



Timing relay, electronic ansprechverzögert 1 NO (semiconductor) 2-wire 4 time ranges 0.05...240 s 12-240 V AC/DC screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP25
General technical data	
product component	
• relay output	No
• semi-conductor output	Yes
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
test voltage for isolation test	2.5 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
vibration resistance according 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	0.05 ... 240 s
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	0.6 A
recovery time	250 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	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
Substance Prohibitance (Date)	09/12/2014
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	12 ... 240 V
• at 60 Hz	12 ... 240 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1	
• at DC	12 ... 240 V
operating range factor control supply voltage rated value at DC	
• initial value	0.8

<ul style="list-style-type: none"> • full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 50 Hz <ul style="list-style-type: none"> • initial value • full-scale value 	0.8 1.1
operating range factor control supply voltage rated value at AC at 60 Hz <ul style="list-style-type: none"> • initial value • full-scale value 	0.8 1.1
inrush current peak <ul style="list-style-type: none"> • at 24 V • at 240 V 	0.1 A 1 A
duration of inrush current peak <ul style="list-style-type: none"> • at 24 V • at 240 V 	0.01 ms 0.04 ms
Switching Function	
switching function <ul style="list-style-type: none"> • ON-delay • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay 	Yes No No No No
switching function <ul style="list-style-type: none"> • flashing symmetrically with interval start/instantaneous • flashing symmetrically with interval start • flashing symmetrically with pulse start/instantaneous • flashing symmetrically with pulse start • flashing asymmetrically with interval start • flashing asymmetrically with pulse start 	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 switched-on control signal • retrotriggerable with switched-on control signal/instantaneous contact • retriggerable with deactivated control signal 	No No No No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
number of NC contacts <ul style="list-style-type: none"> • delayed switching 	0

<ul style="list-style-type: none"> instantaneous contact 	0
number of NO contacts	
<ul style="list-style-type: none"> delayed switching 	1
<ul style="list-style-type: none"> instantaneous contact 	0
number of CO contacts	
<ul style="list-style-type: none"> delayed switching 	0
<ul style="list-style-type: none"> instantaneous contact 	0
operating frequency with 3RT2 contactor maximum	5 000 1/h
switching capacity current with inductive load	0.01 ... 0.6 A
Inputs/ Outputs	
product function	
<ul style="list-style-type: none"> at the relay outputs switchover delayed/without delay 	No
<ul style="list-style-type: none"> non-volatile 	No
residual current maximum	5 mA
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	ambience A (industrial sector)
EMC immunity according to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 	2 kV network connection / 1 kV control connection
<ul style="list-style-type: none"> due to conductor-earth surge according to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> due to conductor-conductor surge according to IEC 61000-4-5 	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front according to IEC 60529	IP20
category according to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> solid 	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> finely stranded with core end processing 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> at AWG cables solid 	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> at AWG cables stranded 	1x (20 ... 12), 2x (20 ... 14)
connectable conductor cross-section	
<ul style="list-style-type: none"> solid 	0.5 ... 4 mm ²
<ul style="list-style-type: none"> finely stranded with core end processing 	0.5 ... 4 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid 	20 ... 12
<ul style="list-style-type: none"> stranded 	20 ... 14
tightening torque	0.6 ... 0.8 N·m
design of the thread of the connection screw	M3
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	100 mm
width	17.5 mm
depth	90 mm
required spacing	
<ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards backwards upwards downwards at the side 	0 mm
	0 mm
	0 mm
	0 mm
	0 mm

- for grounded parts
 - forwards 0 mm
 - backwards 0 mm
 - upwards 0 mm
 - at the side 0 mm
 - downwards 0 mm
- for live parts
 - forwards 0 mm
 - backwards 0 mm
 - upwards 0 mm
 - downwards 0 mm
 - at the side 0 mm



Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity during operation	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 Confirmation		  

Declaration of Conformity	Test Certificates	Marine / Shipping
	Type Test Certificates/Test Report	   

Marine / Shipping	other
 	Confirmation

Further information

- Information- and Downloadcenter (Catalogs, Brochures,...)
<https://www.siemens.com/ic10>
- Industry Mall (Online ordering system)
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2527-1EW30>
- Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2527-1EW30>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2527-1EW30>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2527-1EW30&lang=en
- Characteristic: Derating
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2527-1EW30/manual>

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