



Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges 0.05 s...100 h 24 V AC/DC at 50/60 Hz AC with LED, screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP25
General technical data	
product feature protective coating on printed-circuit board	No
product component	
• relay output	Yes
• semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.5 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 s ... 100 h
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
recovery time	150 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
Weight	0.163 kg
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1 at DC rated value	24 V
operating range factor control supply voltage rated value at DC	

<ul style="list-style-type: none"> initial value 	0.85
<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 	0.85
<ul style="list-style-type: none"> full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> initial value 	0.85
<ul style="list-style-type: none"> full-scale value 	1.1
inrush current peak	
<ul style="list-style-type: none"> at 24 V 	2 A
duration of inrush current peak	
<ul style="list-style-type: none"> at 24 V 	1 ms
Switching Function	
switching function	
<ul style="list-style-type: none"> ON-delay 	Yes
<ul style="list-style-type: none"> ON-delay/instantaneous contact 	No
<ul style="list-style-type: none"> passing make contact 	No
<ul style="list-style-type: none"> passing make contact/instantaneous contact 	No
<ul style="list-style-type: none"> OFF delay 	No
switching function	
<ul style="list-style-type: none"> flashing symmetrically with interval start/instantaneous 	No
<ul style="list-style-type: none"> flashing symmetrically with interval start 	No
<ul style="list-style-type: none"> flashing symmetrically with pulse start/instantaneous 	No
<ul style="list-style-type: none"> flashing symmetrically with pulse start 	No
<ul style="list-style-type: none"> flashing asymmetrically with interval start 	No
<ul style="list-style-type: none"> flashing asymmetrically with pulse start 	No
switching function	
<ul style="list-style-type: none"> star-delta circuit with delay time 	No
<ul style="list-style-type: none"> star-delta circuit 	No
switching function with control signal	
<ul style="list-style-type: none"> additive ON-delay 	No
<ul style="list-style-type: none"> passing break contact 	No
<ul style="list-style-type: none"> passing break contact/instantaneous 	No
<ul style="list-style-type: none"> OFF delay 	No
<ul style="list-style-type: none"> OFF delay/instantaneous 	No
<ul style="list-style-type: none"> pulse delayed 	No
<ul style="list-style-type: none"> pulse delayed/instantaneous 	No
<ul style="list-style-type: none"> pulse-shaping 	No
<ul style="list-style-type: none"> pulse-shaping/instantaneous 	No
<ul style="list-style-type: none"> additive ON-delay/instantaneous 	No
<ul style="list-style-type: none"> ON-delay/OFF-delay/instantaneous 	No
<ul style="list-style-type: none"> passing make contact 	No
<ul style="list-style-type: none"> passing make contact/instantaneous contact 	No
switching function of interval relay with control signal	
<ul style="list-style-type: none"> retrotriggerable with deactivated control signal/instantaneous contact 	No
<ul style="list-style-type: none"> retrotriggerable with switched-on control signal 	No
<ul style="list-style-type: none"> retrotriggerable with switched-on control signal/instantaneous contact 	No
<ul style="list-style-type: none"> retriggerable with deactivated control signal 	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	
material of switching contacts	AgSnO2
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 	0

<ul style="list-style-type: none"> instantaneous contact 	0
number of CO contacts	
<ul style="list-style-type: none"> delayed switching 	2
<ul style="list-style-type: none"> instantaneous contact 	0
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> at 24 V 	3 A
<ul style="list-style-type: none"> at 250 V 	3 A
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> at 24 V 	1 A
<ul style="list-style-type: none"> at 125 V 	0.2 A
<ul style="list-style-type: none"> at 250 V 	0.1 A
operating frequency with 3RT2 contactor maximum	5 000 1/h
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
switching capacity current with inductive load	0.01 ... 3 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

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

category according to EN 954-1	none
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Electrical Safety

protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation

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 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"> for AWG cables solid 	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> for 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 DIN rail
height	100 mm
width	22.5 mm
depth	90 mm
required spacing	
<ul style="list-style-type: none"> with side-by-side mounting 	
— forwards	0 mm

- backwards 0 mm
- upwards 0 mm
- downwards 0 mm
- at the side 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 %

Approvals Certificates

General Product Approval	EMV
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EMV	Test Certificates	Maritime application
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[KC](#)

[Type Test Certificates/Test Report](#)



Maritime application	other	Environment
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[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RP2525-1BB30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-1BB30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-1BB30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2525-1BB30&lang=en



