SIEMENS

Data sheet

3RP2525-2BB30



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, Spring-type terminal (Push-In)

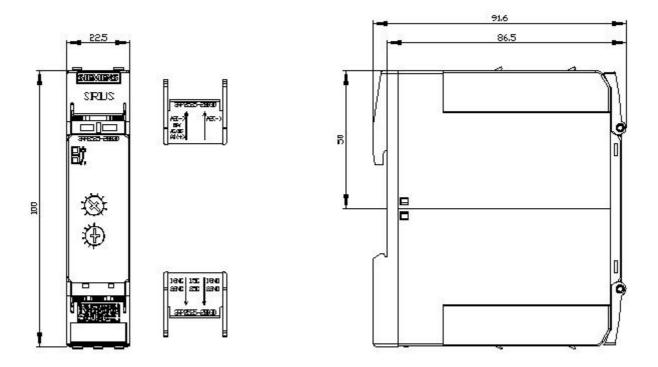
product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP25
General technical data	
product component	
 relay output 	Yes
semi-conductor output	No
product extension required remote control	No
product extension optional remote control	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	0.05 s 100 h
relative setting accuracy relating to full-scale value	5 %
thermal current	5 A
recovery time	150 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 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	
initial value	0.85
• full-scale value	1.1

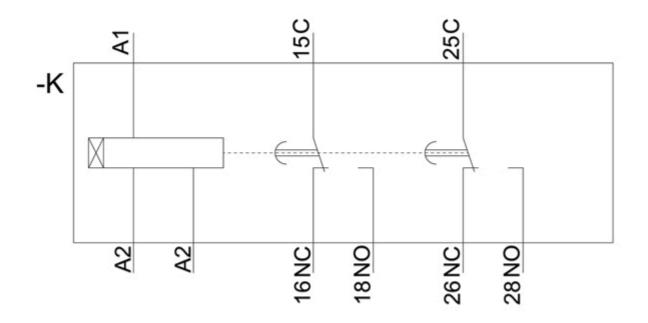
operating range factor control supply voltage rated value at AC at 50 Hz	
 initial value 	0.85
 full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	0.85
• full-scale value	1.1
inrush current peak	
• at 24 V	2 A
duration of inrush current peak	
• at 24 V	1 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
number of NO contacts delayed switching	0
number of CO contacts delayed switching	2

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 61000-4-5	1 kV		
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	· · ·		
touch protection against electrical shock	finger-safe		
	, č		
type of insulation	Basic insulation		
type of insulation category acc. to EN 954-1	none		
category acc. to EN 954-1			
category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and			
category acc. to EN 954-1 Connections/ Terminals product function removable terminal for auxiliary and control circuit	none Yes		
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	none		
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	none Yes spring-loaded terminals (push-in)		
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	none Yes spring-loaded terminals (push-in) 0.5 4 mm ²		
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	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ²		
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 • finely stranded without core end processing	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ²		
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 • finely stranded without core end processing • at AWG cables solid	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12		
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 • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12		
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 • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12 0.5 4 mm ²		
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	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12 0.5 4 mm ² 0.5 2.5 mm ²		
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 • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • connectable conductor cross-section solid • connectable conductor cross-section solid	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12 0.5 4 mm ²		
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 • finely stranded without core end processing • at AWG cables solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section solid • connectable conductor cross-section solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12 0.5 4 mm ² 0.5 2.5 mm ²		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded without core end processing • AWG number as coded connectable conductor	none Yes spring-loaded terminals (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 0.5 4 mm ² 20 12 20 12 0.5 4 mm ² 0.5 4 mm ² 0.5 4 mm ²		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded without 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	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 0.5 4 mm²		
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 • finely stranded without core end processing • at AWG cables solid • connectable conductor cross-section solid • connectable conductor cross-section finely stranded without core end processing • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 0.5 4 mm²		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded without 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 stranded Installation/ mounting/ dimensions mounting position	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 0.5 4 mm² 20 12		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • 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 Installation/ mounting/ dimensions mounting position fastening method	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 20 12 any		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded without 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 stranded Installation/ mounting/ dimensions mounting position	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 4 mm² 20 12 20 12 0.5 4 mm² 20 12 20 12 any screw and snap-on mounting onto 35 mm standard mounting rail		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • 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 Installation/ mounting/ dimensions mounting position fastening method height	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 20 12 0.5 4 mm² 20 12 20 12 20 12 20 12 any screw and snap-on mounting onto 35 mm standard mounting rail 100 mm		
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 • finely stranded without 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 • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded with core end processing • connectable conductor cross-section finely stranded without core end processing • connectable conductor cross-section finely stranded without 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 Installation/ mounting/ dimensions mounting position fastening method height width	none Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 4 mm² 20 12 20 12 0.5 4 mm² 20 12 20 12 20 12 any screw and snap-on mounting onto 35 mm standard mounting rail 100 mm 22.5 mm		

— forwards			0 mm		
- backwards	6		0 mm		
— upwards			0 mm		
- downward	S		0 mm		
— at the side			0 mm		
 for grounded particular 	arts				
— forwards			0 mm		
— backwards	6		0 mm		
— upwards			0 mm		
— at the side	•		0 mm		
- downward	s		0 mm		
 for live parts 					
– forwards			0 mm		
- backwards	3		0 mm		
— upwards			0 mm		
— downward	e		0 mm		
— at the side			0 mm		
Ambient conditions		_	0 mm	_	
	height above sea level	maximum	2 000 m		
			-25 +60 °C		
	rature during operation				
	rature during storage		-40 +85 °C		
	rature during transport		-40 +85 °C		
relative humidity durir			10 95 %		
Certificates/ approval	S			-	
General Product Ap	oproval			EMC	Declaration of Conformity
General Product Ap	oproval	_		EMC	Conformity
General Product Ap	oproval	Ē	ror	EMC	
General Product Ap		٩	FAL	EMC	Conformity
General Product Ap		٩	EAC		Conformity
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General Product Ap		(U) u	EAC	Ô	Conformity
SP CM	œ	(U) u	EAC	Ô	Conformity
General Product Ap		UL UL	ERC	Ô	Conformity
Declaration of	œ	UL VARIANCE	ERC	Ô	Conformity
Declaration of	CCC Test Certificates	UL Marine / Shipt	Ping	Ô	Conformity
Declaration of	Ccc Test Certificates	UL Marine / Shipp	Ping Lloyds Register	Ô	Conformity
Declaration of Conformity	CCC Test Certificates		Lloyd's Register	Ô	Conformity
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