SIEMENS

Data sheet

3RP2540-1BB30



Timing relay, electronic OFF delay without control signal or smooth passing make contact non-volatile 7 time ranges 0.05...600 s 24 V AC/DC, 2 change-over contacts with LED, Screw terminal

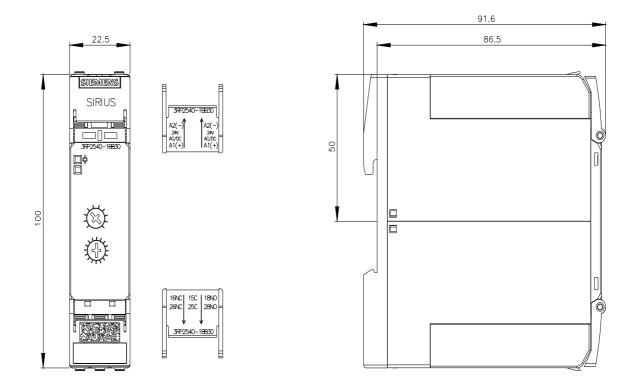
product brand name	SIRIUS
product designation	timing relay
design of the product	rückfallverzögert ohne Steuersignal, nullspannungssicher, einschaltwischend
product type designation	3RP25
General technical data	
product component	
 relay output 	Yes
 semi-conductor output 	No
product extension required remote control	No
product extension optional remote control	No
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
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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 600 s
adjustable time note	minimum value at function N = 0.5 s
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
minimum ON period	250 ms
recovery time	250 ms
reference code according to IEC 81346-2	К
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 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

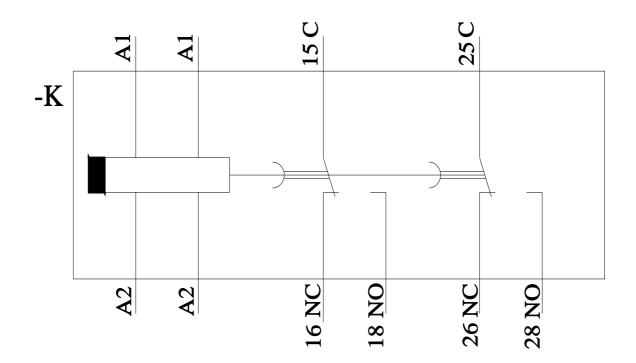
operating range factor control supply voltage rated value at DC	
initial value	0.85
	1.1
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at	
AC at 60 Hz	
 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	No
ON-delay/instantaneous contact	No
passing make contact	Yes
 passing make contact/instantaneous contact 	No
OFF delay	Yes
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
	No
flashing asymmetrically with pulse start switching function	NO
star-delta circuit with delay time	No
-	No
star-delta circuit	No
switching function with control signal	Ne
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 	No
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	fuse gL/gG: 4 A
switch required	
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
delayed switching	0
instantaneous contact	0

number of NO contacts	
 delayed switching 	0
 instantaneous contact 	0
number of CO contacts	
 delayed switching 	2
 instantaneous contact 	0
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)
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	Yes
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	
due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
due to conductor-earth surge according to IEC 61000-4-5	2 kV
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
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
protection class IP on the front according to IEC 60529	IP20 Basic insulation
protection class IP on the front according to IEC 60529 type of insulation	
protection class IP on the front according to IEC 60529	Basic insulation
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals	Basic insulation none
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1	Basic insulation
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and	Basic insulation none
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit	Basic insulation none Yes
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	Basic insulation none Yes
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	Basic insulation none Yes screw-type terminals
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid	Basic insulation none Yes screw-type terminals 1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²)
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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	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)
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protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded	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)
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protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • MG number as coded connectable conductor cross section	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
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid	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 20 12
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • for AWG cables stranded Connectable conductor cross-section • solid • finely stranded with core end processing • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • solid • solid • solid • stranded	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 20 12 20 12 20 12
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque	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
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protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	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 M3
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position	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 20 12 20 12 20 14 0.6 0.8 N·m M3
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method	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 any screw and snap-on mounting onto 35 mm DIN rail
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height	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 20 12 20 12 any screw and snap-on mounting onto 35 mm DIN rail 100 mm
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height width depth	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 20 12 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail 100 mm 22.5 mm
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component 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 • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	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 20 12 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail 100 mm 22.5 mm
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— 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		
nbient conditions				
nstallation altitude at height above sea level r	maximum	2 000 m		
imbient temperature				
during operation		-25 +60 °C		
during storage		-40 +85 °C		
during transport		-40 +85 °C		
relative humidity during operation		10 95 %		
ertificates/ approvals				
Declaration of Conformity	Test Certificates	s Marine / Shipping		
cc UK	Type Test Certi		Llovds	
CE UK EG-Konf.			Llovd's Register uis	PRS
GG-Konf. UK Barine / Shipping	Type Test Certi	BUREAU	Llovd's Kegister uis	PRS
	Type Test Certi		Llovd's Kegister uis	PRS
Marine / Shipping	Type Test Certi ates/Test Repo	other Confirmation	Llovds Register uts	PRS
	Type Test Certi ates/Test Report intervention of the status of validity of the ed EAEU member status n/view/109813875 s, Brochures,)	es. he EAC certification if you intendes Russia or Belarus).		

Image database (product images, 2D dimension drawings, 3D models, device circuit http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1BB30&lang=en Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1BB30/manual





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7/6/2023