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Data sheet 3RA2811-1CW10

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 Screw 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
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
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
vibration resistance acc. to IEC 60068-2-6	10 ... 59 Hz: 0.35 mm, 60 ... 150 Hz: 2g
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 IEC 81346-2	K
relative repeat accuracy	1 %
Product Function	
product function star-delta circuit	No
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	

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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	No
● OFF delay	No
switching function	
● flashing symmetrically with interval start/instantaneous	No
● flashing symmetrically with interval start	No
● flashing symmetrically with pulse start/instantaneous	No
● flashing symmetrically with pulse start	No
● flashing asymmetrically with interval start	No
● flashing asymmetrically with pulse start	No
switching function	
● constant clock cycle with pulse start	No
● constant clock cycle with interval start	No
switching function	
● variably clocked with pulse start	No
● variably clocked with interval start	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 switched-on control signal	No
● retrotriggerable with switched-on control signal/instantaneous contact	No
● retriggerable with deactivated control signal	No
design of the control terminal non-floating	No

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Auxiliary circuit	
number of NO contacts	
● delayed switching	1
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	
● non-volatile	No
residual current maximum	5 mA
voltage drop when switched-through maximum	3.5 V
Electromagnetic compatibility	
EMC immunity acc. to IEC 61812-1	Environment A (industrial area)
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-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	8 kV
Safety related data	
touch 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 circuit	screw-type terminals
type of connectable conductor cross-sections	
● solid	0.5 ... 4 mm², 2x (0.5 ... 2.5 mm²)
● finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
● at AWG cables solid	2x (20 ... 14)
● at AWG cables stranded	2x (20 ... 14)
● connectable conductor cross-section solid	0.5 ... 4 mm²
● connectable conductor cross-section finely stranded with core end processing	0.5 ... 2.5 mm²
● connectable conductor cross-section finely stranded without core end processing	0.25 ... 1.5 mm²
● AWG number as coded connectable conductor cross section solid	20 ... 14
● AWG number as coded connectable conductor cross section stranded	20 ... 14
Installation/ mounting/ dimensions	
mounting position	any (like contactor)
fastening method	clip-on
height	38 mm
width	45 mm
depth	74 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	

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— 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
● ambient temperature during storage	-40 ... +85 °C
● ambient temperature during transport	-40 ... +85 °C
relative humidity during operation	0 ... 95 %

Certificates/ approvals

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

Marine / Shipping

ABS BUREAU VERITAS LRS PRS RINA RMRS

Marine / Shipping	other	Railway
DNV-GL	Confirmation	Vibration and Shock

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=3RA2811-1CW10
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2811-1CW10
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-1CW10
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2811-1CW10&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-1CW10/manual

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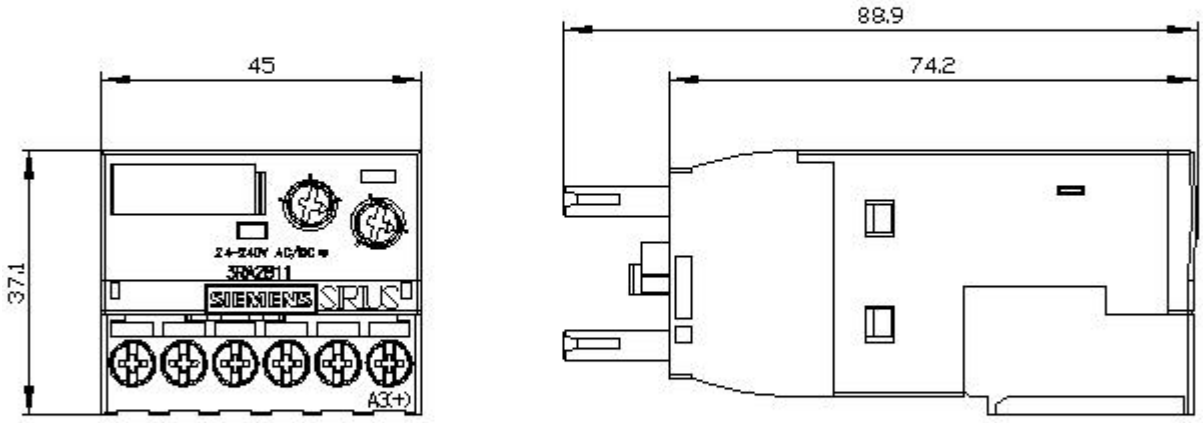

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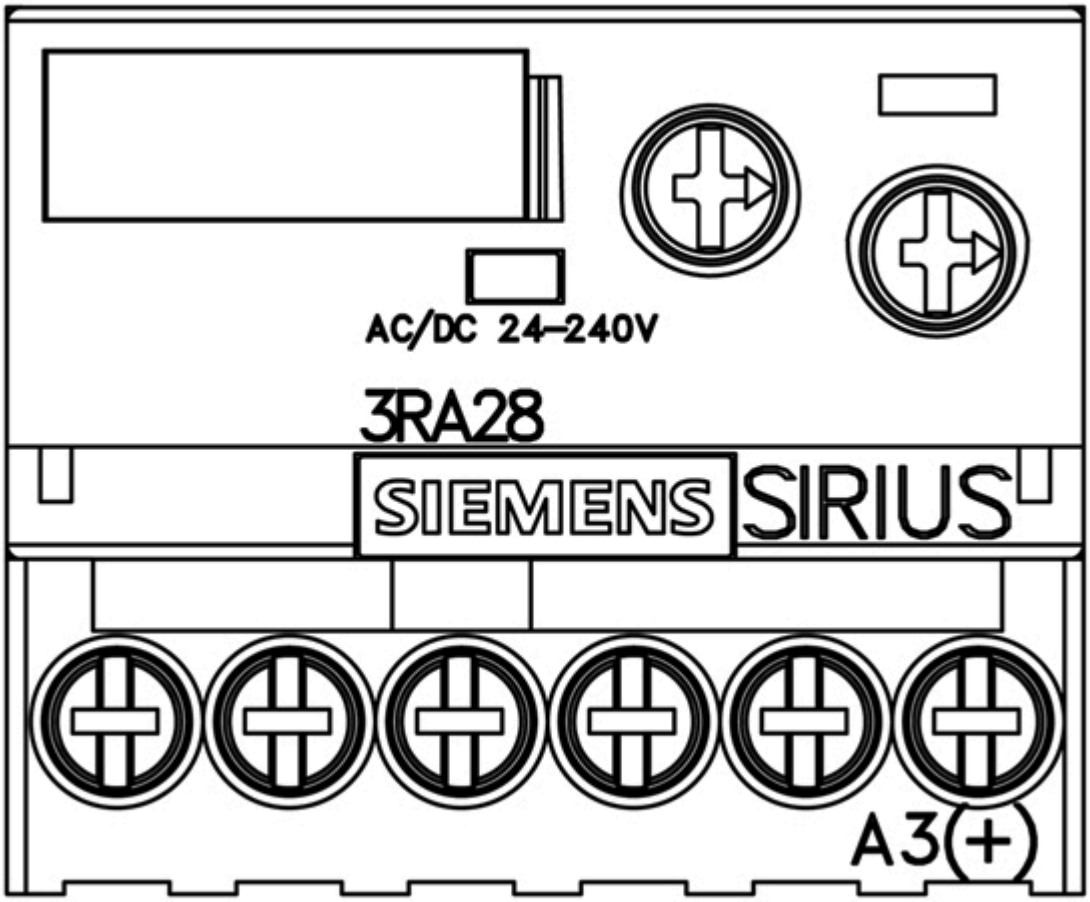

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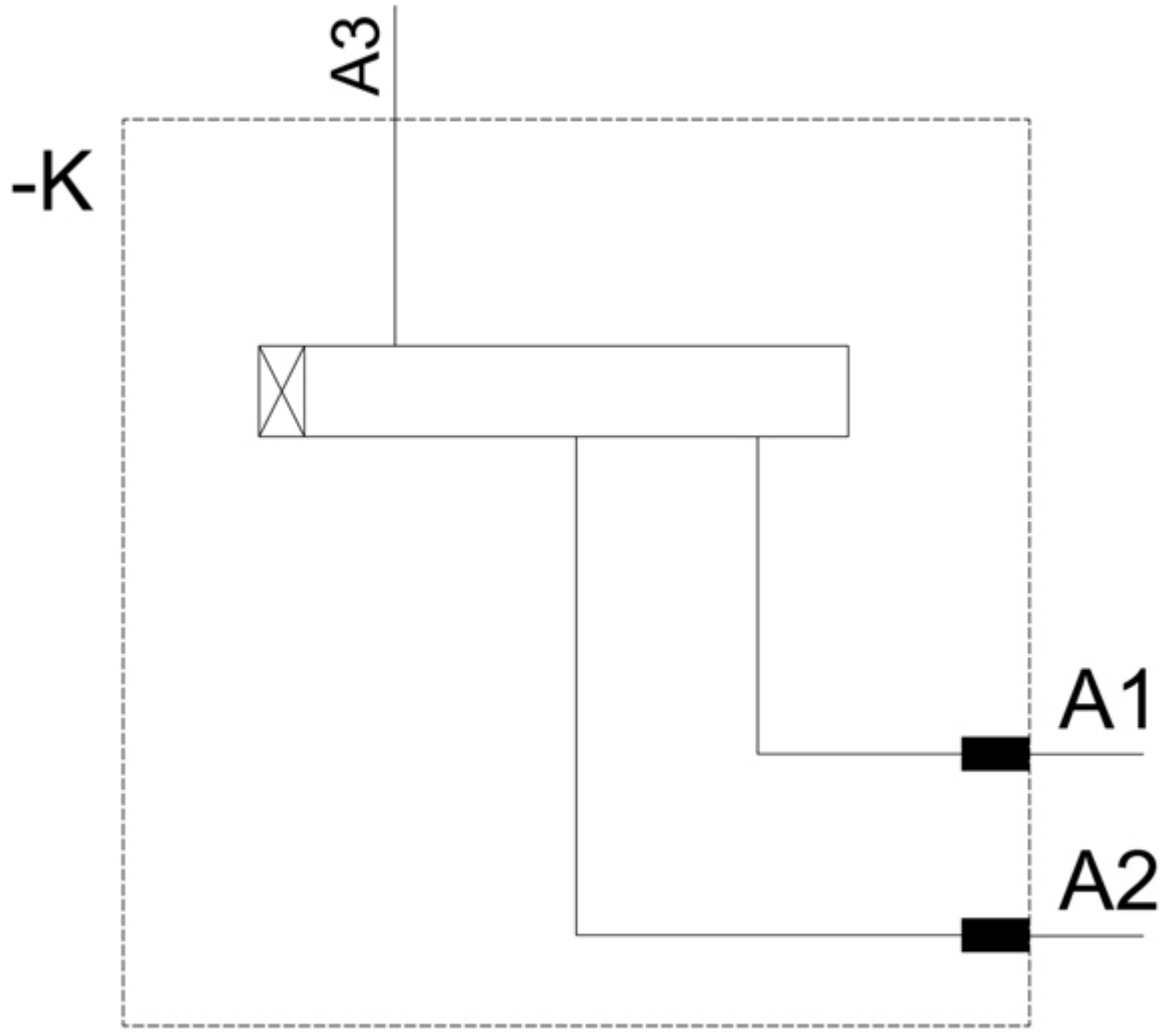

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