SIEMENS

Data sheet 3RP25 40-1AB30



TIMING RELAY, ELECTRONIC, OFF-DELAY, WITHOUT CONTROL SIGNAL OR NON-VOLATILE RELAY POSITIVE PASSING MAKE CONTACT, 24 V DC, 1 CO CONTACT 7 TIME RANGES 0.05S...600S, WITH LED, SCREW TERMINALS

Figure similar

General technical data:		
product brand name		SIRIUS
Product designation		3RP25 timing relays 17.5 mm and 22.5 mm
Design of the product		OFF-delay without control signal, non-volatile, passing make contact
Mounting position		any
Product function at the relay outputs Switchover		No
delayed/without delay		
Product function non-volatile		Yes
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	- 70	EN 61000-6-4(3)
EMI immunity acc. to IEC 61812-1		EN 61000-6-2
Conducted interference due to burst acc. to IEC		2 kV network connection / 1 kV control connection
61000-4-4		2 KV Hetwork 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
• acc. to DIN EN 61346-2		К
• acc. to DIN EN 81346-2		К
Category acc. to EN 954-1		none
Protection against electrical shock		finger-safe
Protection class IP		IP20
Type of insulation		Basic insulation
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	250
Minimum ON period	ms	200
Degree of pollution		3
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3	V	300
rated value	0/	_
Relative setting accuracy relating to full-scale value	%	5
Product extension required remote control		No
Product extension optional remote control		No

Switching Function:		
Switching function		
ON-delay	No	
 ON-delay/instantaneous contact 	No	
passing make contact	No	
 passing make contact/instantaneous contact 	No	

OFF delay		Yes
 flashing asymmetrically starting with interval 		No
 flashing asymmetrically starting with pulse 		No
 flashing symmetrically starting with pulse 		No
 flashing symmetrically starting with pulse/instantaneous 		No
 flashing symmetrically starting with interval 		No
 flashing symmetrically starting with interval/instantaneous 		No
• star-delta circuit		No
 star-delta circuit with delay time 		No
Switching function with control signal	_	
additive ON delay		No
passing break contact		No
OFF delay		No
• pulse-shaping		No
OFF delay/instantaneous		No
 ON-delay/OFF-delay/instantaneous 		No
 passing break contact/instantaneous 		No
additive ON delay/instantaneous		No
ON-delay/OFF-delay		No
passing make contact		No
 passing make contact/instantaneous contact 		No
pulse delayed		No
 pulse delayed/instantaneous 		No
pulse-shaping/instantaneous		No
Switching function of interval relay with control signal		
 retrotriggerable with deactivated control signal/instantaneous contact 		No
 retrotriggerable with activated control signal 		No
 retrotriggerable with activated control signal/instantaneous contact 		No
 retriggerable with deactivated control signal 		No
Control circuit/ Control:		
Adjustable time	s	0.05 600
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 rated value	V	24
• at AC at 60 Hz rated value	V	24

• at DC rated value

24

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
Inrush current peak		
● at 24 V	Α	2
Duration of inrush current peak		
● at 24 V	ms	1
Power loss [W] at AC maximum	W	0.22
Power loss [V•A] at AC maximum	V·A	0.22

Auxiliary 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
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
Test voltage for isolation test	kV	2.5
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		1
• instantaneous contact		0

Installation/ 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
• 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 current circuit		screw-type terminals
Product function removable terminal for auxiliary and control circuit		Yes
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
Design of the thread of the connection screw		M3
Ampacity of the bridge terminals maximum	Α	10

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates











Typprüfbescheinigu ng/Werkszeugnis

Shipping	
Approval	

other

pproval

Umweltbestätigung

Bestätigungen



Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2540-1AB30

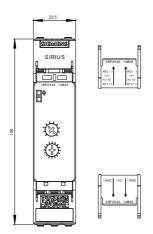
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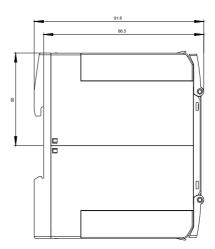
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1AB30

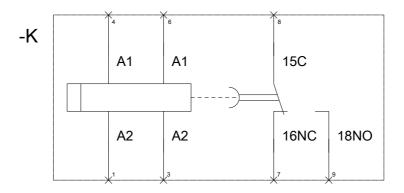
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AB30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1AB30&lang=en







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