



Timing relay, electronic slow-operating 1 change-over contact 24 V AC/DC, 200 to 240 V AC at 50/60 Hz AC 0.05 s to 100 h Overall width 45 mm Spring-type terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP20
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 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
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	±5 %
power supply influence	±1 %
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.11 kg
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 2 at AC	
• at 50 Hz	200 ... 240 V
• at 60 Hz	200 ... 240 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 - full-scale value	0.85 1.1
operating range factor control supply voltage rated value at AC at 50 Hz - initial value - full-scale value	0.85 1.1
operating range factor control supply voltage rated value at AC at 60 Hz - initial value - full-scale value	0.85 1.1
Switching Function	
switching function - ON-delay - ON-delay/instantaneous contact - passing make contact - passing make contact/instantaneous contact - OFF delay	Yes No No No No
switching function - flashing symmetrically with interval start/instantaneous - flashing symmetrically with interval start - flashing symmetrically with pulse start/instantaneous - flashing symmetrically with pulse start - flashing asymmetrically with interval start - flashing asymmetrically with pulse start	No No No No No No
switching function - star-delta circuit with delay time - star-delta circuit	No No
switching function with control signal - additive ON-delay - passing break contact - passing break contact/instantaneous - OFF delay - OFF delay/instantaneous - pulse delayed - pulse delayed/instantaneous - pulse-shaping - pulse-shaping/instantaneous - additive ON-delay/instantaneous - ON-delay/OFF-delay/instantaneous - passing make contact - passing make contact/instantaneous contact	No No No No No No No No No No No No No No
switching function of interval relay with control signal - retrotriggerable with deactivated control signal/instantaneous contact - retrotriggerable with switched-on control signal - retrotriggerable with switched-on control signal/instantaneous contact - retriggerable with deactivated control signal	No No No 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 0
number of NO contacts delayed switching	0

instantaneous contact	0
number of CO contacts	
delayed switching	1
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
Inputs/ Outputs	
product function	
non-volatile	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	EN 61000-6-4(3)
EMC immunity according to IEC 61812-1	EN 61000-6-2
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 61000-4-5	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	
category according to EN 954-1	none
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
type of insulation	Basic insulation
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection for auxiliary and control circuit	spring-loaded terminals
type of connectable conductor cross-sections	
solid	2x (0,25 ... 2,5 mm ²)
finely stranded with core end processing	2 x (0.25 ... 1.5 mm ²)
finely stranded without core end processing	2x (0.25 ... 2.5 mm ²)
for AWG cables solid	2x (24 ... 14)
for AWG cables stranded	2x (24 ... 14)
connectable conductor cross-section	
solid	0.3 ... 2.5 mm ²
finely stranded with core end processing	0.3 ... 1.5 mm ²
finely stranded without core end processing	2.5 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
solid	24 ... 14
stranded	24 ... 14
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	57 mm
width	45 mm
depth	73 mm
required spacing	
with side-by-side mounting	
— forwards	0 mm
— 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

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity during operation	10 ... 95 %

Approvals Certificates

General Product Approval



[Confirmation](#)



EMV

Test Certificates

Marine / Shipping



[KC](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other

Environment



[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

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

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=3RP2025-2AP30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2025-2AP30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2025-2AP30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2025-2AP30&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2025-2AP30/manual>

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