SIEMENS

Data sheet 3RP2505-2AW30



Timing relay, Multifunction 1 change-over contact, 13 functions 7 time ranges (0.05 s...100 h) 12-240 V AC/DC at 50/60 Hz AC with LED Springtype terminal (push-in)

product brand name product designation design of the product product type designation SIRIUS timing relay 13 functions 3RP25

General technical data

	4
product	component

· relay output

• semi-conductor output

product extension required remote control

product extension optional remote control

power loss [W] maximum

insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value

test voltage for isolation test

degree of pollution

surge voltage resistance rated value

protection class IP

shock resistance according to IEC 60068-2-27

vibration resistance according to IEC 60068-2-6 mechanical service life (switching cycles) typical

electrical endurance (switching cycles) at AC-15 at 230 V typical

adjustable time

relative setting accuracy relating to full-scale value

thermal current minimum ON period recovery time

reference code according to IEC 81346-2

relative repeat accuracy

influence of the surrounding temperature

power supply influence **Substance Prohibitance (Date)**

Yes

No

No

Nο 2 W

300 V

2.5 kV 3

4 000 V

IP20

11g / 15 ms

10 ... 55 Hz / 0.35 mm 10 000 000

100 000

0.05 s ... 100 h

5 %; +/-

5 A

35 ms

250 ms

1 %; +/-

1% in the whole temperature range to the set runtime

1% in the whole voltage range to the set runtime

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Control circuit/ Control

type of voltage of the control supply voltage control supply voltage 1 at AC

• at 50 Hz

• at 60 Hz control supply voltage frequency 1

control supply voltage 1

• at DC

operating range factor control supply voltage rated

value at DC

AC/DC

12 ... 240 V

12 ... 240 V

50 ... 60 Hz

12 ... 240 V

initial value	0.8
 full-scale value 	1.1
operating range factor control supply voltage rated	
value at AC at 50 Hz	
initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	0.8
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 	Yes
 ON-delay/instantaneous contact 	No
 passing make contact 	Yes
 passing make contact/instantaneous contact 	No
OFF delay	No
switching function	
 flashing symmetrically with interval start/instantaneous 	No
 flashing symmetrically with interval start 	Yes
 flashing symmetrically with pulse start/instantaneous 	No
 flashing symmetrically with pulse start 	Yes
 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 	Yes
 passing break contact 	Yes
 passing break contact/instantaneous 	No
OFF delay	Yes
 OFF delay/instantaneous 	No
 pulse delayed 	Yes
 pulse delayed/instantaneous 	No
pulse-shaping	Yes
pulse-shaping/instantaneous	No
 additive ON-delay/instantaneous 	No
 ON-delay/OFF-delay/instantaneous 	No
 passing make contact 	Yes
 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 	Yes
 retrotriggerable with switched-on control signal/instantaneous contact 	No
 retriggerable with deactivated control signal 	Yes
design of the control terminal non-floating	Yes
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 instantaneous centeet	0
instantaneous contact number of CO contacts	0
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)
contact rating of auxiliary contacts according to UL	R300 / B300
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	No
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 burst according to IEC 6 1000-4-4 due to conductor-earth surge according to IEC	2 kV network connection / 1 kV control connection
61000-4-5	-
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	40 V/m
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	10 V/m 4 kV contact discharge / 8 kV air discharge
Safety related data	TIV Contact discharge / City all discharge
protection class IP on the front according to IEC	IP20
60529	11 20
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 type of connectable conductor cross-sections	spring-loaded terminals (push-in)
solid	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm ²
finely stranded without core end processing	0.5 4 mm²
at AWG cables solid	20 12
 at AWG cables stranded 	20 12
connectable conductor cross-section	
• solid	0.5 4 mm²
• finely stranded with core end processing	0.5 2.5 mm ²
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 standard mounting rail
height	100 mm
width	17.5 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 0 mm — at the side — downwards 0 mm • for live parts - forwards 0 mm - backwards 0 mm — upwards 0 mm

Ambient conditions

- downwards

- at the side

installation altitude at height above sea level maximum

ambient temperature

• during operation
• during storage
• during transport

-40 ... +85 °C

relative humidity during operation

2 000 m

-25 ... +60 °C

-40 ... +85 °C

10 ... 95 %

0 mm

0 mm

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=3RP2505-2AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-2AW30

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

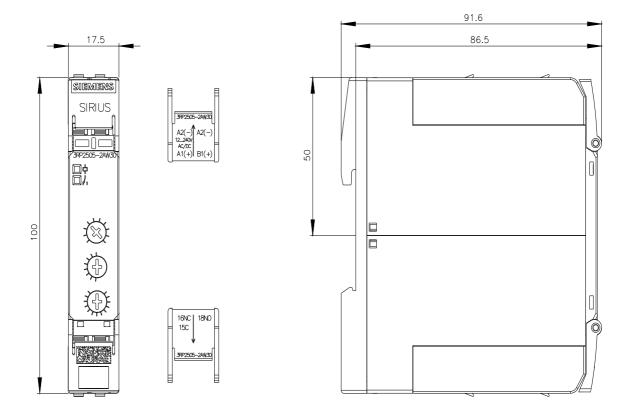
https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AW30

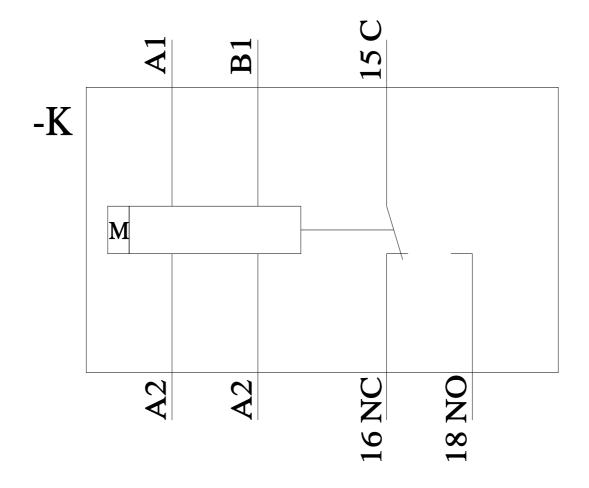
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2505-2AW30\&lang=en}}$

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AW30/manual





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