## **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
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 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	
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
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	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
<ul><li>pulse-snaping</li><li>pulse-shaping/instantaneous</li></ul>	No
	No
additive ON-delay/instantaneous     ON delay/OFF delay/instantaneous	
ON-delay/OFF-delay/instantaneous     pagging make contact	No No
passing make contact	No No
passing make contact/instantaneous contact      with him function of interval relay with control pignal.	No
switching function of interval relay with control signal	N-
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
retrotriggerable with switched-on control signal	No
retrotriggerable with switched-on control	No
signal/instantaneous contact	
<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	0
instantaneous contact	0
number of NO contacts	
delayed switching	0

• instantaneous contact	0
number of CO contacts	
<ul> <li>delayed switching</li> </ul>	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)
contact rating of auxiliary contacts according to UL	R300 / B300
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
<ul> <li>at the relay outputs switchover delayed/without delay</li> </ul>	No
• 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
protection class if on the nont according to ico 00329	11 20
type of insulation	Basic insulation
·	7.7
type of insulation	Basic insulation
type of insulation category according to EN 954-1	Basic insulation
type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and	Basic insulation none
type of insulation category according to EN 954-1  Connections/ Terminals product component removable terminal for auxiliary and control circuit	Basic insulation none  Yes
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
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  spring-loaded terminals (push-in)
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 spring-loaded terminals (push-in)  0.5 4 mm²
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  spring-loaded terminals (push-in)  0.5 4 mm² 0.5 2.5 mm²
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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  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid	Basic insulation none  Yes  spring-loaded terminals (push-in)  0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 20 12
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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  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 0.5 4 mm² 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 0.5 12  20 12
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— 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	
for live parts		
— 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	
<ul> <li>during storage</li> </ul>	-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

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

 $Information-\ and\ Download center\ (Catalogs,\ Brochures, \ldots)$ 

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

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2525-2BB30}$ 

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

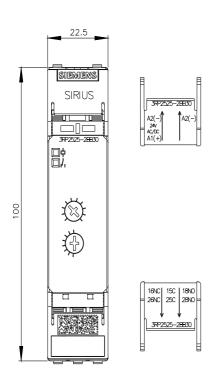
 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BB30}}$ 

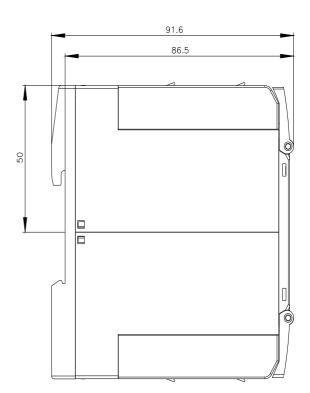
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

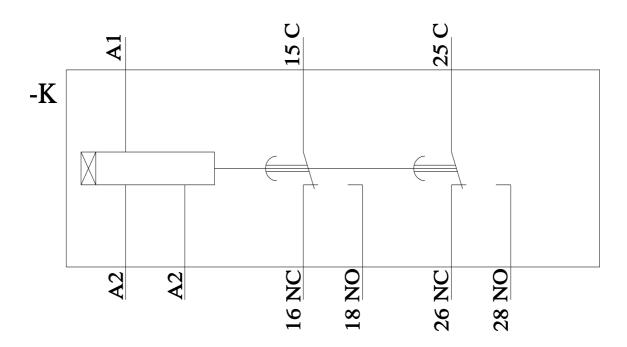
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2525-2BB30&lang=en

**Characteristic: Derating** 

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







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