SIEMENS

Data sheet 3RP2505-2BW30



Timing relay, Multifunction 2 change-over contacts, 27 functions 7 time ranges (0.05 s...100 h) 12-240 V AC/DC at 50/60 Hz AC with LED Spring-type terminal (push-in)

product brand name	SIRIUS
product designation	timing relay
design of the product	27 functions
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
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 s 100 h
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
minimum ON period	35 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 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1
Weight	0.16 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 operating range factor control supply voltage rated value at DC initial value full-scale value operating range factor control supply voltage rated value at AC at 50 Hz initial value full-scale value operating range factor control supply voltage rated value at AC at 60 Hz initial value initial value initial value full-scale value initial value full-scale value initial value full-scale value initial value of unitial value full-scale value initial value of unitial value of unitial value initial value of unitial value full-scale value initial value of unitial value	
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switching function of interval relay with control signal	
signal/instantaneous contact	
• retrotriggerable with switched-on control signal Yes	
• retrotriggerable with switched-on control	
signal/instantaneous contact	
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 fuse gL/gG: switch required	
Auxiliary circuit	A

material of switching contacts	AgSnO2
material of switching contacts	Ayonoz
number of NC contacts	0
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	0.4
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	4.4
• 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 delay	Yes
• 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 conductor-earth surge according to IEC 61000-4-5 	2 kV
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
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	spring-loaded terminals (push-in)
type of connectable conductor cross-sections	
• solid	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
 finely stranded without core end processing 	0.5 4 mm²
 for AWG cables solid 	20 12
for AWG cables stranded	20 12
connectable conductor cross-section	
• solid	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
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 DIN rail

depth 9 required spacing 0 ● with side-by-side mounting 0 — forwards 0 — backwards 0 — upwards 0 — at the side 0 ● for grounded parts 0 — backwards 0 — backwards 0 — at the side 0 — downwards 0 • for live parts 0 — backwards 0 • for lackwards 0	22.5 mm 90 mm 0 mm 0 mm 0 mm 0 mm	
required spacing	0 mm 0 mm 0 mm 0 mm 0 mm	
 with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — downwards — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards 0 • for live parts — backwards 0 — backwards 0 0 0	0 mm 0 mm 0 mm 0 mm	
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 — backwards — upwards — downwards — at the side ● for grounded parts — forwards — backwards — upwards — at the side — downwards ● for live parts — forwards 0 0	0 mm 0 mm 0 mm 0 mm	
 — upwards — downwards — at the side ● for grounded parts — forwards — backwards — upwards — at the side — downwards ● for live parts — forwards 0 0 - at the side - downwards • for live parts — backwards 0 	0 mm 0 mm 0 mm	
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 for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards 		
— forwards 0 — backwards 0 — upwards 0 — at the side 0 — downwards 0 • for live parts 0 — forwards 0 — backwards 0	n mm	
 — backwards — upwards — at the side — downwards ● for live parts — forwards — backwards 	1 mm	
 — upwards — at the side — downwards • for live parts — forwards — backwards 0 	V 111111	
 — at the side — downwards ● for live parts — forwards — backwards 0 	0 mm	
 — downwards ● for live parts — forwards — backwards 0 	0 mm	
 for live parts forwards backwards 	0 mm	
forwardsbackwards0	0 mm	
— backwards 0		
	0 mm	
— upwards 0	0 mm	
	0 mm	
— downwards 0	0 mm	
— at the side 0	0 mm	
Ambient conditions		
installation altitude at height above sea level maximum 2	2 000 m	
ambient temperature		
• during operation -2	-25 +60 °C	
• during storage	-40 +85 °C	
• during transport	-40 +85 °C	
relative humidity during operation 1	10 95 %	
Approvals Certificates		
General Product Approval		EMV













EMV	Toot Cortificates	Marina / Chinnina
FINIA	Test Certificates	Marine / Shipping

<u>KC</u>

Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping other Railway Environment







Confirmation

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)

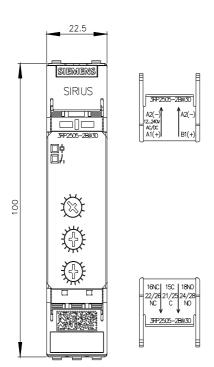
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2505-2BW30

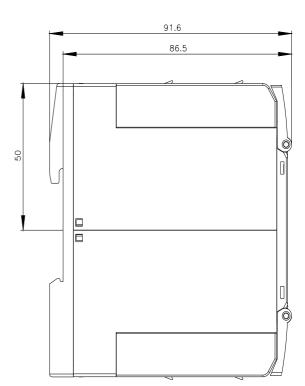
Cax online generator

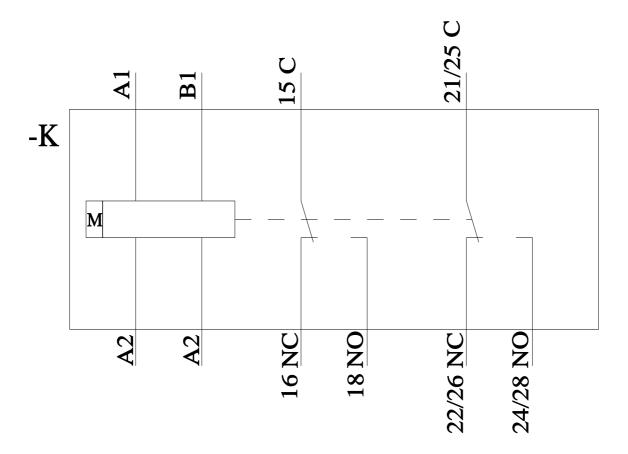
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-2BW30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2BW30 Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2BW30/manual







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