



TIMING RELAY, SOLID-STATE, !!! PHASE-OUT PRODUCT !!! FOR FURTHER INFORMATION PLEASE CONTACT OUR SALES STAFF! OFF-DELAY, W/O AUX.VOLTAGE, 1 CO CONTACT 9 TIME SETTING RANGES 0.05S...600S, 24V AC/DC, WITH LED, SCREW TERMINAL

Figure similar

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
Mounting position		any
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	%	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		K
• acc. to DIN EN 61346-2		K
• acc. to DIN EN 81346-2		K
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	150
Minimum ON period	ms	200
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
Product extension required remote control		No
Product extension optional remote control		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

No
No
No
No
Yes
No

• flashing asymmetrically starting with pulse • flashing symmetrically starting with pulse • flashing symmetrically starting with pulse/instantaneous • flashing symmetrically starting with interval • flashing symmetrically starting with interval/instantaneous • star-delta circuit • star-delta circuit with delay time		No
		No
		No
		No
		No
		No
		No
Switching function with control signal		
• additive ON delay • passing break contact • OFF delay • pulse-shaping • OFF delay/instantaneous • ON-delay/OFF-delay/instantaneous • passing break contact/instantaneous • additive ON delay/instantaneous • ON-delay/OFF-delay • passing make contact • passing make contact/instantaneous contact • pulse delayed • pulse delayed/instantaneous • pulse-shaping/instantaneous		No
		No
		No
		No
		No
		No
		No
		No
		No
		No
		No
		No
		No
Switching function of interval relay with control signal		
• retrotriggerable with deactivated control signal/instantaneous contact • retrotriggerable with activated control signal • retrotriggerable with activated control signal/instantaneous contact • retriggerable with deactivated control signal		No
		No
		No
		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	V	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	0.7 ... 1.25

Auxiliary circuit:

Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
Material of switching contacts		AgNi
Operating current of auxiliary contacts		
• at AC-15		
— at 24 V	A	3
— at 250 V	A	3
• at DC-13		
— at 24 V	A	1
— at 125 V	A	0.2
— at 250 V	A	0.1
Influence of the surrounding temperature		±5 %
Power supply influence		±1 %
Test voltage for isolation test	kV	2
Design of the fuse link for short-circuit protection of the auxiliary switch required		fuse gL/gG: 4 A
Thermal current	A	5
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
Contact rating of auxiliary contacts according to UL		R300 / B300

Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	22.5
Height	mm	83
Depth	mm	91
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 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded		
— with core end processing		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• at AWG conductors		
— stranded		2x (20 ... 14)
— solid		2x (20 ... 14)
Tightening torque	N·m	0.8 ... 1.2
Design of the thread of the connection screw		M3

Certificates/approvals

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	spezielle Prüfbescheinigunge n

Shipping Approval					
 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS	 RINA

Shipping Approval	other		
 RMRS	Umweltbestätigung	Bestätigungen	sonstig

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=3RP1540-1AB31>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1540-1AB31>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP1540-1AB31>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1540-1AB31&lang=en

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