

Electronic timing relay ON delay with semiconductor output 24-240 V AC/DC Time range 0.05...100 s can be snapped on at the front for contactors 3RT2 S00/S0 and auxiliary contactor 3RH2 S00 Spring-type terminal Varistor for attenuation of the contactor coils integrated



Product brand name	SIRIUS
Product designation	function module
Product type designation	3RA28
General technical data	
Size of contactor can be combined company-specific	S00, S0
Product component • semi-conductor output	Yes
Product extension required remote control	No
Product extension optional remote control	No
Power loss [W] total typical	1 W
Test voltage for isolation test	1.5 kV
Degree of pollution	3
Surge voltage resistance rated value	4 kV
Test voltage for surge voltage test	4 800 V
Protection class IP • of the terminal	IP20
Shock resistance • acc. to IEC 60068-2-27	15g / 11 ms
Mechanical service life (switching cycles)	

• typical	100 000 000
Electrical endurance (switching cycles)	
• at AC-15 at 230 V typical	10 000 000
Electrical endurance (switching cycles)	
• with contactor 3R.2 of frame size S00	10 000 000
• with contactor 3R.2 of frame size S0	10 000 000
Adjustable time	0.05 ... 100 s
Relative setting accuracy relating to full-scale value	15 %
Recovery time	50 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 %

Product Function

Product function star-delta circuit	No
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Control circuit/ Control

Type of voltage of the control supply voltage	AC/DC
Control supply voltage 1 at AC	
• at 50 Hz	24 ... 240 V
• at 60 Hz	24 ... 240 V
Control supply voltage frequency 1	50 ... 60 Hz
Control supply voltage 1	
• at DC	24 ... 240 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
Design of the surge suppressor	with varistor

Switching Function

Switching function	
• ON-delay	Yes
• ON-delay/instantaneous contact	No
• passing make contact	No

• passing make contact/instantaneous contact • OFF delay	No
	No
Switching function	
• flashing symmetrically starting with interval/instantaneous	No
• flashing symmetrically starting with interval	No
• flashing symmetrically starting with pulse/instantaneous	No
• flashing symmetrically starting with pulse	No
• flashing asymmetrically starting with interval	No
• flashing asymmetrically starting with pulse	No
Switching function	
• fixed clock cycle beginning with pulse	No
• fixed clock cycle beginning with interval	No
Switching function	
• variably clocked start with impulse	No
• variably clocked start with interval	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
• pulse-shaping/instantaneous	No
• additive ON delay/instantaneous	No
• ON-delay/OFF-delay	No
• ON-delay/OFF-delay/instantaneous	No
• passing make contact	No
• passing make contact/instantaneous contact	No
Switching function of interval relay with control signal	
• retrotriggerable with deactivated control signal/instantaneous contact	No
• retrotriggerable with activated control signal	No
• retrotriggerable with activated control signal/instantaneous contact	No
• retriggerable with deactivated control signal	No

Design of the control terminal non-floating	No
Auxiliary circuit	
Number of NO contacts	1
• delayed switching	
Operating frequency with 3RT2 contactor maximum	2 500 1/h
Influence of the surrounding temperature	±1 %
Power supply influence	±1 %
Main circuit	
Type of voltage	AC/DC
Inputs/ Outputs	
Product function	No
• non-volatile	
Electromagnetic compatibility	
EMI immunity	Environment A (industrial area)
• acc. to IEC 61812-1	
Conducted interference	2 kV network connection / 1 kV control connection
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	1 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	8 kV
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
• removable terminal for auxiliary and control circuit	
Type of electrical connection	spring-loaded terminals
• for auxiliary and control current circuit	
Type of connectable conductor cross-sections	0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²)
• solid	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• finely stranded with core end processing	2x (0.5 ... 1.5 mm ²)
• finely stranded without core end processing	2x (20 ... 14)
• at AWG conductors solid	2x (20 ... 14)
• at AWG conductors stranded	
Connectable conductor cross-section	

• solid	0.5 ... 4 mm ²
• finely stranded with core end processing	0.5 ... 2.5 mm ²
• finely stranded without core end processing	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	
• solid	20 ... 14
• stranded	20 ... 14

Installation/ mounting/ dimensions	
Mounting position	any (like contactor)
Mounting type	clip-on
Height	38 mm
Width	45 mm
Depth	74 mm
Required spacing	
• with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — Backwards — upwards — downwards — at the side	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Relative humidity	
• during operation	0 ... 95 %

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates
 UL	 EAC	 EG-Konf.
	Miscellaneous	Type Test Certificates/Test Report
		Special Test Certificate

Marine / Shipping					
 ABS	 BUREAU VERITAS	 LRS	 RINA	 RMRS	 DNV-GL DNVGL.COM/AF

other	Railway
Confirmation	Vibration and Shock

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=3RA2811-2CW10>

Cax online generator

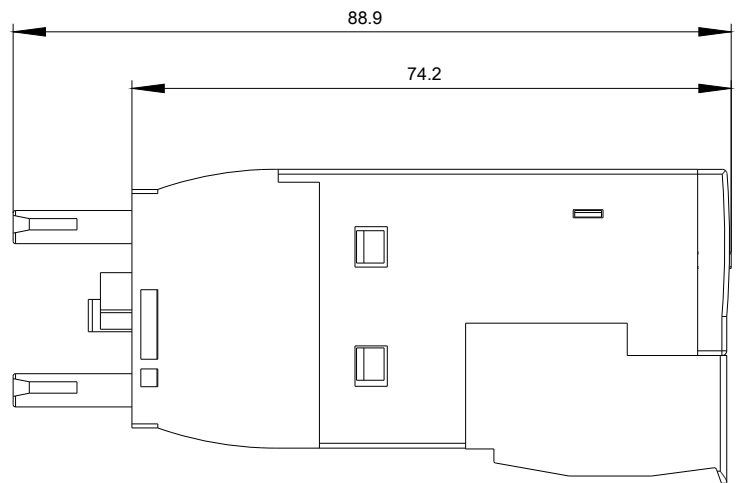
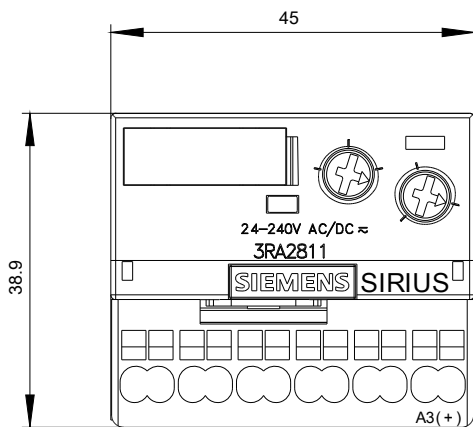
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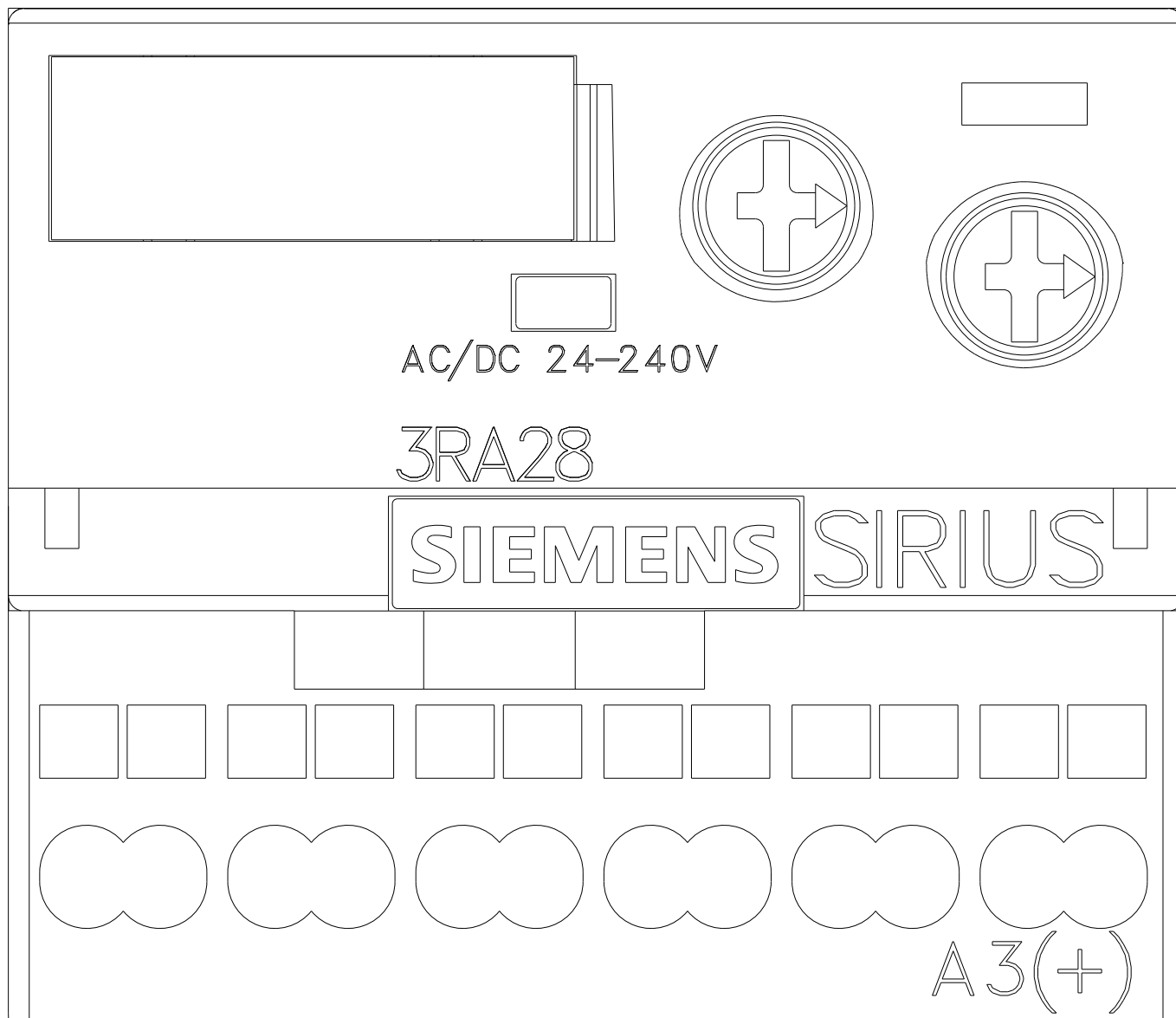
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

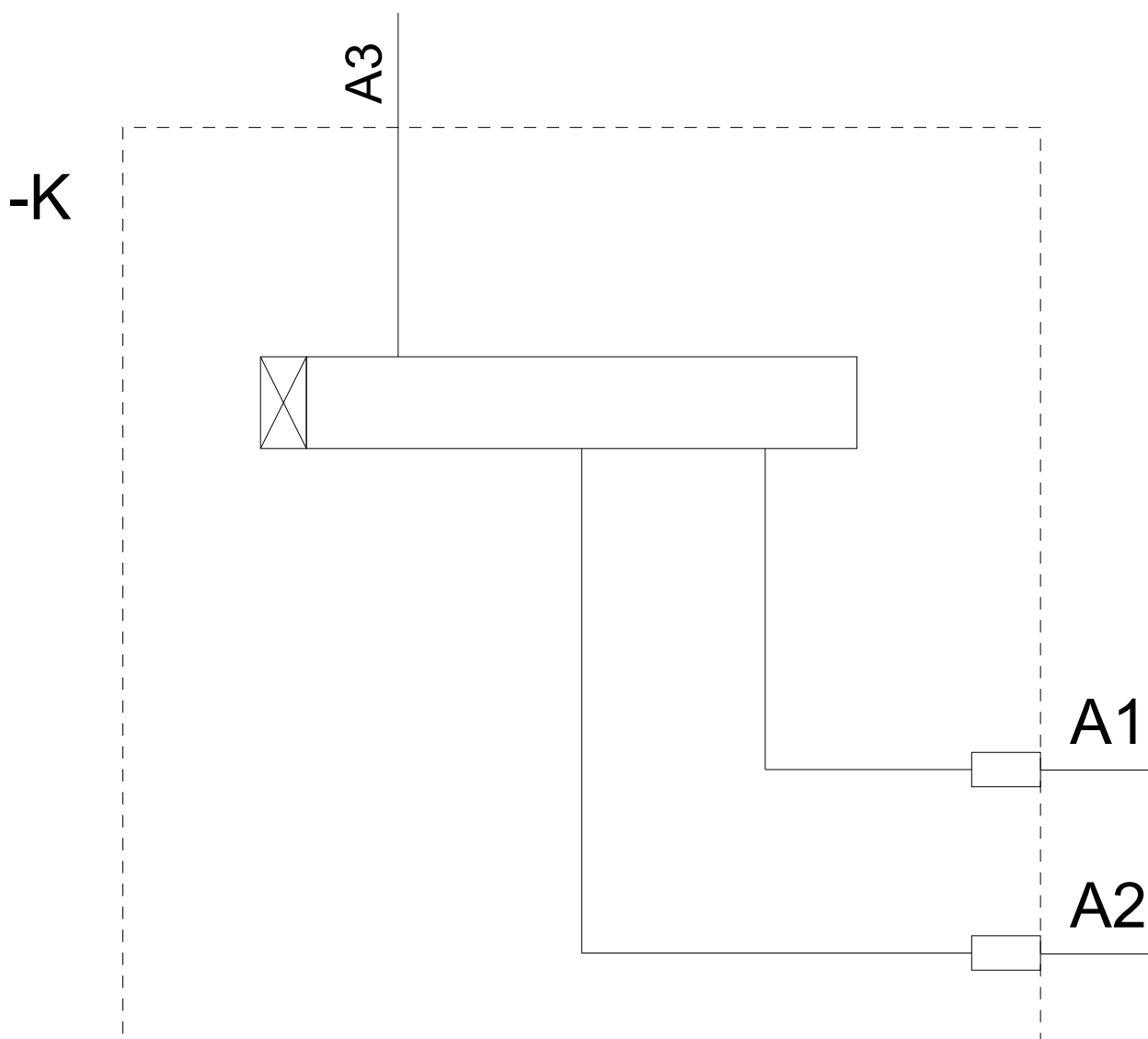
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2811-2CW10&lang=en







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