## **SIEMENS**

Data sheet 3RP2505-2RW30



Timing relay, Multifunction 2 change-over contacts, 13 functions Positively driven Relay contacts 24...240 V AC/DC at 50/60 Hz AC 7 time ranges (0.05 s...100 h) with LED Spring-type terminal (push-in)

product brand name	SIRIUS
product designation	timing relay
design of the product	13 functions, suitable for railway applications
product type designation	3RP25
General technical data	
product component	
<ul><li>relay output</li></ul>	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	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 Prohibitance (Date)	04/21/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Weight	0.166 kg
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	24 240 V
• at 60 Hz	24 240 V
control supply voltage frequency 1	50 60 Hz

operating range factor control supply voltage rated value at CP (CP) initial value (1.1 color value) (	control cumply voltage 1 at DC	24 240 V
initial value (1.1 scale value (1.1 scal	control supply voltage 1 at DC	24 240 V
Initial value Initial value Operating range factor control supply voltage rated value at AC at 80 Hz Initial value Initial valu		
Initial value Operating range factor control supply voltage rated value at 1.11  Poperating range factor control supply voltage rated value at 1.11  Operating range factor control supply voltage rated value at 2.11  Operating range factor control supply voltage rated value at 2.11  Operating range factor control supply voltage rated value at 2.11  Initial value		0.7
operating range factor control supply voltage rated value at AC at 50 4t .  - initial value		
AC at 9 Hz    Initial value   0.7		
• full-scale value Operating range factor control supply voltage rated value at Act 40 9/14.  • initial value • initial value  1.1  Inrush current peak • at 24 V • at 240 V • o.5 ms  Switching function  Switching function  • ON-delay/instantaneous contact • passing make contact • passing make contact • flashing symmetrically with interval start instantaneous • flashing symmetrically with puse start • flashing symmetrically with puse start • flashing asymmetrically with puse start • flashing asymmetricall		
operating range factor control supply voltage rated value at AC at 50 ft 2  initial value  initial value  initial value  1.1  invaluation pask  at 24 V  5.4  duration of inrush current peak  at 24 V  5.5 A  duration of inrush current peak  at 24 V  5.6 A  duration of inrush current peak  at 24 V  5.7 A  duration of inrush current peak  at 24 V  5.8 To 5. To	• initial value	0.7
AC at 60 Hz  Intrish value  Intrish current peak  Intrish current	• full-scale value	1.1
Initial value		
Inrush current peak  at 24 V  at 240 V  duration of inrush current peak  at 24 V  at 240 V  other section of the section of th		
e at 24 V 5 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7		1.1
e at 240 V  duration of inrush current peak	-	
duration of inrush current peak  at 24 V  at 240 V  0.5 ms  Switching Function  switching Function  switching function  - ON-delay Yes  - ON-delay Yes  - ON-delay Yes  - ON-delay Yes  - ON-delay No  - passing make contact Yes  - 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 pulse start/instantaneous No  - flashing symmetrically with pulse start/instantaneous No  - flashing symmetrically with pulse start Yes  - flashing symmetrically with pulse start Yes  - flashing symmetrically with pulse start No  - flashing symmetrically with pulse start No  - stardata circuit with delay time No  - star-delta circuit with delay time No  - star-delta circuit with delay time No  - star-delta circuit with delay time No  - passing break contact Yes  - passing preak contact No  - OFF delay Yes  - pulse-shaping All Stantaneous No  - ON-delay(OFF-delay)instantaneous No  - pulse-shaping anke contact/instantaneous No  - passing make contact/instantaneous Contact  - retrotriggerable with switched-on control signal  - retrotriggerable with switched-on control signal  - retrotriggerable with deactivated control signal  - retrotriggerable with switched-on control signal  - retrotriggerable with deactivated control signal		
at 24 V 0,5 ms  at 240 V 0,5 ms  attaching function  Chi-delay Mistantaneous contact  Chi-delay Mistantaneous Chi-delay No  attaching symmetrically with interval start funstantaneous  Chi-delay Mistantaneous  Chi-delay Mistantaneous  Chi-delay Mistantaneous  Chi-delay Chi-delay Mistantaneous  Chi-delay		5 A
* at 240 V  Switching Function  switching function  ON-delay Yes ON-delay/instantaneous contact No ON-delay Yes ON-delay/instantaneous contact Pessagn make contact Pessagn pess	•	
Switching Function  switching function  • ON-delay (Pes On-delay)		
switching function  ON-delay/instantaneous contact  ON-delay/instantaneous contact  passing make contact/instantaneous contact  passing make contact/instantaneous contact  Pes  passing make contact/instantaneous contact  No  OFF delay  switching function  flashing symmetrically with interval start/instantaneous  flashing symmetrically with pulse start yes  flashing symmetrically with pulse start yes  flashing symmetrically with pulse start yes  flashing symmetrically with pulse start  flashing asymmetrically with pulse start  No  switching function  star-delta circuit with delay time  star-delta circuit with delay time  star-delta circuit with control signal  additive ON-delay  passing break contact  passing break contact  passing break contact  passing break contact/instantaneous  OFF delay  OFF delay  OFF delay/instantaneous  pulse delayed  pulse shaping  yes  pulse shaping/instantaneous  No  ON-delay/OFF-delay/instantaneous  No  ON-delay/OFF-delay/instantaneous  No  ON-delay/OFF-delay/instantaneous  passing make contact  passing make contact  passing make contact  retrotriggerable with switched-on control signal  retrotriggerable with switched-on control signal  retrotriggerable with deactivated control signal		0.5 ms
ON-delay ON-delay/instantaneous contact On-delay/instantaneous contact Passing make contact Passing make contact Passing make contact/instantaneous contact OFF delay No switching function Islashing symmetrically with interval start/instantaneous Islashing symmetrically with pulse start Yes Islashing symmetrically with pulse start Yes Islashing asymmetrically with pulse start Yes Islashing asymmetrically with pulse start No Islashing symmetrically with pulse start No Islashing bymetrically with control signal Islashing very search as a start of the		
ON-delay/instantaneous contact passing make contact passing make contact/instantaneous contact No OFF delay No switching function flashing symmetrically with interval start/instantaneous flashing symmetrically with pulse start flashing symmetrically with pulse start flashing symmetrically with pulse start flashing asymmetrically with pulse start flashing asymmetrically with pulse start No flashing asymmetrically with pulse start No flashing asymmetrically with pulse start No switching function  star-delta circuit with delay time star-delta circuit with delay time star-delta circuit with delay time star-delta circuit No switching function with control signal additive ON-delay passing break contact passing break contact passing break contact pulse delayed pulse delayed pulse delayed pulse delayed pulse-shaping pulse-shaping/instantaneous No ON-delay/OFF-delay/instantaneous And DN-delay/OFF-delay/instantaneous pulse-shaping/instantaneous And DN-delay/OFF-delay/instantaneous passing make contact passing make contact retrotriggerable with deactivated control signal retrotriggerable with switched-on control signal retrotriggerable with switched-on control signal retrotriggerable with witched-on control signal retroggerable with switched-on control signal retroggerable with witched-on control signal retroggerable with deactivated control signal design of the control terminal non-floating Yes Short-circuit protection	_	
passing make contact passing make contact/instantaneous contact OFF delay  switching function  flashing symmetrically with interval start/instantaneous flashing symmetrically with pulse start yes flashing symmetrically with pulse start yes flashing asymmetrically with cally start no flashing asymmetrically with cally start no flashing asymmetrically with pulse start yes flashing asymmetrically with cally start no flashing asymmetrically with pulse start no flashing asymmetrically with cally start no flashing asymmetrically with pulse start no no switching function finetrous flashing asymmetrically with control signal retrotrigerable with deactivated control signal retrotrigerable with with cactivated control signal retrotrigerable with with cactivated control signal retrotrigerable with with deactivated control signal retrotrigerable with theactivated control signal retrotrigerable with deactivated control signal	•	
passing make contact/instantaneous contact OFF delay switching function flashing symmetrically with interval start/ start/instantaneous flashing symmetrically with interval start flashing symmetrically with pulse start/instantaneous flashing symmetrically with pulse start flashing symmetrically with pulse start flashing asymmetrically with pulse start No switching function star-delta circuit with delay time star-delta circuit with delay time star-delta circuit with control signal additive ON-delay passing break contact passing break contact passing break contact/instantaneous OFF delay OFF delay/instantaneous  Uses Uses delayed Uses delayed Uses-shaping Uses-shaping Uses-shaping Uses-shaping Uses-shaping Uses-shaping Uses-shaping with control signal additive ON-delay/instantaneous Ano ON-delay/OFF-delay/instantaneous Ano ON-delay/OFF-dela	•	
Switching function  • flashing symmetrically with interval start flashing symmetrically with pulse start yes  • flashing asymmetrically with pulse start yes  • flashing asymmetrically with pulse 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  • pulse delayed Yes  • pulse delayed Yes  • pulse delayed/instantaneous No  • pulse delayed/instantaneous No  • pulse-shaping Yes  • pulse-shaping Yes  • pulse-shaping Yes  • pulse-shaping Yes  • pulse-shapinginstantaneous No  • pulse-shapinginstantaneous No  • pulse-shapinginstantaneous No  • pulse-shaping Yes  • pulse-shapinginstantaneous No  • pulse-shaping instantaneous No  • pulse-shaping Hese contact Yes  • passing make contact  • passing make contact  • passing make contact Yes  • passing make contact No  switching function of interval relay with control signal  • retrotriggerable with deactivated control signal  • retrotriggerable with switched-on control signal  • retrotrigerable with deactivated control signal	. •	
switching function  • flashing symmetrically with interval start/instantaneous  • flashing symmetrically with pulse start/ yes  • flashing symmetrically with pulse start Yes  • flashing symmetrically with pulse start Yes  • flashing asymmetrically with pulse start Yes  • flashing asymmetrically with pulse start Yes  • flashing asymmetrically with pulse start No  • flashing asymmetrically with pulse start No  • star-delta circuit with delay time No  • star-delta circuit with delay time No  • star-delta circuit with control signal  • additive ON-delay Yes  • passing break contact Yes  • passing break contact Yes  • passing break contact Yes  • passing break contact/instantaneous  • OFF delay Yes  • OFF delay Yes  • OFF delay Yes  • pulse delayed/instantaneous  • pulse delayed/instantaneous  • pulse-shaping Yes  • pulse-shaping/instantaneous  • pulse-shaping/instantaneous  • pulse-shaping/instantaneous  • ON-delay/OFF-delay/instantaneous  • ON-delay/OFF-delay/instantaneous  • DN-delay/OFF-delay/instantaneous  • passing make contact  • passing make contact  • passing make contact Yes  • passing make contact Yes  • passing make contact No  switching function of interval relay with control signal  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with switched-on control signal  • retrotriggerable with deactivated control signal  • retrotriggerable with control terminal non-floating  Yes		
flashing symmetrically with interval start	OFF delay	No
• flashing symmetrically with pulse start/instantaneous     • flashing symmetrically with pulse start     • flashing asymmetrically with pulse start     • flashing asymmetrically with pulse start     • flashing function     • star-delta circuit with delay time     • star-delta circuit with control signal     • additive ON-delay     • passing break contact     • passing break contact     • passing break contact/instantaneous     • OFF delay     • OFF delay     • OFF delay     • OFF delay     • pulse delayed     • pulse delayed     • pulse delayed/instantaneous     • pulse-shaping     • pulse-shaping     • pulse-shaping Yes     • pulse-shaping/instantaneous     • ON-delay/FF-delay/instantaneous     • ON-delay/FF-delay/instantaneous     • ON-delay/FF-delay/instantaneous     • Dassing make contact     • passing make contact     • passing make contact     • passing make contact     • passing make contact     • protrotriggerable with deactivated control signal     • retrotriggerable with switched-on control signal     • retrotriggerable with switched-on control signal     • retrotriggerable with switched-on control signal     • retrotriggerable with deactivated control signal     • retrotriggerable with switched-on control signal     • retrotriggerable with deactivated control signal     • retrotriggerable with switched-on control signal     • retrotriggerable with deactivated control signal	_	
flashing symmetrically with pulse start     flashing asymmetrically with pulse start     flashing asymmetrically with pulse start     flashing asymmetrically with pulse start     No     flashing asymmetrically with pulse start     No     switching function     star-delta circuit with delay time     star-delta circuit     No     switching function with control signal     additive ON-delay     passing break contact     passing break contact/instantaneous     OFF delay     OFF delay/instantaneous     ON     Ouldelay/oFF-delay/instantaneous     Onedelay/oFF-delay/instantaneous     ON-delay/OFF-delay/instantaneous     ON-delay/OFF-delay/instantaneous     Onedelay/oFF-delay/instantaneous     Onedelay/oFF-de	- · · · · · · · · · · · · · · · · · · ·	No
flashing symmetrically with pulse start     flashing asymmetrically with interval start     flashing asymmetrically with pulse start     No     switching function     star-delta circuit with delay time     star-delta circuit     No     switching function with control signal     additive ON-delay     passing break contact     passing break contact     passing break contact/instantaneous     OFF delay/instantaneous     OFF delay/instantaneous     pulse delayed     pulse delayed     pulse delayed/instantaneous     pulse-shaping     pulse-shaping/instantaneous     pulse-shaping/instantaneous     additive ON-delay/instantaneous     pulse-shaping/instantaneous     pulse-shaping yes     pulse-shaping/instantaneous     No     additive ON-delay/instantaneous     No     ON-delay/OFF-delay/instantaneous     No     passing make contact     passing make contact     passing make contact yes     passing function of interval relay with control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control     signal/instantaneous contact     retrogrepable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal	<ul> <li>flashing symmetrically with interval start</li> </ul>	Yes
• flashing asymmetrically with interval start • flashing asymmetrically with pulse start  switching function • star-delta circuit with delay time • star-delta circuit  switching function with control signal • additive ON-delay • passing break contact • passing break contact/instantaneous • OFF delay • OFF delay • OFF delay • pulse delayed • pulse delayed • pulse shaping • pulse-shaping • pulse-shaping/instantaneous • oNo • ON-delay/ioFF-delay/instantaneous • oNo • pulse shaping yes • pulse ontact/instantaneous • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with deactivated control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal/instantaneous contact • retriggerable with deactivated control signal • retrotriggerable with deactivated control signal		No
• flashing asymmetrically with pulse start  switching function  • star-delta circuit with delay time  • additive ON-delay  • passing break contact  • passing break contact/instantaneous  • OFF delay  • pulse delayed  • pulse delayed/instantaneous  • pulse-shaping/instantaneous  • oudditive ON-delay/instantaneous  • pulse delayed/instantaneous  • pulse-shaping/instantaneous  • retrofrigerable with deactivated control signal  • retrotriggerable with switched-on control signal  • retrotriggerable with switched-on control signal  • retrotriggerable with deactivated control signal  • retrotriggerable with switched-on control signal  • retrotriggerable with switched-on control signal  • retrotriggerable with switched-on control signal  • retrotriggerable with deactivated control signal  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with deactivated control signal  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with deactivated control signal  • retrotriggerable with switched-on control  signal/instantaneous contact  • retrotriggerable with deactivated control signal	<ul> <li>flashing symmetrically with pulse start</li> </ul>	Yes
switching function  • star-delta circuit with delay time • star-delta circuit  switching function with control signal  • additive ON-delay • passing break contact • passing break contact/instantaneous • OFF delay • OFF delay/instantaneous • pulse delayed/instantaneous • pulse delayed/instantaneous • pulse-shaping • pulse-shaping/instantaneous • pulse-shaping/instantaneous • oNo • additive ON-delay/instantaneous • additive ON-delay/instantaneous • passing make contact • passing make contact • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal • retrotriggerable with switched-on control signal • retrotriggerable with deactivated control signal • retrotriggerable with switched-on control signal	<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
star-delta circuit with delay time star-delta circuit  switching function with control signal  additive ON-delay passing break contact passing break contact/instantaneous OFF delay OFF delay/instantaneous pulse delayed/instantaneous pulse-shaping pulse-shaping pulse-shaping pulse-shaping/instantaneous additive ON-delay/instantaneous ONo ON-delay/instantaneous No ON-delay/OFF-delay/instantaneous starditive ON-delay/instantaneous substantianeous substantianeo	flashing asymmetrically with pulse start	No
star-delta circuit  switching function with control signal     additive ON-delay     passing break contact     passing break contact/instantaneous     OFF delay     OFF delay     OFF delay/instantaneous     pulse delayed     pulse delayed/instantaneous     pulse-shaping     pulse-shaping     pulse-shaping/instantaneous     pulse-shaping/instantaneous     o Additive ON-delay/instantaneous     o Additive ON-delay/instantaneous     o No     o Passing make contact     passing make contact     passing make contact     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal     retrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal     retrotriggerable with switched-on control signal	switching function	
switching function with control signal  additive ON-delay  passing break contact  passing break contact/instantaneous  OFF delay  OFF delay  OFF delay  OFF delay  OFF delay/instantaneous  pulse delayed  pulse delayed/instantaneous  pulse-shaping  pulse-shaping  pulse-shaping/instantaneous  oON-delay/instantaneous  additive ON-delay/instantaneous  passing make contact  passing make contact  passing make contact/instantaneous contact  ves  retrotriggerable with deactivated control signal  retrotriggerable with switched-on control  retrotriggerable with switched-on control  retrotriggerable with deactivated control  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with switched-on control  retrotriggerable with deactivated  retrotriggerable with switched-on control  retrotriggerable with deactivated control	<ul> <li>star-delta circuit with delay time</li> </ul>	No
additive ON-delay passing break contact passing break contact/instantaneous OFF delay OFF delay OFF delay OFF delay/instantaneous pulse delayed pulse delayed/instantaneous pulse-shaping pulse-shaping pulse-shaping/instantaneous oNo oN-delay/instantaneous ON-delay/instantaneous oNo oN-delay/instantaneous No on-delay/OFF-delay/instantaneous passing make contact passing make contact passing make contact/instantaneous contact No  switching function of interval relay with control signal retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with switched-on control signal retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal		No
passing break contact passing break contact/instantaneous No OFF delay OFF delay OFF delay/instantaneous No pulse delayed pulse delayed/instantaneous No pulse-shaping pulse-shaping pulse-shaping/instantaneous No additive ON-delay/instantaneous No ON-delay/OFF-delay/instantaneous No passing make contact passing make contact passing make contact passing function of interval relay with control signal retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with deactivated control signal retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal retrotriggerable with deactivated control signal retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with deactivated control signal retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with switched-on control signal	switching function with control signal	
passing break contact/instantaneous OFF delay OFF delay OFF delay/instantaneous  pulse delayed pulse delayed/instantaneous  pulse-shaping pulse-shaping ONO  delay/instantaneous No  delayed-instantaneous No  delay-shaping/instantaneous No  delay-instantaneous No  ON-delay/OFF-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  retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retriggerable with deactivated control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with deactivated control signal yes design of the control terminal non-floating Yes  Short-circuit protection	<ul> <li>additive ON-delay</li> </ul>	Yes
OFF delay OFF delay/instantaneous OFF delay/instantaneous  pulse delayed pulse delayed/instantaneous  pulse-shaping  pulse-shaping  pulse-shaping/instantaneous  ditive ON-delay/instantaneous ON-delay/OFF-delay/instantaneous  ANO  passing make contact  passing make contact/instantaneous contact  passing function of interval relay with control signal  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with switched-on control signal  retrotriggerable with switched-on control signal/instantaneous contact  retrotriggerable with switched-on control signal/instantaneous contact  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with deactivated control signal  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with deactivated control signal	<ul> <li>passing break contact</li> </ul>	Yes
OFF delay/instantaneous  pulse delayed  pulse delayed/instantaneous  pulse-shaping  pulse-shaping  pulse-shaping/instantaneous  additive ON-delay/instantaneous  ON-delay/OFF-delay/instantaneous  passing make contact  passing make contact  passing make contact/instantaneous contact  passing make contact/instantaneous contact  No  switching function of interval relay with control signal  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with switched-on control signal  retrotriggerable with switched-on control signal/instantaneous contact  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with switched-on control signal/instantaneous contact  retriggerable with deactivated control signal  retrotriggerable with deactivated control signal  retrotriggerable with control terminal non-floating  retrotriggerable with deactivated control signal  retrotriggerable with deactivated control signal  retrotriggerable with control terminal non-floating  retrotriggerable with deactivated control signal	. •	No
pulse delayed pulse delayed/instantaneous pulse-shaping pulse-shaping/instantaneous pulse-shaping/instantaneous pulse-shaping/instantaneous pulse-shaping/instantaneous pulse-shaping/instantaneous pulse-shaping/instantaneous pulse-shaping/instantaneous No onditive ON-delay/instantaneous No onditive ON-delay/instantaneous passing make contact passing make contact passing make contact/instantaneous contact passing make contact/instantaneous contact passing make contact/instantaneous contact No switching function of interval relay with control signal retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal/instantaneous contact retrotriggerable with deactivated control signal/instantaneous contact retriggerable with deactivated control signal retrotriggerable with deactivated control signal		
pulse delayed/instantaneous  pulse-shaping  pulse-shaping/instantaneous  additive ON-delay/instantaneous  ON-delay/OFF-delay/instantaneous  passing make contact  passing make contact/instantaneous contact  passing make contact/instantaneous contact  No  switching function of interval relay with control signal  retrotriggerable with deactivated control signal/instantaneous contact  retrotriggerable with switched-on control signal  retrotriggerable with switched-on control signal  retrotriggerable with switched-on control  retrotriggerable with switched-on control  retriggerable with deactivated control  retriggerable with deactivated control  yes  design of the control terminal non-floating  Yes  Short-circuit protection	•	
pulse-shaping     pulse-shaping/instantaneous     pulse-shaping/instantaneous     additive ON-delay/instantaneous     ON-delay/OFF-delay/instantaneous     Passing make contact     passing make contact     passing make contact/instantaneous contact     passing make contact/instantaneous contact     vertrotriggerable with deactivated control signal     retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal/instantaneous contact     retriggerable with deactivated control signal     retriggerable with deactivated control signal     Yes  design of the control terminal non-floating  Short-circuit protection		
pulse-shaping/instantaneous     additive ON-delay/instantaneous     ON-delay/OFF-delay/instantaneous     passing make contact     passing make contact/instantaneous contact     passing make contact/instantaneous contact     No  switching function of interval relay with control signal     retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control     signal/instantaneous contact     retriggerable with deactivated control signal     retriggerable with deactivated control signal     Yes  design of the control terminal non-floating  Short-circuit protection		
additive ON-delay/instantaneous     ON-delay/OFF-delay/instantaneous     passing make contact     passing make contact/     passing make contact/instantaneous contact     No  switching function of interval relay with control signal     retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal/instantaneous contact     retriggerable with deactivated control signal     retriggerable with deactivated control signal     Yes  design of the control terminal non-floating  Short-circuit protection		
ON-delay/OFF-delay/instantaneous passing make contact passing make contact/instantaneous contact No  switching function of interval relay with control signal retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal retrotriggerable with switched-on control signal/instantaneous contact retriggerable with switched-on control signal/instantaneous contact retriggerable with deactivated control signal Yes  design of the control terminal non-floating Yes  Short-circuit protection		
<ul> <li>passing make contact/instantaneous contact</li> <li>passing make contact/instantaneous contact</li> <li>passing make contact/instantaneous contact</li> <li>retrotriggerable with deactivated control signal</li> <li>retrotriggerable with switched-on control signal</li> <li>retrotriggerable with switched-on control signal</li> <li>retrotriggerable with switched-on control signal</li> <li>retriggerable with switched-on control signal/instantaneous contact</li> <li>retriggerable with deactivated control signal</li> <li>retriggerable with deactivated control signal</li> <li>Yes</li> <li>design of the control terminal non-floating</li> <li>Yes</li> </ul>	•	
passing make contact/instantaneous contact  switching function of interval relay with control signal     retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal/instantaneous contact     retriggerable with deactivated control signal     retriggerable with deactivated control signal     retriggerable with deactivated control signal     Yes  design of the control terminal non-floating  Short-circuit protection	•	
switching function of interval relay with control signal  • retrotriggerable with deactivated control signal/instantaneous contact  • retrotriggerable with switched-on control signal  • 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		
retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal     retrotriggerable with switched-on control signal/instantaneous contact     retriggerable with deactivated control signal     retriggerable with deactivated control signal     Yes  design of the control terminal non-floating  Short-circuit protection		No
signal/instantaneous contact  • retrotriggerable with switched-on control signal  • 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		
◆ retrotriggerable with switched-on control signal/instantaneous contact      ◆ retriggerable with deactivated control signal  design of the control terminal non-floating  Short-circuit protection  No  Yes  Yes	signal/instantaneous contact	
signal/instantaneous contact  • retriggerable with deactivated control signal  design of the control terminal non-floating  Short-circuit protection  Yes  Yes	-	Yes
design of the control terminal non-floating  Yes  Short-circuit protection		No
Short-circuit protection	retriggerable with deactivated control signal	Yes
		Yes
design of the first light for about significant after a fig. 100 and 1	Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required fuse gL/gG: 4 A	design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	Auxiliary circuit	

material of switching contacts	AgSnO2
material of switching contacts	AgSnO2
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	
• 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)
contact rating of auxiliary contacts according to UL	R300 / B300
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	0.01 071
product function	
at the relay outputs switchover delayed/without delay	No
at the relay outputs switchover delayed/without delay     non-volatile	No
Indi-volatile     Electromagnetic compatibility	110
	ambignes A (industrial costsr)
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	O IA/ materials composition / 4 IA/ control composition
due to burst according to IEC 61000-4-4      due to conductor porth ourse according to IEC 61000-4-5.	2 kV network connection / 1 kV control connection
due to conductor-earth surge according to IEC 61000-4-5      due to conductor-earth surge according to IEC	2 kV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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	Yes
control circuit	
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
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	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 mm <sup>2</sup>
finely stranded without core end processing	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
	20 42
• stranded	20 12
• stranded Installation/ mounting/ dimensions	20 12
	any

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         0 mm           — backwards         0 mm	
depth 90 mm   required spacing   • with side-by-side mounting 0 mm   — forwards 0 mm   — backwards 0 mm   — upwards 0 mm   — downwards 0 mm   — at the side 0 mm   • for grounded parts 0 mm   — forwards 0 mm	
required spacing  • with side-by-side mounting  — forwards — backwards — upwards — upwards — downwards — at the side  • for grounded parts — forwards  — forwards  0 mm  0 mm	
<ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>0 mm</li> <li>0 mm</li> <li>0 mm</li> <li>0 mm</li> <li>0 mm</li> </ul>	
— forwards       0 mm         — backwards       0 mm         — upwards       0 mm         — downwards       0 mm         — at the side       0 mm         ● for grounded parts       0 mm         — forwards       0 mm	
— backwards       0 mm         — upwards       0 mm         — downwards       0 mm         — at the side       0 mm         ● for grounded parts       0 mm         — forwards       0 mm	
— upwards       0 mm         — downwards       0 mm         — at the side       0 mm         • for grounded parts       0 mm         — forwards       0 mm	
— downwards 0 mm  — at the side 0 mm  • for grounded parts — forwards 0 mm	
<ul> <li>— at the side</li> <li>● for grounded parts</li> <li>— forwards</li> <li>0 mm</li> <li>0 mm</li> </ul>	
for grounded parts     — forwards     0 mm	
— 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	

**General Product Approval** 



Confirmation









EMV **Test Certificates** Marine / Shipping



<u>KC</u>

Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report





Marine / Shipping other Railway **Environment** 









Confirmation

Confirmation

**Environmental Confirmations** 

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=3RP2505-2RW30

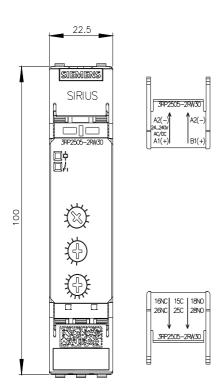
Cax online generator

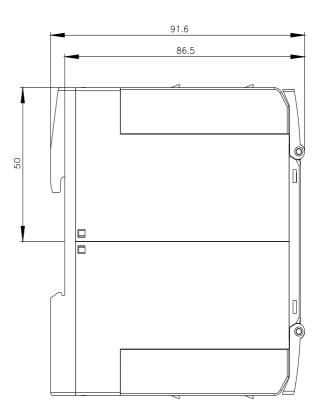
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-2RW30

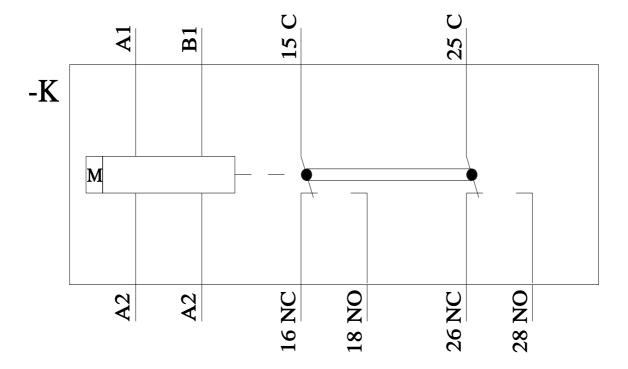
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2RW30

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2RW30/manual







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