SIEMENS

Data sheet

3RP2505-2CW30



Timing relay, Multifunction 1 NO semiconductor 13 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	13 functions
product type designation	3RP25
General technical data	
product component	
● relay output	No
 semi-conductor output 	Yes
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
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	300 000
adjustable time	0.05 s 100 h
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	1 A
minimum ON period	35 ms
recovery time	400 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	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8
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	0.8
• 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	0.5 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.4 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	
number of NC contacts	

delayed switching	0
instantaneous contact	0
number of NO contacts	
delayed switching	1
instantaneous contact	0
number of CO contacts	0
 delayed switching instantaneous contact 	0
operational current of auxiliary contacts at AC-15	0
• at 24 V	1A
• at 250 V	1A
operational current of auxiliary contacts at DC-12	
• at 24 V	1A
• at 125 V	1A
• at 250 V	1 A
operating frequency with 3RT2 contactor maximum	5 000 1/h
switching capacity current with inductive load	0.01 1 A
Inputs/ Outputs	
product function	
 at the relay outputs switchover delayed/without delay 	No
non-volatile	No
residual current maximum	0.5 mA
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
electrostatic discharge according to IEC 61000-4-2 Safety related data	4 KV contact discharge / 8 KV air discharge
	4 kV contact discharge / 8 kV air discharge
Safety related data	
Safety related data category according to EN 954-1	none
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 Connections/ Terminals product component removable terminal for auxiliary and	none
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 Connections/ Terminals product component removable terminal for auxiliary and control circuit	none IP20 Yes
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 Connections/ Terminals product component removable terminal for auxiliary and	none IP20
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	none IP20 Yes
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 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	none IP20 Yes spring-loaded terminals (push-in)
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 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	none IP20 Yes spring-loaded terminals (push-in) 0.5 4 mm ²
Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 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	none IP20 Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ²
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— forwards		() mm		
- backwards		() mm		
— upwards		() mm		
- downwards		() mm		
— at the side		() mm		
 for grounded par 	ts				
— forwards		() mm		
- backwards		() mm		
— upwards		() mm		
— at the side		() mm		
- downwards		() mm		
 for live parts 					
— forwards		() mm		
- backwards		() mm		
— upwards		() mm		
- downwards		() mm		
— at the side		() mm		
bient conditions					
nstallation altitude at h	eight above sea level max	ximum	2 000 m		
mbient temperature					
 during operation 			25 +60 °C		
 during storage 			40 +85 °C		
 during transport 			40 +85 °C		
			10 95 %		
elative humidity during	operation				
elative humidity during oprovals Certificates General Product App				EMC	Declaration of Cor formity
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oprovals Certificates General Product App	roval	Marine / Shipping	EAC Hoyds Register Uts	Ô	formity
General Product App Confirmation	roval	BUREAU	Lloyds Register	Ô	formity
Declaration of Con- formity	roval	BUREAU VERITAS	Lloyds Register	Ô	formity
provals Certificates General Product App Confirmation	roval CCC Test Certificates Type Test Certific- ates/Test Report	E L R E A U VERITAS	Lloyds Register	Ô	formity

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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)

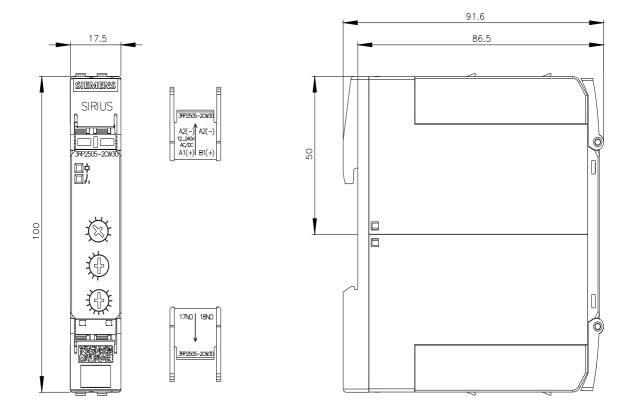
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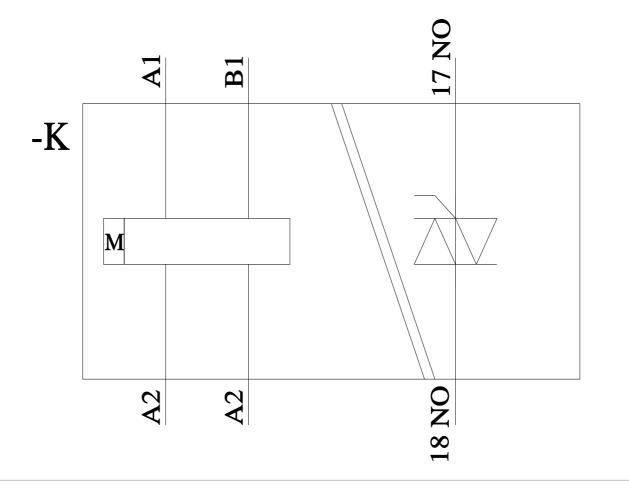
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2505-2CW30&lang=en Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2CW30/manual





last modified:

8/7/2023 🖸