SIEMENS

3RP25 05-1BW30 Data sheet



TIME RELAY, MULTI-FUNCTION, 2 CO CONTACTS, 27 FUNCTIONS, 15 TIME SETTING RANGE(1,3,10, 30, 100) (S, MIN, HR), AC/DC 12... 240V, 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		
Relay output		Yes
• semi-conductor output		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-25 + 60
during storage	°C	-40 + 85
during transport	°C	-40 + 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
Power loss [W] total typical	W	2
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		К
Equipment marking 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
Vibration resistance acc. to IEC 60068-2-6		10 55 Hz / 0.35 mm
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 according to IEC 60664 with degree of pollution 3 rated value	V	300
Relative setting accuracy relating to full-scale value	%	5

Switching Function:	
Switching function	
ON-delay	Yes
 ON-delay/instantaneous contact 	Yes
 passing make contact 	Yes
 passing make contact/instantaneous contact 	Yes
OFF delay	Yes
 flashing asymmetrically starting with interval 	No
 flashing asymmetrically starting with pulse 	No
 flashing symmetrically starting with pulse 	Yes
 flashing symmetrically starting with pulse/instantaneous 	Yes
 flashing symmetrically starting with interval 	Yes

 flashing symmetrically starting with interval/instantaneous 		Yes
star-delta circuit		Yes
star-delta circuit with delay time		No
Switching function with control signal		
additive ON delay		Yes
passing break contact		Yes
OFF delay		Yes
•		Yes
pulse-shaping OFF delay/instantaneous		Yes
OFF delay/instantaneous ON delay/OFF delay/instantaneous		Yes
ON-delay/OFF-delay/instantaneous		Yes
passing break contact/instantaneous		
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/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage 1		
• at AC		
— at 50 Hz	V	12 240
— at 60 Hz	V	12 240
• at DC	V	12 240
Operating range factor control supply voltage rated value		
• at AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• at DC		0.85 1.1
- at DO		

uxiliary circuit:		
Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
Material of switching contacts		AgSnO2
Operating current of 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		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	Α	5
Switching capacity current with inductive load	Α	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
nstallation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	22.5
Height	mm	100
Depth	mm	90
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
at the sideupwards	mm 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		screw-type terminals
current circuit		
Type of connectable conductor cross-sections		
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
finely stranded		
— with core end processing		1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG conductors		
— stranded		1x (20 12), 2x (20 14)
— solid		1x (20 12), 2x (20 14)
Tightening torque	N·m	0.6 0.8

Certificates/ approvals:

General Product Approval

Declaration of other

Conformity











Umweltbestätigung

Railway

Bestätigungen

Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

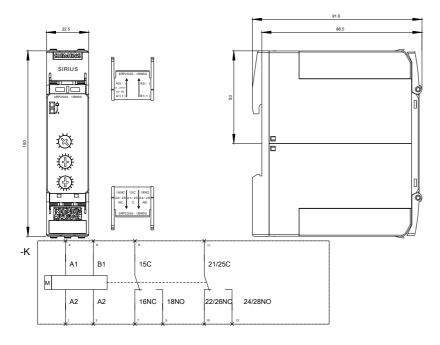
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP25051BW30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RP25051BW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP25051BW30&lang=en



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