
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

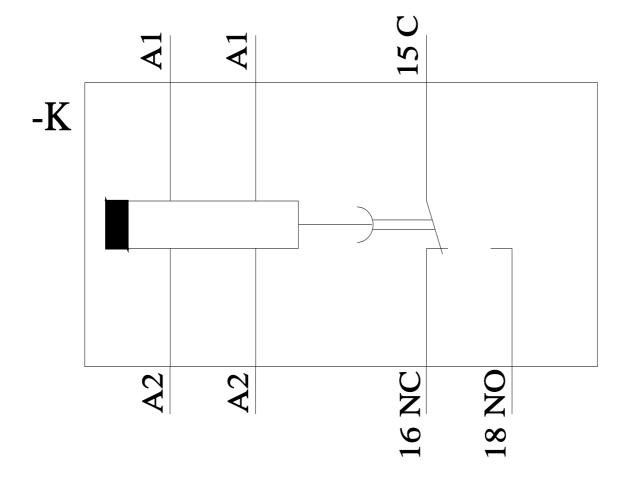
https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1AW30\&lang=en}}$







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