## **SIEMENS**

Data sheet 3RA2815-1AW10



Solid-state time-delayed auxiliary switch OFF delay without control signal Relay 1 changeover contact 24...240 V AC/DC Time range 0.05...100 s Can be snapped on at the front For 3RT2 S00-S3 contactors and 3RH2 S00 contactor relays Screw terminal Varistor for attenuation of the contactor coils integrated

product brand name	SIRIUS
product designation	Solid-state time-delay auxiliary switch
product type designation	3RA28
General technical data	
size of contactor can be combined company-specific	S00, S0, S2, S3
product component 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	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	10 000 000
mechanical service life (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
<ul> <li>with contactor 3R.2 of frame size S2</li> </ul>	10 000 000
with contactor 3R.2 of frame size S3	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
electrical endurance (switching cycles)	
<ul> <li>with contactor 3R.2 of frame size S00</li> </ul>	100 000
<ul> <li>with contactor 3R.2 of frame size S0</li> </ul>	100 000
<ul> <li>with contactor 3R.2 of frame size S2</li> </ul>	100 000
with contactor 3R.2 of frame size S3	100 000
adjustable time	0.05 100 s
relative setting accuracy relating to full-scale value	15 %
minimum ON period	200 ms
recovery time	150 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	NOIDO
• 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	0.05
Initial value     full-scale value	0.85
	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>	No
<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	Yes
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
<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	
<ul> <li>variably clocked with pulse start</li> </ul>	No
variably clocked with interval start	No
switching function	
<ul> <li>star-delta circuit with delay time</li> </ul>	No
star-delta circuit	No
switching function with control signal	
<ul> <li>additive ON-delay</li> </ul>	No
<ul> <li>passing break contact</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	No
OFF delay/instantaneous	No
<ul><li>pulse delayed</li></ul>	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul><li>pulse-shaping</li></ul>	No
<ul><li>pulse-shaping/instantaneous</li></ul>	No
<ul> <li>additive ON-delay/instantaneous</li> </ul>	No
ON-delay/OFF-delay	No

<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No
design of the control terminal non-floating	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	AgNi
number of CO contacts	
<ul> <li>delayed switching</li> </ul>	1
operational current of auxiliary contacts at AC-15	
• maximum	3 A
• at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts as NC contact at AC-15	
• at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts as NO contact at AC-15	
• at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts at DC-13	1 0.1
operational 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	2 500 1/h
contact rating of auxiliary contacts according to UL	B300 / R300
influence of the surrounding temperature	±1 %
power supply influence	±1 %
Main circuit	
type of voltage	AC/DC
Inputs/ Outputs	
product function	
<ul> <li>at the relay outputs switchover delayed/without delay</li> </ul>	No
• non-volatile	No
Electromagnetic compatibility	
EMC immunity acc. to IEC 61812-1	Environment A (industrial area)
conducted interference	
<ul><li>due to burst acc. to IEC 61000-4-4</li></ul>	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	1 kV
61000-4-5	
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 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)
<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)
<ul> <li>at AWG cables stranded</li> </ul>	2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	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
• 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 operation     during storage	-40 +85 °C
during storage     during transport	-40 +85 °C
relative humidity during operation	0 95 %
Certificates/ approvals	oo 70
General Product Approval	Declaration of Conformity









UK Declaration of Conformity



**Test Certificates** 

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









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=3RA2815-1AW10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2815-1AW10

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

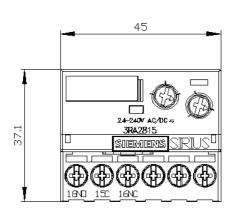
https://support.industry.siemens.com/cs/ww/en/ps/3RA2815-1AW10

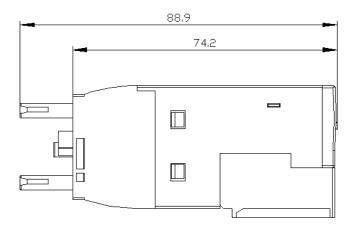
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$ 

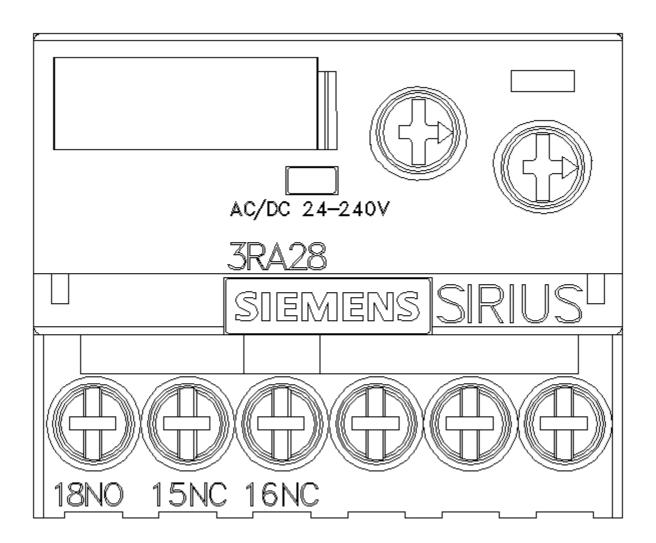
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2815-1AW10&lang=en

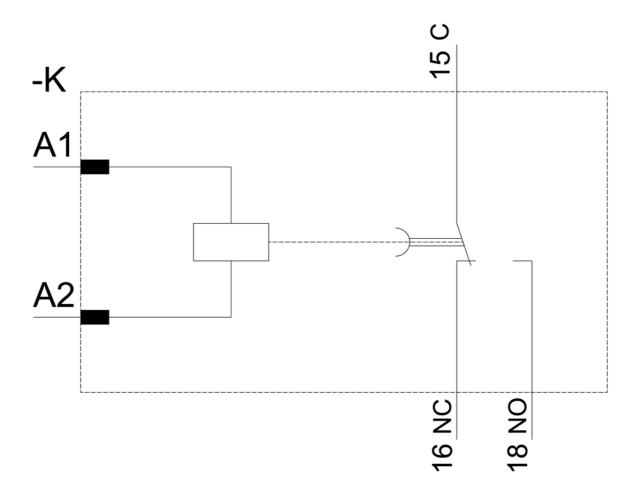
**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RA2815-1AW10/manual









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