## **SIEMENS**

Data sheet 3RP20 25-2AP30



Figure similar

SOLID-STATE TIME-DELAY RELAY ON-DELAY 1 CHANGEOVER CONTACT AC/DC 24V, AC 200 TO 240V 0.05 S TO 100H WIDTH 45MM CAGE CLAMP

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function non-volatile		No
Product component		
Relay output		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60
during storage	°C	-40 <b>+</b> 85
during transport	°C	-40 <b>+</b> 85
Relative humidity during operation	%	10 95
EMC emitted interference acc. to IEC 61812-1		EN 61000-6-4(3)
EMI immunity acc. to IEC 61812-1		EN 61000-6-2
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV network connection / 1 kV control connection
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Surge voltage resistance Rated value	V	4 000

Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended		К
according to IEC 204-2 acc. to IEC 750		
Equipment marking acc. to DIN EN 81346-2		K
Category acc. to EN 954-1		none
Protection against electrical shock		finger-safe
Protection class IP		IP20
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
Operating frequency with 3RT2 contactor maximum	1/h	5 000
Shock resistance acc. to IEC 60068-2-27		11g / 15 ms
Relative repeat accuracy	%	1
Recovery time	ms	150
Degree of pollution		3
Insulation voltage for overvoltage category III	V	300
according to IEC 60664 with degree of pollution 3		
Rated value		
Relative setting accuracy relating to full-scale value	%	5

Switching Function:			
Switching function			
ON-delay	Yes		
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No		
<ul> <li>passing make contact</li> </ul>	No		
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No		
OFF delay	No		
<ul> <li>flashing asymmetrically starting with interval</li> </ul>	No		
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>	No		
<ul> <li>flashing symmetrically starting with pulse</li> </ul>	No		
<ul> <li>flashing symmetrically starting with</li> </ul>	No		
pulse/instantaneous			
<ul> <li>flashing symmetrically starting with interval</li> </ul>	No		
<ul> <li>flashing symmetrically starting with</li> </ul>	No		
interval/instantaneous			
• star-delta circuit	No		
<ul> <li>star-delta circuit with delay time</li> </ul>	No		
Switching function with control signal			
<ul> <li>additive ON delay</li> </ul>	No		
<ul> <li>passing break contact</li> </ul>	No		
OFF delay	No		
• pulse-shaping	No		
OFF delay/instantaneous	No		
ON-delay/OFF-delay/instantaneous	No		

<ul><li>passing break contact/instantaneous</li></ul>	No
<ul> <li>additive ON delay/instantaneous</li> </ul>	No
<ul><li>ON-delay/OFF-delay</li></ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
• pulse delayed	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul><li>pulse-shaping/instantaneous</li></ul>	No
Switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control</li> </ul>	No
signal/instantaneous contact	
<ul> <li>retrotriggerable with activated control signal</li> </ul>	No
<ul> <li>retrotriggerable with activated control</li> </ul>	No
signal/instantaneous contact	
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No
Control circuit/ Control:	
Softi of Girodity Control.	

Control circuit/ Control:		
Adjustable time	S	0.05 360 000
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 2 with AC		
● at 50 Hz	V	200 240
● at 60 Hz	V	200 240
Operating range factor control supply voltage rated value		
• with AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• for DC		0.85 1.1

Auxiliary circuit:			
Contact reliability of the auxiliary contacts		one incorrect switching operation of 100 million	
		switching operations (17 V, 5 mA)	
Material of switching contacts		AgSnO2	
Operating current of the auxiliary contacts			
● at AC-15			
— at 24 V	Α	3	
— at 250 V	Α	3	
● at DC-13			
— at 24 V	Α	1	
— at 125 V	Α	0.2	
— at 250 V	Α	0.1	

Design of the fuse link for short-circuit protection of the auxiliary switch required		fuse gL/gG: 4 A
Thermal current	Α	5
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
• instantaneous contact		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
• instantaneous contact		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		1
• instantaneous contact		0

nstallation/ mounting/ dimensions:			
Mounting type		screw and snap-on mounting onto 35 mm standard	
		mounting rail	
Width	mm	45	
Height	mm	57	
Depth	mm	73	
Required spacing with side-by-side mounting			
• upwards	mm	0	
• forwards	mm	0	
• at the side	mm	0	
Backwards	mm	0	
• downwards	mm	0	
Required spacing for grounded parts			
Backwards	mm	0	
• at the side	mm	0	
• upwards	mm	0	
• forwards	mm	0	
• downwards	mm	0	
Required spacing for live parts			
• downwards	mm	0	
Backwards	mm	0	
• at the side	mm	0	
• forwards	mm	0	
• upwards	mm	0	

Connections/ Terminals:		
Type of electrical connection for auxiliary and control	spring-loaded terminals	
current circuit		
Type of connectable conductor cross-section		
• solid	2x (0,25 2,5 mm²)	
• finely stranded		

- without core end processing

- with core end processing

• for AWG conductors

- stranded

- solid

2x (0.25 ... 2.5 mm²)

2 x (0.25 ... 1.5 mm<sup>2</sup>)

2x (24 ... 14)

2x (24 ... 14)

## Certificates/ approvals:

General Product Approval EMC Declaration of Conformity Certificates











Special Test Certificate

## **Shipping Approval**

















Shipping Approval other



Environmental Confirmations

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP20252AP30

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

http://support.automation.siemens.com/WW/view/en/3RP20252AP30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP20252AP30&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP20252AP30&lang=en</a>

