## **SIEMENS**

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)	
<ul> <li>with contactor 3R.2 of frame size S00</li> </ul>	10 000 000
<ul> <li>with contactor 3R.2 of frame size S0</li> </ul>	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 %
Substance Prohibitance (Date)	01.10.2009 00:00:00
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 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
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	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>constant clock cycle with pulse start</li> </ul>	No
constant clock cycle with interval start	No
switching function	
<ul> <li>variably clocked with pulse start</li> </ul>	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 No
OFF delay/instantaneous	No No
OFF delay/instantaneous	No No
pulse delayed	No No
pulse delayed/instantaneous     pulse charing	No No
• pulse-shaping	No No
pulse-shaping/instantaneous     additive ON delay/instantaneous	No No
additive ON-delay/instantaneous     ON-delay/OFF delay.	No No
ON-delay/OFF-delay	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 co	No
switching function of interval relay with control signal     retrotriggerable with deactivated control	No
signal/instantaneous contact	
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	No
retrotriggerable with switched-on control	No
signal/instantaneous contact	
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No

design of the control terminal non-floating	No
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	11 //
type of voltage	AC/DC
Inputs/ Outputs	Noibo
product function	
• non-volatile	No
residual current maximum	5 mA
voltage drop when switched-through maximum	3.5 V
Electromagnetic compatibility	3.3 V
	Environment A (industrial area)
EMC immunity acc. to IEC 61812-1  conducted interference	Environment A (industrial area)
	2 kV network connection / 1 kV control connection
due to burst acc. to IEC 61000-4-4      due to conductor-earth surge acc. to IEC 61000-4-5	2 kV network connection / 1 kV control connection
<ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> <li>due to conductor-conductor surge acc. to IEC</li> </ul>	2 kV 1 kV
61000-4-5	I IV
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	
protection class IP on the front acc. to IEC 60529	IP20
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)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul> <li>at AWG cables solid</li> </ul>	2x (20 14)
at AWG cables stranded	2x (20 14)
<ul> <li>connectable conductor cross-section solid</li> </ul>	0.5 4 mm²
connectable conductor cross-section finely stranded	0.5 2.5 mm²
with core end processing	
connectable conductor cross-section finely stranded without core end processing	0.25 1.5 mm²
<ul> <li>AWG number as coded connectable conductor cross section solid</li> </ul>	20 14
<ul> <li>AWG number as coded connectable conductor cross section stranded</li> </ul>	20 14
Installation/ mounting/ dimensions	
mounting position	any (like contactor)
fastening method	clip-on
-uctoming mounds	
height	38 mm
	38 mm 45 mm
height width depth	
height width depth required spacing	45 mm
height width depth required spacing • with side-by-side mounting	45 mm 74 mm
height width depth required spacing • with side-by-side mounting — forwards	45 mm 74 mm
height width depth required spacing • with side-by-side mounting	45 mm 74 mm
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards	45 mm 74 mm
height width depth required spacing  • with side-by-side mounting — forwards — backwards	45 mm 74 mm 0 mm 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
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
<ul> <li>ambient temperature during operation</li> </ul>	-25 +60 °C
<ul> <li>ambient temperature during storage</li> </ul>	-40 +85 °C
<ul> <li>ambient temperature during transport</li> </ul>	-40 +85 °C
relative humidity during operation	0 95 %
Certificates/ approvals	

(III)

**General Product Approval** 





**Declaration of Conformity** 

**Miscellaneous** 

Special Test Certificate

**Test Certificates** 

Type Test
Certificates/Test
Report

## Marine / Shipping













Marine / Shipping other Railway



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

 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$ 

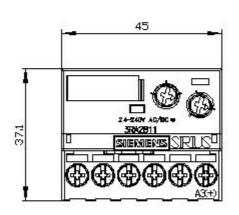
https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-1CW10

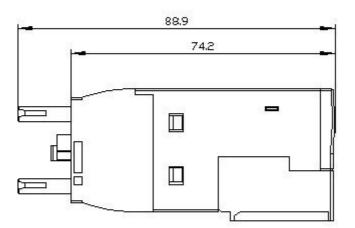
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$ 

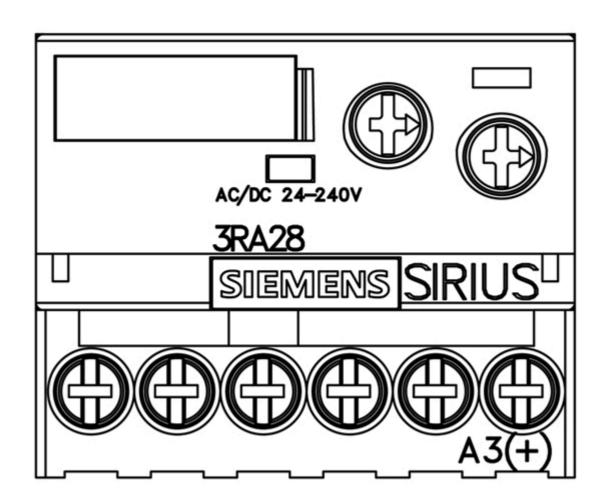
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2811-1CW10\&lang=en}}$ 

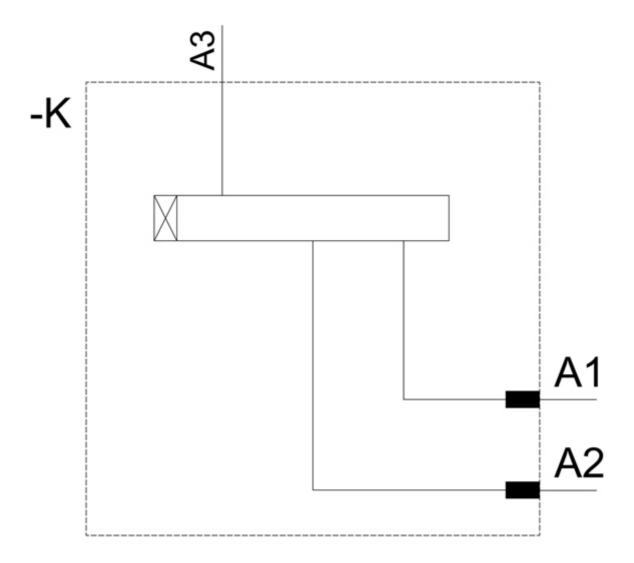
**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-1CW10/manual









last modified: 12/19/2020 🖸