

Timing relay, electronic with star-delta (wye-delta) function 1 NO delayed 1 NO instantaneous 1 time range, 3...60 s 12-240 V AC/DC at 50/60 Hz 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	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	

• 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	250 ms
Reference code acc. to DIN EN 81346-2	K
Relative repeat accuracy	1 %

Control circuit/ Control

Type of voltage of the control supply voltage	AC/DC
Control supply voltage 1 at AC	
• at 50 Hz	12 ... 240 V
• at 60 Hz	12 ... 240 V
Control supply voltage frequency 1	50 ... 60 Hz
Control supply voltage 1	
• at DC	12 ... 240 V
Operating range factor control supply voltage rated value at DC	
• initial value	0.8
• Full-scale value	1.1
Operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
• Full-scale value	1.1
Operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
• Full-scale value	1.1
Inrush current peak	
• at 24 V	0.5 A
• at 240 V	5 A
Duration of inrush current peak	
• at 24 V	0.4 ms
• at 240 V	0.5 ms

Switching Function

Switching function	
• ON-delay	No

• ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay	No No No No
Switching function • flashing symmetrically starting with interval/instantaneous • flashing symmetrically starting with interval • flashing symmetrically starting with pulse/instantaneous • flashing symmetrically starting with pulse • flashing asymmetrically starting with interval • flashing asymmetrically starting with pulse	No No No No No No
Switching function • star-delta circuit with delay time • star-delta circuit	No Yes
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
Switching function of interval relay with control signal • retrotriggerable with deactivated control signal/instantaneous contact • retrotriggerable with activated control signal • retrotriggerable with activated 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	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
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	
removable terminal for auxiliary and control circuit	Yes
Type of electrical connection	
for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
finely stranded with core end processing	1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
at AWG conductors solid	1x (20 ... 12), 2x (20 ... 14)
at AWG conductors stranded	1x (20 ... 12), 2x (20 ... 14)
Connectable conductor cross-section	
solid	0.5 ... 4 mm ²
finely stranded with core end processing	0.5 ... 4 mm ²
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 type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	100 mm
Width	22.5 mm
Depth	90 mm
Required spacing	
- with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side	0 mm 0 mm 0 mm 0 mm 0 mm
- for grounded parts — forwards — Backwards — upwards — at the side — downwards	0 mm 0 mm 0 mm 0 mm 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 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 UL	 RCM

Declaration of Conformity	Test Certificates	Marine / Shipping
Miscellaneous	Type Test Certificates/Test Report	 BUREAU VERITAS
		 LRS
		 PRS
		 RINA

Marine / Shipping	other
 RMRS	Confirmation
 DNV-GL DNVGL.COM/AF	

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

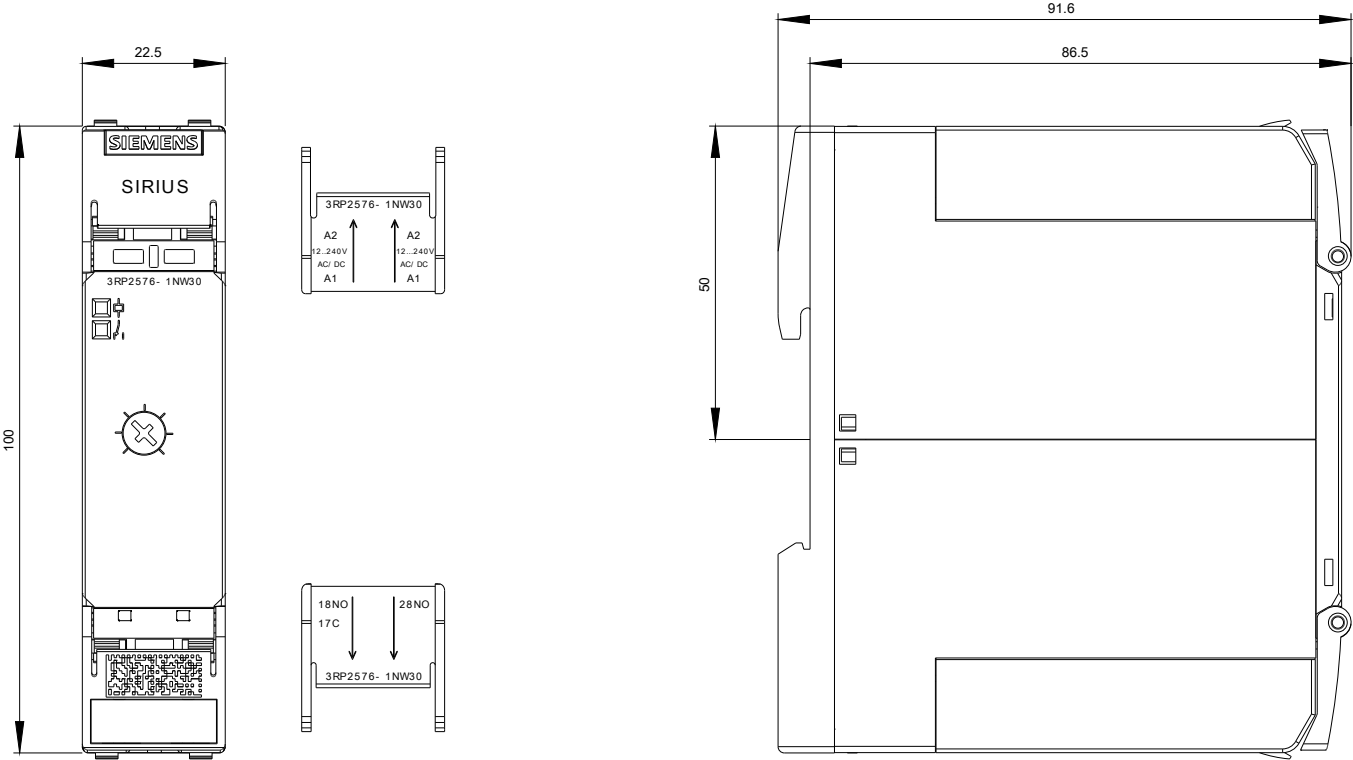
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2576-1NW30>

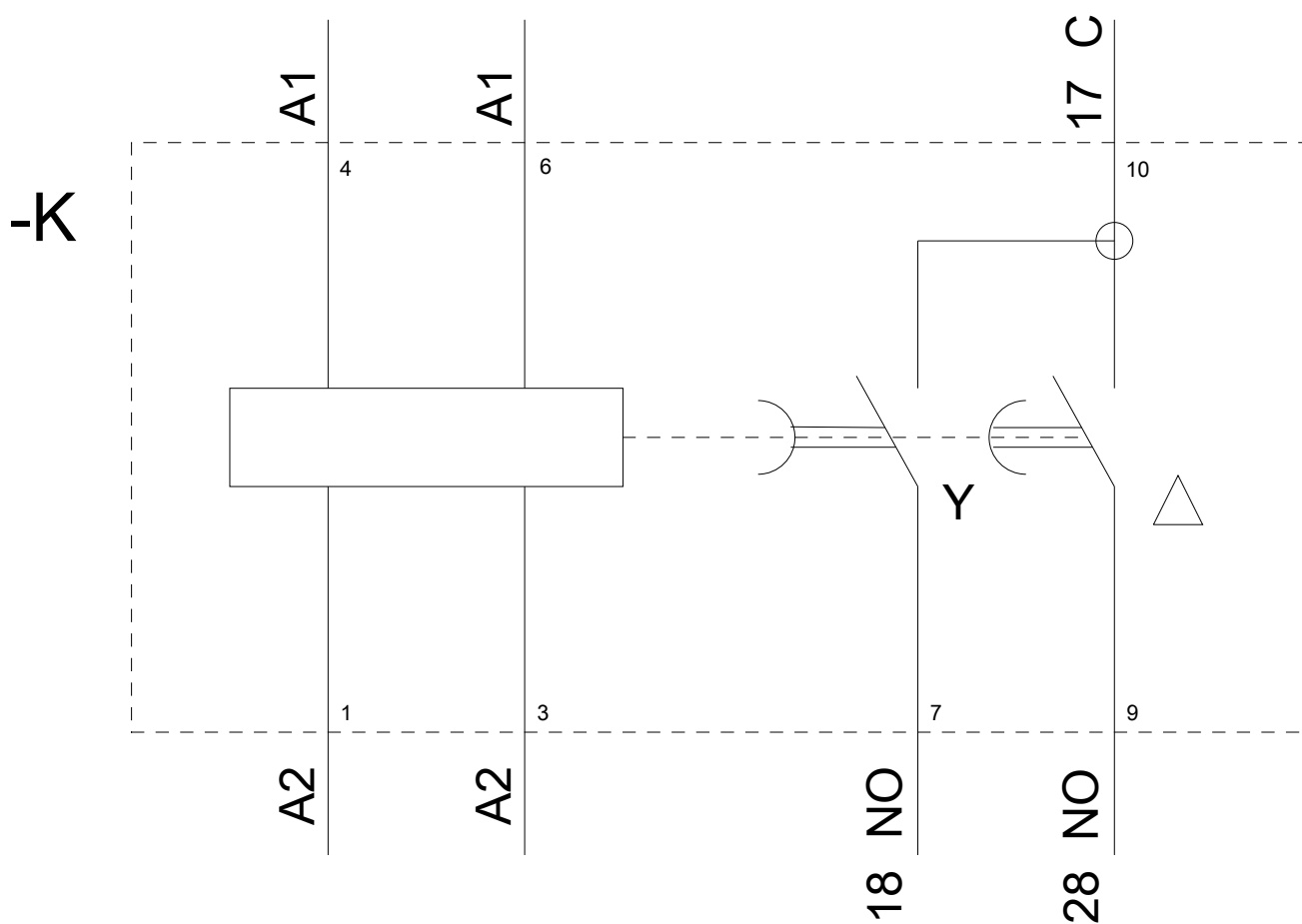
Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2576-1NW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2576-1NW30>





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