



Timing relay, electronic Phased-out product !!! For further information, please contact our sales department
OFF delay 1 change-over contact, without auxiliary voltage 9 time ranges, 0.05 s...600 s 24 V AC/DC with LED, Screw terminal

Figure similar

Article number		
Product brand name		SIRIUS
Product designation		timing relay
Product type designation		3RP15

General technical data		
Product component		
• Relay output		Yes
• semi-conductor output		No
Product extension required remote control		No
Product extension optional remote control		No
Power loss [W] total typical	W	2
Insulation voltage		
• for overvoltage category III according to IEC 60664		
— with degree of pollution 3 rated value	V	300
Test voltage for isolation test	kV	2
Degree of pollution		3
Surge voltage resistance rated value	V	4 000

Protection class IP		IP20
Shock resistance		
• acc. to IEC 60068-2-27		11g / 15 ms
Vibration resistance		
• acc. to IEC 60068-2-6		10 ... 55 Hz / 0.35 mm
Mechanical service life (switching cycles)		
• typical		10 000 000
Electrical endurance (switching cycles)		
• at AC-15 at 230 V typical		100 000
Adjustable time	s	0.05 ... 600
Relative setting accuracy relating to full-scale value	%	5
Thermal current	A	5
Minimum ON period	ms	200
Recovery time	ms	150
• Reference identifier acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		K
• Reference identifier acc. to DIN EN 61346-2		K
• Reference identifier acc. to DIN EN 81346-2		K
Relative repeat accuracy	%	1

Control circuit/ Control

Type of voltage of the control supply voltage		AC/DC
Control supply voltage 1 at AC		
• at 50 Hz rated value	V	24
• at 60 Hz rated value	V	24
Control supply voltage 1		
• at DC rated value	V	24
Control supply voltage frequency 1	Hz	50 ... 60
Operating range factor control supply voltage rated value at DC		
• initial value		0.7
• Full-scale value		1.25
Operating range factor control supply voltage rated value at AC at 50 Hz		
• initial value		0.85
• Full-scale value		1.1
Operating range factor control supply voltage rated value at AC at 60 Hz		
• initial value		0.85
• Full-scale value		1.1

Switching Function

Switching function		
• ON-delay		No

<ul style="list-style-type: none"> • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay 		No No No Yes
Switching function <ul style="list-style-type: none"> • flashing symmetrically starting with interval/instantaneous • flashing symmetrically starting with interval • flashing symmetrically starting with pulse/instantaneous • flashing symmetrically starting with pulse • flashing asymmetrically starting with interval • flashing asymmetrically starting with pulse 		No No No No No No
Switching function <ul style="list-style-type: none"> • star-delta circuit with delay time • star-delta circuit 		No No
Switching function with control signal <ul style="list-style-type: none"> • additive ON delay • passing break contact • passing break contact/instantaneous • OFF delay • OFF delay/instantaneous • pulse delayed • pulse delayed/instantaneous • pulse-shaping • pulse-shaping/instantaneous • additive ON delay/instantaneous • ON-delay/OFF-delay/instantaneous • passing make contact • passing make contact/instantaneous contact 		No No No No No No No No No No No No No
Switching function of interval relay with control signal <ul style="list-style-type: none"> • 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
Short-circuit protection		
Design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 		fuse gL/gG: 4 A

Auxiliary circuit		
Material of switching contacts		AgNi
Number of NC contacts		0
• delayed switching		
Number of NO contacts		0
• delayed switching		
Number of CO contacts		1
• delayed switching		
Operating current of auxiliary contacts at AC-15		
• at 24 V	A	3
• at 250 V	A	3
Operating current of auxiliary contacts at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	0.1
Operating frequency with 3RT2 contactor maximum	1/h	5 000
Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
Contact rating of auxiliary contacts according to UL		R300 / B300
Influence of the surrounding temperature		±5 %
Power supply influence		±1 %

Inputs/ Outputs		
Product function		
• non-volatile		No

Electromagnetic compatibility		
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
• due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge

Safety related data		
Protection against electrical shock		finger-safe
Type of insulation		Basic insulation
Category acc. to EN 954-1		none

Connections/Terminals		
Product function		

• removable terminal for auxiliary and control circuit		Yes
Type of electrical connection		
• for auxiliary and control current circuit		screw-type terminals
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 solid		2x (20 ... 14)
• at AWG conductors stranded		2x (20 ... 14)
Connectable conductor cross-section		
• solid	mm ²	0.5 ... 4
• finely stranded with core end processing	mm ²	0.5 ... 2.5
AWG number as coded connectable conductor cross section		
• solid		20 ... 14
• stranded		20 ... 14
Tightening torque	N·m	0.8 ... 1.2
Design of the thread of the connection screw		M3

Installation/ mounting/ dimensions

Mounting position		any
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Height	mm	83
Width	mm	22.5
Depth	mm	91
Required spacing		
• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	0
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0

— downwards

— at the side

mm	0
mm	0



Ambient conditions

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

Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates
 CCC	 EAC	 EG-Konf.
 CSA		Special Test Certificate
 UL		

Test Certificates	Marine / Shipping
Type Test Certificates/Test Report	 BUREAU VERITAS
	 GL
	 LRS
	 PRS
	 RINA

Marine / Shipping	other
 RMRS	Confirmation
 DNV-GL	Miscellaneous

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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