SIEMENS

Data sheet

3RP2512-1AW30



Timing relay, electronic ansprechverzögert 1 change-over contact, 1 time range 1.5...30 s 12-240 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 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	1 30 s
relative setting accuracy relating to full-scale value	5 %
thermal current	5 A
recovery time	250 ms
reference code acc. to IEC 81346-2	К
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

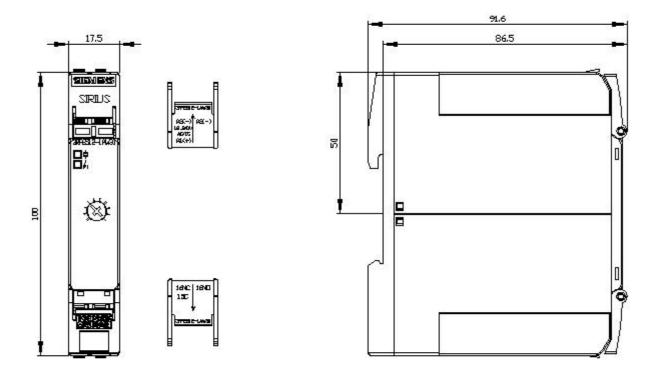
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	0.8
 full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	0.8
• full-scale value	1.1
inrush current peak	
• at 24 V	0.4 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms
Switching Function	
switching function	
ON-delay	Yes
 ON-delay/instantaneous contact 	No
 passing make contact 	No
 passing make contact/instantaneous contact 	No
• OFF delay	No
switching function	
 flashing symmetrically with interval start/instantaneous 	No
 flashing symmetrically with interval start 	No
 flashing symmetrically with pulse start/instantaneous 	No
 flashing symmetrically with pulse start 	No
 flashing asymmetrically with interval start 	No
 flashing asymmetrically with pulse start 	No
switching function	
 star-delta circuit with delay time 	No
star-delta circuit	No
switching function with control signal	
 additive ON-delay 	No
 passing break contact 	No
 passing break contact/instantaneous 	No
 OFF delay 	No
 OFF delay/instantaneous 	No
 pulse delayed 	No
 pulse delayed/instantaneous 	No
 pulse-shaping 	No
 pulse-shaping/instantaneous 	No
 additive ON-delay/instantaneous 	No
 ON-delay/OFF-delay/instantaneous 	No
 passing make contact 	No
 passing make contact/instantaneous contact 	No
switching function of interval relay with control signal	
 retrotriggerable with deactivated control signal/instantaneous contact 	No
retrotriggerable with switched-on control signal	No
retrotriggerable with switched-on 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	AgSnO2
number of NC contacts delayed switching	0

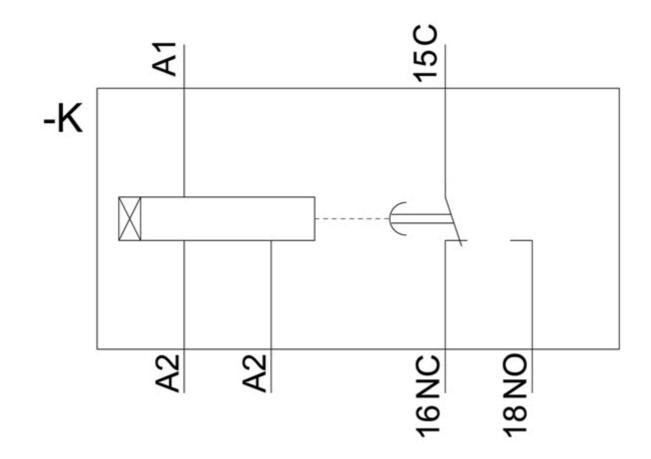
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number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• 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
non-volatile	No
Electromagnetic compatibility	
EMC 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 	1 kV
61000-4-5	
field-based interference 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	4 KV contact discharge / 8 KV air discharge
_	finger-safe
Safety related data	
Safety related data touch protection against electrical shock	finger-safe
Safety related data touch protection against electrical shock type of insulation	finger-safe Basic insulation
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1	finger-safe Basic insulation
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and	finger-safe Basic insulation none
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit	finger-safe Basic insulation none Yes
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²)
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	finger-safe Basic insulation none Yes screw-type terminals
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14)
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²)
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14)
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section solid	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ²
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm² 0.5 4 mm²
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 12
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • connectable conductor cross-section finely stranded with core end processing • AWG cables stranded • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid	finger-safe Basic insulation none Yes screw-type terminals $1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$ $1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$ 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ 20 12 20 14 0.6 0.8 N·m
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • AWG cables stranded • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions	finger-safe Basic insulation none Yes screw-type terminals $1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$ $1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$ 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ 20 12 20 14 0.6 0.8 N·m
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm² 20 12 20 12 20 14 0.6 0.8 N·m M3
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • AWG cables stranded • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 4 mm ²), 2x (0.5 1.5 mm ²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm ² 0.5 4 mm ² 20 12 20 14 0.6 0.8 N·m M3
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • AWG cables stranded • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm² 0.5 4 mm² 0.5 4 mm² any screw and snap-on mounting onto 35 mm standard mounting rail
Safety related data touch protection against electrical shock type of insulation category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height	finger-safe Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm² 20 12 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm standard mounting rail 100 mm

	lo mounting				
 with side-by-side — forwards 	le mounting		0 mm		
— backwards			0 mm		
— upwards	2		0 mm		
— downward	e		0 mm		
— at the side			0 mm		
 for grounded participation 			0 mm		
— forwards	anto		0 mm		
— backwards			0 mm		
— upwards	2		0 mm		
— at the side	x		0 mm		
— downward			0 mm		
 for live parts 	5		0 mm		
• for live parts — forwards			0 mm		
— backwards			0 mm		
— upwards	2		0 mm		
— downward	e		0 mm		
— at the side			0 mm		
Ambient conditions	;		Unini		
	hoight above and level	mavimum	2 000 m		_
	height above sea level	maximum	2 000 m		
	rature during operation		-25 +60 °C		
	rature during storage		-40 +85 °C		
	rature during transport		-40 +85 °C		
relative humidity durin			10 95 %		
Certificates/ approval	S				
General Product Ap	oproval			EMC	Declaration of Conformity
General Product Ap	oproval			EMC	Declaration of Conformity
General Product Ap	oproval			ЕМС	
General Product Ap	oproval	ጫ	597	емс	Conformity
General Product Ap		٩	EAC	ЕМС	Conformity
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General Product Ap		UL UL	EAC	EMC RCM	Conformity
General Product Ap		(U) u	EAC	EMC RCM	Conformity
Declaration of		UL UL	EAC	EMC RCM	Conformity
SP CM	CCC	UL UL	Ping	EMC RCM	Conformity
Declaration of	ccc	UL UL	Ping	EMC RCM	Conformity
Declaration of	CCC Test Certificates	UL UL Marine / Ship	Ping	EMC RCM	Conformity
Declaration of Conformity	ccc	UL Marine / Ship	ping Keyster	EMC RCM	Conformity
Declaration of	Ccc Test Certificates	BUREAU	Lloyds Register Us	EMC RCM	Conformity
Declaration of Conformity	Ccc Test Certificates	Marine / Ship	Lloyds Register Us	EMC RCM	Conformity
Declaration of Conformity	Ccc Test Certificates	BUREAU	Lloyds Register Us	EMC RCM	Conformity
Declaration of Conformity EG-Konf.	Ccc Test Certificates	BUREAU VERITAS	Lloyds Register Us	EMC RCM	Conformity
Declaration of Conformity	Ccc Test Certificates	BUREAU	Lloyds Register Us	EMC RCM	Conformity
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Declaration of Conformity EG-Konf.	Ccc Test Certificates	BUREAU VERITAS	Hoyds Register urs	EMC RCM	Conformity
Declaration of Conformity EG-Konf.	Ccc Test Certificates Certificates/Test Certificates/Test Report	BUREAU VERITAS	Hoyds Register urs	EMC RCM	Conformity
Declaration of Conformity EG-Konf.	CCC Test Certificates Type Test Certificates/Test Report	BUREAU VERITAS	Hoyds Register urs	EMC	Conformity
Declaration of Conformity EG-Konf.	Ccc Test Certificates Certificates/Test Certificates/Test Report	BUREAU VERITAS	Hoyds Register urs	EMC	Conformity
Declaration of Conformity EG-Konf.	Ccc Test Certificates Certificates/Test Certificates/Test Report	BUREAU VERITAS	Hoyds Register urs	EMC	Conformity

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