SIEMENS

Data sheet

3RP25 05-2BT20



TIME RELAY, MULTI-FUNCTION, 2 CO CONT., 27 FUNCT., 15 TIME SET. RANGES (1, 3, 10, 30, 100) (S/MIN/HR), 400-440V AC AT AC 50/60HZ, LED, SPRING-LOADED TERMINAL (PUSH-IN)

Figure similar

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function at the relay outputs Switchover delayed/without delay		Yes
Product function non-volatile		No
Product component		
 Relay output 		Yes
 semi-conductor output 		No
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
 during operation 	°C	-25 +60
• during storage	°C	-40 +85
 during transport 	°C	-40 +85
Relative humidity		
 during operation 	%	15 70
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 BURST acc. to IEC 61000-4- 4		2 kV network connection / 1 kV control connection
Conducted interference conductor-earth SURGE acc. to IEC 61000-4-5		2 kV
Conducted interference 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
Reference code acc. to DIN 40719 extended		К
according to IEC 204-2 acc. to IEC 750		
Reference code acc. to DIN EN 81346-2		к
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 230 V typical		100 000
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
Minimum ON period	ms	35
Degree of pollution		3
Insulation voltage for overvoltage category III	V	500
according to IEC 60664 with degree of pollution 3 Rated value		
Relative setting accuracy relating to full-scale value	%	5
Relative setting accuracy relating to full-scale value	%	5
Switching Function:	%	5
Switching Function: Switching function	%	
Switching Function: Switching function • ON-delay	%	Yes
Switching Function: Switching function • ON-delay • ON-delay/instantaneous contact	%	Yes Yes
Switching Function: Switching function • ON-delay • ON-delay/instantaneous contact • passing make contact	%	Yes Yes Yes
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Switching Function: Switching function • ON-delay • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay	%	Yes Yes Yes Yes Yes
Switching Function: Switching function • ON-delay • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay • flashing asymmetrically starting with interval	%	Yes Yes Yes Yes No
Switching Function: Switching function • ON-delay • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay • flashing asymmetrically starting with interval • flashing asymmetrically starting with pulse	%	Yes Yes Yes Yes No No
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• OFF delay	Yes
• pulse-shaping	Yes
 OFF delay/instantaneous 	Yes
 ON-delay/OFF-delay/instantaneous 	Yes
 passing break contact/instantaneous 	Yes
 additive ON delay/instantaneous 	Yes
 ON-delay/OFF-delay 	Yes
 passing make contact 	Yes
 passing make contact/instantaneous contact 	Yes
• pulse delayed	Yes
 pulse delayed/instantaneous 	Yes
 pulse-shaping/instantaneous 	Yes
Switching function of interval relay with control signal	
 retrotriggerable with deactivated control signal/instantaneous contact 	Yes
 retrotriggerable with activated control signal 	Yes
 retrotriggerable with activated control signal/instantaneous contact 	Yes
 retriggerable with deactivated control signal 	Yes
Design of the control terminal non-floating	Yes

Control circuit/ Control:		
Adjustable time	S	0.05 360 000
Type of voltage of the control supply voltage	-	AC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage 1		
• with AC		
— at 50 Hz	V	400 440
— at 60 Hz	V	400 440
Operating range factor control supply voltage rated	-	
value		
• with AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		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	А	3
— at 250 V	А	3
• at DC-13		

— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of	-	fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	А	5
Switching capacity current	_	
 with inductive load 	А	0.01 3
Number of NC contacts	-	
 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

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Installation/	mounting	/ dimensions
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Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	22.5
Height	mm	100
Depth	mm	90
Spacing required with side-by-side mounting		
• upwards	mm	0
• forwards	mm	0
• at the side	mm	0
Backwards	mm	0
• downwards	mm	0
Spacing required for grounded parts	_	
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• forwards	mm	0
• downwards	mm	0
Spacing required for live parts		
• downwards	mm	0
Backwards	mm	0
• at the side	mm	0
• forwards	mm	0
• upwards	mm	0

Connections/ Terminals:	
Design of the electrical connection for auxiliary and control current circuit	PUSH-IN connection (spring-loaded connection)
Type of connectable conductor cross-section	
• solid	0.5 4 mm²
 finely stranded 	
- without core end processing	0.5 4 mm²
- with core end processing	0.5 2.5 mm ²
 for AWG conductors 	
— solid	20 12

Certificates/ approvals:

other

Environmental Confirmations

urther information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

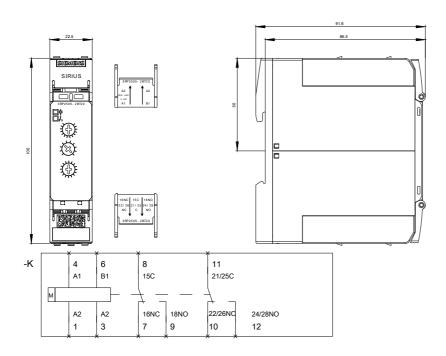
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP25052BT20

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP25052BT20&lang=en



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