## **SIEMENS**

Data sheet 3RP2576-1NM20



Timing relay, electronic with star-delta (wye-delta) function 1 NO delayed 1 NO instantaneous 1 time range, 3...60 s 200-240 V AC and 380-440 V AC with LED, Screw terminal

product brand name	SIRIUS	
product designation	timing relay	
design of the product	Star-delta (wye-delta) function	
product type designation	3RP25	
General technical data		
product component		
<ul><li>relay output</li></ul>	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	500 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	3 60 s	
relative setting accuracy relating to full-scale value	5 %; +/-	
thermal current	5 A	
recovery time	150 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	
control supply voltage 1 at AC		
● at 50 Hz	200 240 V	
● at 60 Hz	200 240 V	
control supply voltage 2 at AC		
● at 50 Hz	380 440 V	
● at 60 Hz	380 440 V	
control supply voltage frequency 1	50 60 Hz	

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 240 V	1 A
• at 440 V	1.5 A
duration of inrush current peak	
• at 240 V	0.2 ms
• at 440 V	0.1 ms
Switching Function	
switching function	
ON-delay	No
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
flashing asymmetrically with pulse start	No
switching function	
<ul> <li>star-delta circuit with delay time</li> </ul>	No
star-delta circuit	Yes
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
OFF delay/instantaneous	No
pulse delayed	No
pulse delayed/instantaneous	No
• pulse-shaping	No
pulse-shaping/instantaneous	No No
additive ON-delay/instantaneous	No No
ON-delay/OFF-delay/instantaneous	No No
passing make contact     passing make contact/instantaneous contact	No No
passing make contact/instantaneous contact      passing make contact/instantaneous contact/instantaneou	No
switching function of interval relay with control signal	No
retrotriggerable with deactivated control signal/instantaneous contact     retrotriggerable with switched on control signal.	No
<ul> <li>retrotriggerable with switched-on control signal</li> <li>retrotriggerable with switched-on control signal/instantaneous control</li> </ul>	No No
signal/instantaneous contact	No
retriggerable with deactivated control signal  Short circuit protection	INU
Short-circuit protection	fues al laC: 4 A
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	4.0.00
material of switching contacts	AgSnO2
number of NC contacts  • delayed switching	0

:	
• instantaneous contact	0
number of NO contacts	4
delayed switching	1
instantaneous contact	1
number of CO contacts	
delayed switching	0
• instantaneous contact	0
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
• at 400 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
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	
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	screw-type terminals
type of connectable conductor cross-sections	, , , , , , , , , , , , , , , , , , ,
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
finely stranded with core end processing	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG cables solid	1x (20 12), 2x (20 14)
at AWG cables stranded	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
stranded	20 14
tightening torque	0.6 0.8 N·m
design of the thread of the connection screw	M3
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=3RP2576-1NM20

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2576-1NM20}$ 

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RP2576-1NM20">https://support.industry.siemens.com/cs/ww/en/ps/3RP2576-1NM20</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=3RP2576-1NM20&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2576-1NM20&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP2576-1NM20/manual

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