## **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
consumed current at 24 V	24 mA
protection class IP of the terminal	IP20
shock resistance according to IEC 60068-2-27	15g / 11 ms
vibration resistance according 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
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 according to IEC 81346-2	K
relative repeat accuracy	1 %
influence of the surrounding temperature	±1 %
power supply influence	±1 %
Substance Prohibitance (Date)	10/01/2009
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	
<ul><li>ON-delay</li></ul>	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
passing make contact	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
OFF delay	No
switching function	
flashing symmetrically with interval     start/instantaneous	No
start/instantaneous	No
<ul><li>flashing symmetrically with interval start</li><li>flashing symmetrically with pulse</li></ul>	No No
start/instantaneous	110
<ul> <li>flashing symmetrically with pulse start</li> </ul>	No
flashing asymmetrically with interval start	No
<ul> <li>flashing asymmetrically with pulse start</li> </ul>	No
switching function	
<ul> <li>constant clock cycle with pulse start</li> </ul>	No
constant clock cycle with interval start	No
switching function	
variably clocked with pulse start	No
variably clocked with interval start	No
switching function	Ma
star-delta circuit with delay time	No No
• star-delta circuit	No
switching function with control signal	No
additive ON-delay     passing break contact	No No
<ul><li>passing break contact</li><li>passing break contact/instantaneous</li></ul>	No
OFF delay	No
OFF delay      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	No
00	
signal/instantaneous contact	
signal/instantaneous contact • retrotriggerable with switched-on control signal	No
signal/instantaneous contact	No No

docion of the control terminal non flecting	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
Main circuit	
type of voltage	AC/DC
Inputs/ Outputs	
product function	
• non-volatile	No
residual current maximum	5 mA
Electromagnetic compatibility	
EMC immunity according to IEC 61812-1	Environment A (industrial area)
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	8 kV
Safety related data	
protection class IP on the front according to IEC	IP20
60529	Designation
type of insulation	Basic insulation
category according to EN 954-1	none
Connections/ Terminals	V
product component 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 mm <sup>2</sup>
finely stranded with core end processing	0.5 2.5 mm²
finely stranded without core end processing	0.25 1.5 mm²
AWG number as coded connectable conductor cross section	
• solid	20 14
• 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	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm

— at the side	0 mm
— downwards	0 mm
<ul> <li>for live parts</li> </ul>	
— 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
 during storage
 during transport
 -25 ... +60 °C
 -40 ... +85 °C
 -40 ... +85 °C

relative humidity during operation 0 ... 95 %

Certificates/ approvals

General Product Approval Declaration of Conformity Test Certificates

Confirmation









Special Test Certificate

**Test Certificates** 

Marine / Shipping

Type Test Certificates/Test Report











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

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

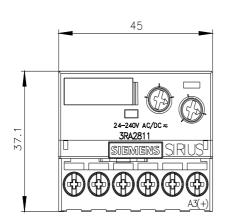
https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-1CW10

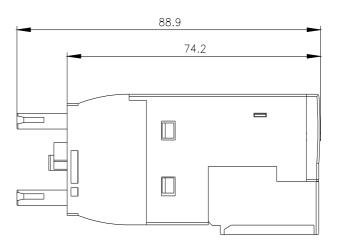
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

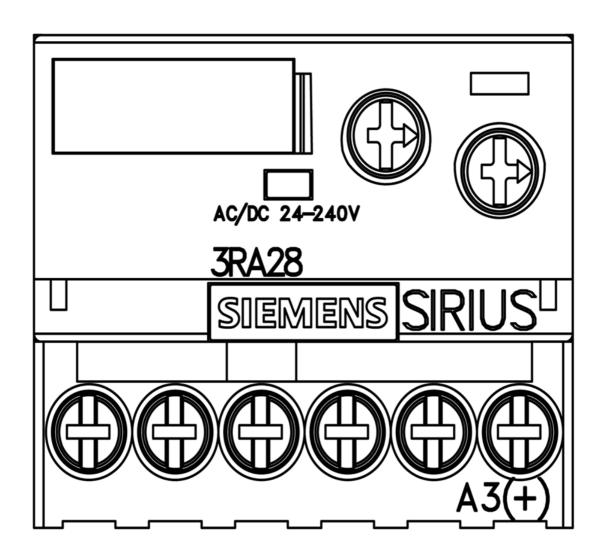
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2811-1CW10&lang=en

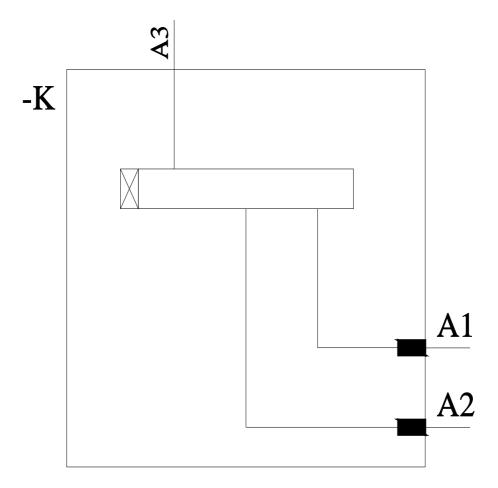
**Characteristic: Derating** 

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









last modified: 8/2/2022 🖸