# SIEMENS

#### Data sheet

### 3RP25 05-1BB30



TIME RELAY, MULTI-FUNCTION, 2 CO CONTACTS, 27 FUNCTIONS, 15 TIME SET. RANGES, (1, 3, 10, 30, 100), (S/MIN/HR), 24V AC/DC AT AC 50/60HZ, LED, SCREW TERMINAL

Figure similar

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function at the relay outputs Switchover		Yes
delayed/without delay		
Product function non-volatile		No
Product component		
<ul> <li>Relay output</li> </ul>		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 +60
during storage	°C	-40 +85
during transport	°C	-40 +85
Relative humidity		
<ul> <li>during operation</li> </ul>	%	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-		2 kV network connection / 1 kV control connection
4		
Conducted interference conductor-earth SURGE acc.		2 kV
to IEC 61000-4-5		
Conducted interference conductor-conductor SURGE		1 kV
acc. to IEC 61000-4-5		

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	300
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	/0	5
Switching Function:		
Switching function		
<ul> <li>ON-delay</li> </ul>		Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>		Yes
<ul> <li>passing make contact</li> </ul>		Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>		Yes
● OFF delay		Yes
<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>		Yes
<ul> <li>flashing symmetrically starting with pulse/instantaneous</li> </ul>		Yes
<ul> <li>flashing symmetrically starting with interval</li> </ul>		Yes
<ul> <li>flashing symmetrically starting with interval/instantaneous</li> </ul>		Yes
• star-delta circuit		Yes
<ul> <li>star-delta circuit with delay time</li> </ul>		No
Switching function with control signal		
Switching function with control signal		
		Yes
additive ON delay     passing break contact		Yes

• OFF delay	Yes
• pulse-shaping	Yes
<ul> <li>OFF delay/instantaneous</li> </ul>	Yes
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	Yes
<ul> <li>passing break contact/instantaneous</li> </ul>	Yes
<ul> <li>additive ON delay/instantaneous</li> </ul>	Yes
<ul> <li>ON-delay/OFF-delay</li> </ul>	Yes
<ul> <li>passing make contact</li> </ul>	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	Yes
• pulse delayed	Yes
<ul> <li>pulse delayed/instantaneous</li> </ul>	Yes
<ul> <li>pulse-shaping/instantaneous</li> </ul>	Yes
Switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	Yes
<ul> <li>retrotriggerable with activated control signal</li> </ul>	Yes
<ul> <li>retrotriggerable with activated control signal/instantaneous contact</li> </ul>	Yes
<ul> <li>retriggerable with deactivated control signal</li> </ul>	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/DC
Control supply voltage frequency 1	Hz	50 60
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	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 the auxiliary switch required	_	fuse gL/gG: 4 A
Thermal current	А	5
Switching capacity current		
<ul> <li>with inductive load</li> </ul>	А	0.01 3
Number of NC contacts	_	
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		2
<ul> <li>instantaneous contact</li> </ul>		0

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	screw-type terminals
control current circuit	
Type of connectable conductor cross-section	

	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
	1x (20 12), 2x (20 14)
	1x (20 12), 2x (20 14)
N∙m	0.6 0.8
	N∙m

Certificates/ approvals:		
General Product	Declaration of	other
Approval	Conformity	
r 11 r		Environmental Confirmations
FAL		
LIIL	EG-Konf.	

#### Further information

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

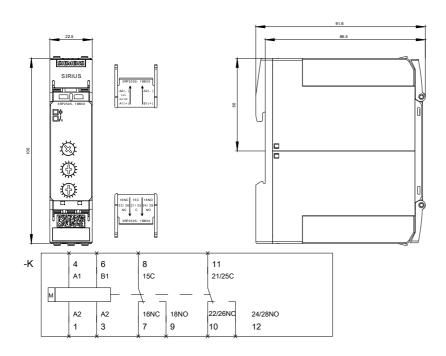
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP25051BB30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RP25051BB30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP25051BB30&lang=en



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