

Timing relay, electronic ansprechverzögert 1 change-over contact, 1 time range 0.5...10 s 12-240 V AC/DC at 50/60 Hz AC with LED, Spring-type terminal (push-in)



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	Yes
• semi-conductor output	No
Product extension required remote control	No
Product extension optional remote control	No
• — 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
• 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	0.5 ... 10 s
Relative setting accuracy relating to full-scale value	5 %
thermal current	5 A
• recovery time	250 ms
Reference code 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	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
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
• full-scale value	1.1
Inrush current peak	
• at 24 V	0.4 A
• at 240 V	5 A
Duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms

Switching Function

• switching function ON-delay	Yes
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<ul style="list-style-type: none"> • switching function ON-delay/instantaneous contact 	No
<ul style="list-style-type: none"> • switching function passing make contact 	No
<ul style="list-style-type: none"> • switching function passing make contact/instantaneous contact 	No
<ul style="list-style-type: none"> • Switching function OFF delay 	No
Switching function	
<ul style="list-style-type: none"> • flashing symmetrically starting with interval/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with interval 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse 	No
<ul style="list-style-type: none"> • flashing asymmetrically starting with interval 	No
<ul style="list-style-type: none"> • flashing asymmetrically starting with pulse 	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
<ul style="list-style-type: none"> • Switching function with control signal additive ON delay 	No
<ul style="list-style-type: none"> • Switching function with control signal passing break contact 	No
<ul style="list-style-type: none"> • Switching function with control signal passing break contact/instantaneous 	No
<ul style="list-style-type: none"> • Switching function with control signal OFF delay 	No
<ul style="list-style-type: none"> • Switching function with control signal OFF delay/instantaneous 	No
<ul style="list-style-type: none"> • Switching function with control signal pulse delayed 	No
<ul style="list-style-type: none"> • Switching function with control signal pulse delayed/instantaneous 	No
<ul style="list-style-type: none"> • switching function with control signal pulse-shaping 	No
<ul style="list-style-type: none"> • Switching function with control signal pulse-shaping/instantaneous 	No
<ul style="list-style-type: none"> • Switching function with control signal additive ON delay/instantaneous 	No
<ul style="list-style-type: none"> • Switching function with control signal ON-delay/OFF-delay/instantaneous 	No
<ul style="list-style-type: none"> • Switching function with control signal passing make contact 	No
<ul style="list-style-type: none"> • Switching function with control signal passing make contact/instantaneous contact 	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

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	AgSnO ₂
Number of NC contacts	
• delayed switching	0
Number of NO contacts	
• delayed switching	0
Number of CO contacts	
• delayed switching	1
• operating current of auxiliary contacts at AC-15 at 24 V	3 A
• operating current of auxiliary contacts at AC-15 at 250 V	3 A
• operating current of auxiliary contacts at DC-13 at 24 V	1 A
• operating current of auxiliary contacts at DC-13 at 125 V	0.2 A
• operating current of auxiliary contacts at DC-13 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
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
Switching capacity current with inductive load	0.01 ... 3 A

Inputs/ Outputs

• Product function at the relay outputs Switchover delayed/without delay	No
• Product function non-volatile	No

Electromagnetic compatibility

EMI immunity	
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• 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	spring-loaded terminals (push-in)
• type of connectable conductor cross-sections solid	0.5 ... 4 mm ²
• Type of connectable conductor cross-sections finely stranded with core end processing	0.5 ... 2.5 mm ²
• Type of connectable conductor cross-sections finely stranded without core end processing	0.5 ... 4 mm ²
• Type of connectable conductor cross-sections at AWG conductors solid	20 ... 12
• Type of connectable conductor cross-sections at AWG conductors stranded	20 ... 12
• connectable conductor cross-section solid	0.5 ... 4 mm ²
• connectable conductor cross-section finely stranded with core end processing	0.5 ... 2.5 mm ²
• connectable conductor cross-section finely stranded without core end processing	0.5 ... 4 mm ²
AWG number as coded connectable conductor cross section	
• solid	20 ... 12
• stranded	20 ... 12

Installation/ mounting/ dimensions	
• mounting position	any
Mounting type	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 0 mm — Backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 0 mm — at the side 0 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — 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	
<ul style="list-style-type: none"> • maximum 2 000 m 	
Ambient temperature	
<ul style="list-style-type: none"> • during operation -25 ... +60 °C • during storage -40 ... +85 °C • during transport -40 ... +85 °C 	
Relative humidity	
<ul style="list-style-type: none"> • during operation 10 ... 95 % 	

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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CCC



CSA



UL



RCM



EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



BUREAU VERITAS



LRS



PRS



RINA

Marine / Shipping	other
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RMRS



DNV-GL

[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=3RP2511-2AW30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2511-2AW30>

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

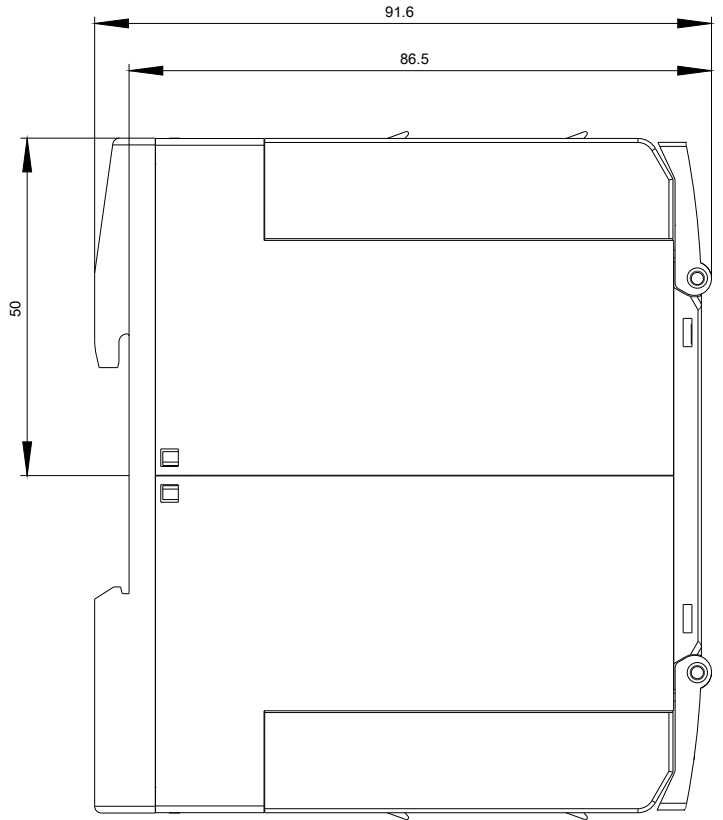
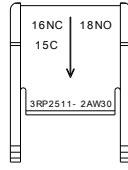
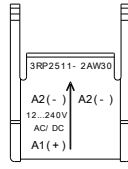
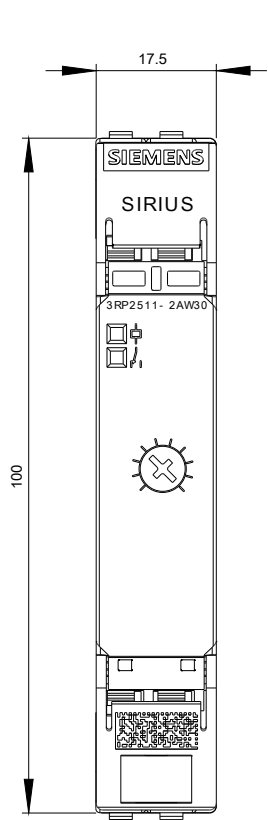
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2511-2AW30>

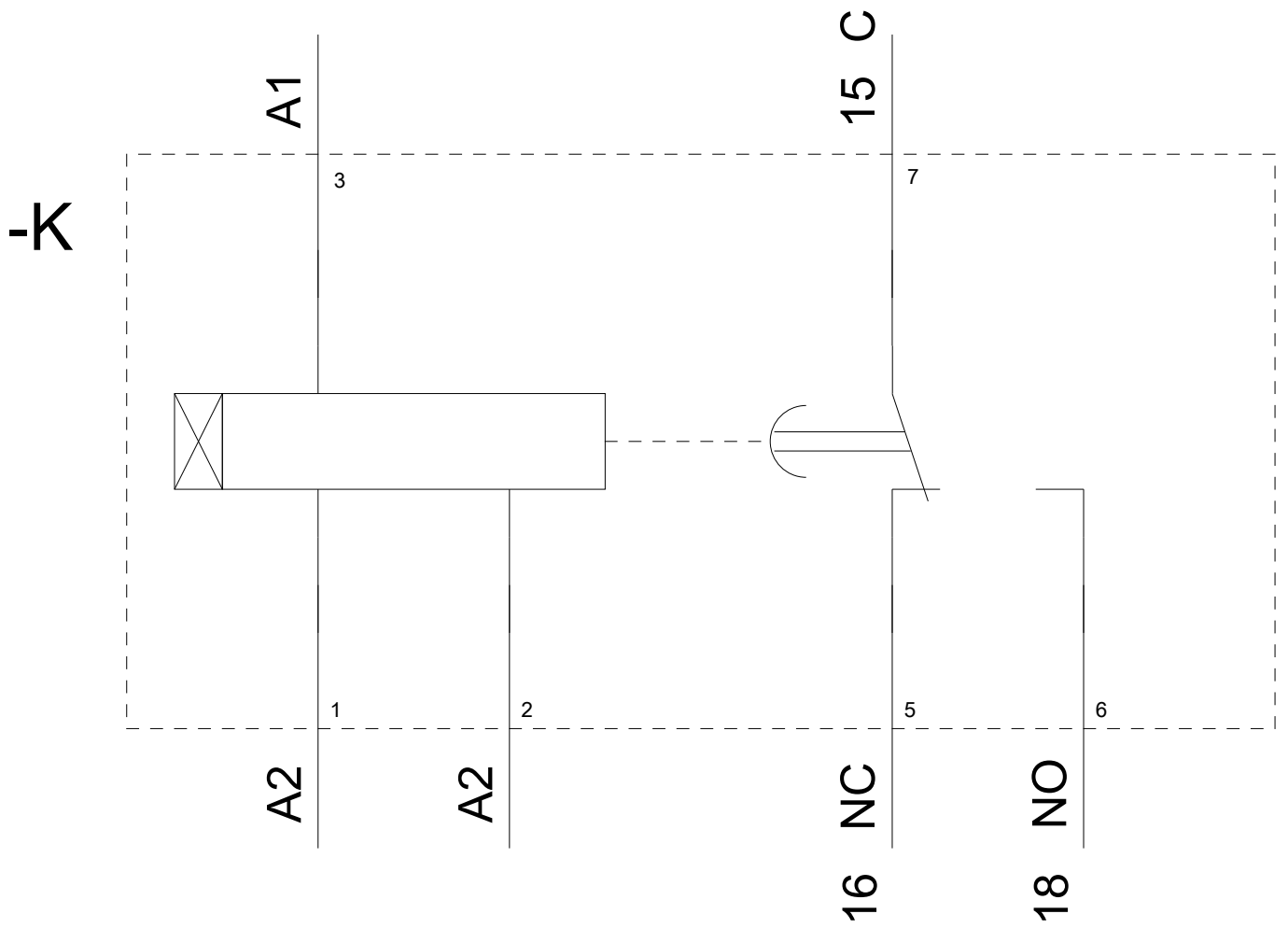
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2511-2AW30&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2511-2AW30/manual>





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