

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	
• Relay output	Yes
• semi-conductor output	No
Product extension required remote control	No
Product extension optional remote control	No
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	

• acc. to IEC 60068-2-27	11g / 15 ms
Vibration resistance	
• acc. 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 acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
Relative repeat accuracy	1 %

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

<ul style="list-style-type: none"> • ON-delay/instantaneous contact 	No
<ul style="list-style-type: none"> • passing make contact 	No
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 	No
<ul style="list-style-type: none"> • OFF delay 	No
Switching function	
<ul style="list-style-type: none"> • flashing symmetrically starting with interval/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with interval 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse/instantaneous 	No
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse 	No
<ul style="list-style-type: none"> • flashing asymmetrically starting with interval 	No
<ul style="list-style-type: none"> • flashing asymmetrically starting with pulse 	No
Switching function	
<ul style="list-style-type: none"> • star-delta circuit with delay time 	No
<ul style="list-style-type: none"> • star-delta circuit 	Yes
Switching function with control signal	
<ul style="list-style-type: none"> • additive ON delay 	No
<ul style="list-style-type: none"> • passing break contact 	No
<ul style="list-style-type: none"> • passing break contact/instantaneous 	No
<ul style="list-style-type: none"> • OFF delay 	No
<ul style="list-style-type: none"> • OFF delay/instantaneous 	No
<ul style="list-style-type: none"> • pulse delayed 	No
<ul style="list-style-type: none"> • pulse delayed/instantaneous 	No
<ul style="list-style-type: none"> • pulse-shaping 	No
<ul style="list-style-type: none"> • pulse-shaping/instantaneous 	No
<ul style="list-style-type: none"> • additive ON delay/instantaneous 	No
<ul style="list-style-type: none"> • ON-delay/OFF-delay/instantaneous 	No
<ul style="list-style-type: none"> • passing make contact 	No
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 	No
Switching function of interval relay with control signal	
<ul style="list-style-type: none"> • retrotriggerable with deactivated control signal/instantaneous contact 	No
<ul style="list-style-type: none"> • retrotriggerable with activated control signal 	No
<ul style="list-style-type: none"> • retrotriggerable with activated control signal/instantaneous contact 	No
<ul style="list-style-type: none"> • retriggerable with deactivated control signal 	No
Short-circuit protection	
Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 4 A

Auxiliary circuit	
Material of switching contacts	AgSnO ₂
Number of NC contacts	
• delayed switching	0
Number of NO contacts	
• delayed switching	1
Number of CO contacts	
• delayed switching	0
Operating current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
• at 400 V	3 A
Operating 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
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
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	No

Electromagnetic compatibility	
EMI immunity	
• acc. to IEC 61812-1	EN 61000-6-2
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV network connection / 1 kV control connection
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge

Safety related data	
Protection against electrical shock	finger-safe
Type of insulation	Basic insulation

Category acc. to EN 954-1	none
---------------------------	------

Connections/ Terminals

Product function	Yes
<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 	
Type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> for auxiliary and control current circuit 	
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> solid 	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> finely stranded with core end processing 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> at AWG conductors solid 	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> at AWG conductors stranded 	1x (20 ... 12), 2x (20 ... 14)
Connectable conductor cross-section	
<ul style="list-style-type: none"> solid 	0.5 ... 4 mm ²
<ul style="list-style-type: none"> finely stranded with core end processing 	0.5 ... 4 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid 	20 ... 12
<ul style="list-style-type: none"> 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 type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	100 mm
Width	22.5 mm
Depth	90 mm
Required spacing	
<ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards Backwards upwards downwards at the side 	0 mm
<ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> forwards Backwards upwards at the side downwards 	0 mm
<ul style="list-style-type: none"> for live parts 	0 mm

— 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
Relative humidity	
• during operation	10 ... 95 %

Certificates/ approvals

General Product Approval			EMC	Declaration of Conformity	
 CCC	 CSA	 UL		 RCM	 EG-Konf.
Declaration of Conformity	Test Certificates	Marine / Shipping			
Miscellaneous	Type Test Certificates/Test Report	 LRS	 PRS	 RINA	 RMRS
Marine / Shipping	other				



[Confirmation](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2576-1NM20>

Cax online generator

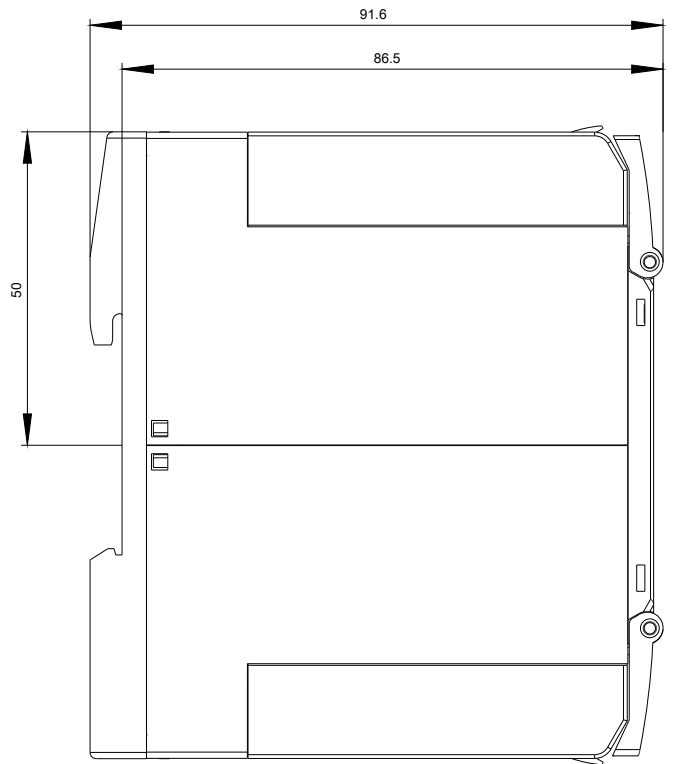
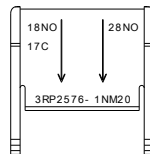
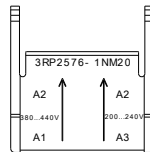
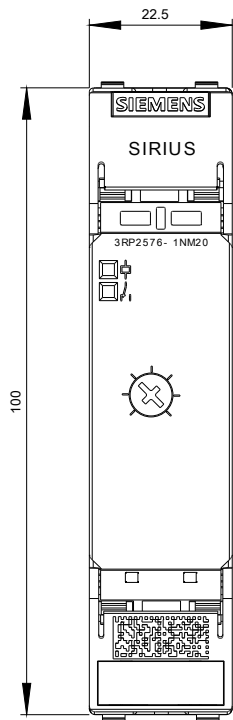
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2576-1NM20>

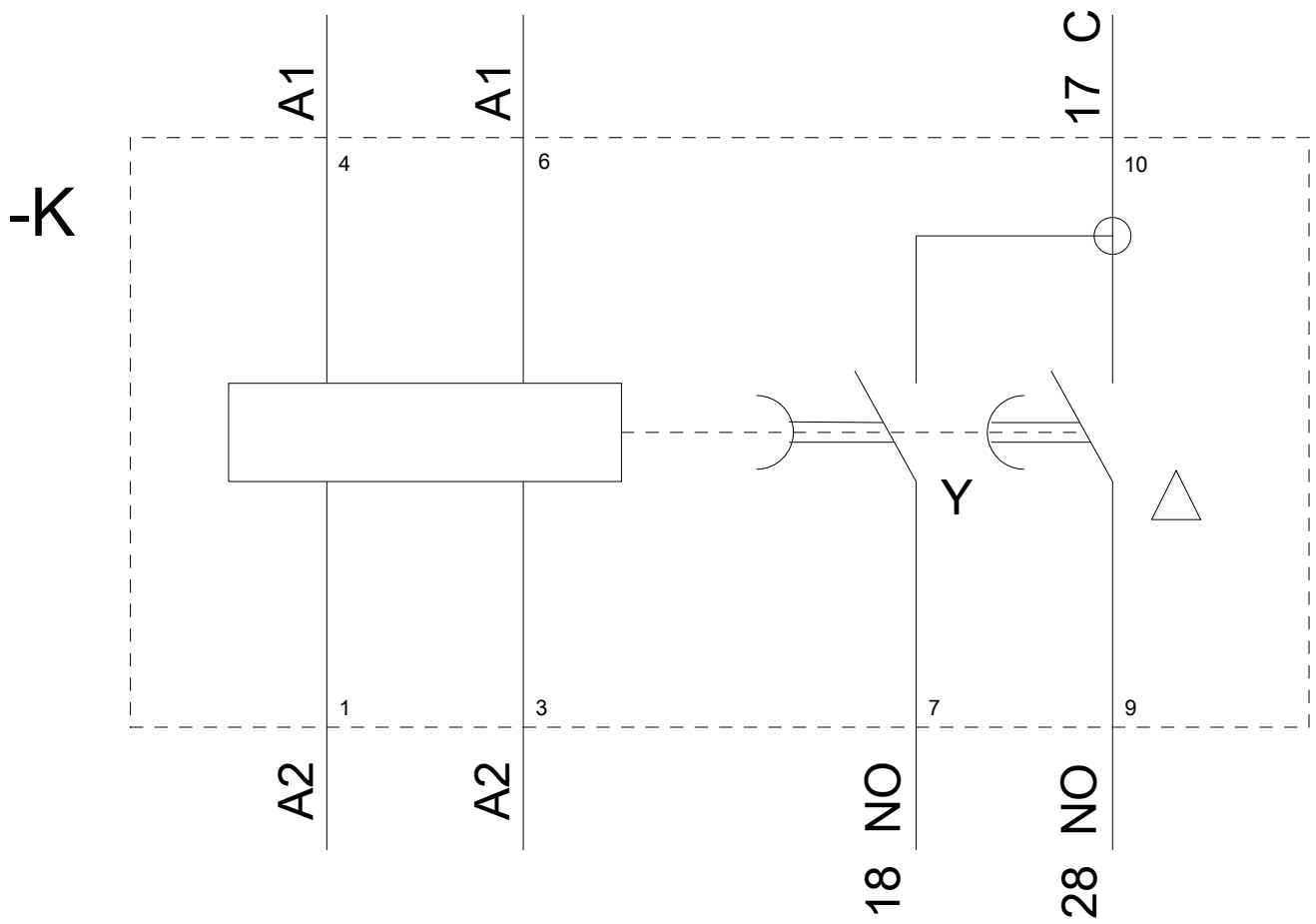
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2576-1NM20&lang=en





last modified:

11/20/2019