## **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	
<ul> <li>relay output</li> </ul>	Yes
<ul> <li>semi-conductor output</li> </ul>	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 (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 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
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	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	
<ul><li>initial value</li></ul>	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	
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with interval start</li> </ul>	No
<ul> <li>flashing symmetrically with pulse start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with pulse start</li> </ul>	No
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
<ul> <li>flashing asymmetrically with pulse start</li> </ul>	No
switching function	
<ul> <li>star-delta circuit with delay time</li> </ul>	No
star-delta circuit	No
switching function with control signal	
<ul> <li>additive ON-delay</li> </ul>	No
<ul> <li>passing break contact</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	No
<ul> <li>OFF delay/instantaneous</li> </ul>	No
<ul> <li>pulse delayed</li> </ul>	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul><li>pulse-shaping</li></ul>	No
<ul><li>pulse-shaping/instantaneous</li></ul>	No
<ul> <li>additive ON-delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
<ul> <li>retriggerable with deactivated control signal</li> </ul>	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     instantaneous contact	0	
instantaneous contact     number of NO contacts	0	
	0	
delayed switching     instructure outside the switching	0	
instantaneous contact     number of CO contacts	U	
	2	
<ul><li>delayed switching</li><li>instantaneous contact</li></ul>	0	
operational current of auxiliary contacts at AC-15	0	
• 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	
switching capacity current with inductive load	0.01 3 A	
Inputs/ Outputs		
product function		
at the relay outputs switchover delayed/without	No	
delay		
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> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection	
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV	
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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		
protection class IP on the front according to IEC 60529	IP20	
type of insulation	Basic insulation	
category according to EN 954-1	none	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	Yes	
type of electrical connection for auxiliary and control circuit	spring-loaded terminals (push-in)	
type of connectable conductor cross-sections		
• solid	0.5 4 mm <sup>2</sup>	
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>	
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 4 mm²	
at AWG cables solid	20 12	
at AWG cables stranded	20 12	
connectable conductor cross-section		
• solid	0.5 4 mm²	
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>	
finely stranded without core end processing	0.5 4 mm²	
AWG number as coded connectable conductor cross section		
• solid	20 12	
• stranded	20 12	
Installation/ mounting/ dimensions mounting position	any	
mounting position	any	

fastening method	screw and snap-on mounting onto 35 mm standard	mounting rail
height	100 mm	
width	22.5 mm	
depth	90 mm	
required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
<ul> <li>for grounded parts</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— at the side	0 mm	
— downwards	0 mm	
<ul> <li>for live parts</li> </ul>		
— 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		
<ul> <li>during operation</li> </ul>	-25 +60 °C	
during storage	-40 +85 °C	
during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Certificates/ approvals		
General Product Approval		EMC





Confirmation







**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other







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=3RP2525-2BB30

Cax online generator

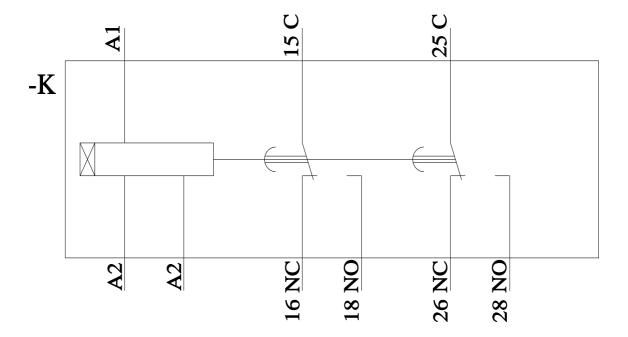
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-2BB30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BB30">https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BB30</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2525-2BB30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2525-2BB30&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BB30/manual



last modified: 12/9/2021 🖸