SIEMENS

Data sheet 3RA2813-2FW10



Solid-state time-delayed auxiliary switch ON delay Relay 1 NC + 1 NO 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 Spring-type 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)	
 with contactor 3R.2 of frame size S00 	10 000 000
 with contactor 3R.2 of frame size S0 	10 000 000
 with contactor 3R.2 of frame size S2 	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)	
 with contactor 3R.2 of frame size S00 	100 000
 with contactor 3R.2 of frame size S0 	100 000
 with contactor 3R.2 of frame size S2 	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 %
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	
• 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	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
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 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	Yes
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 NC contacts	7.9
delayed switching	1
number of NO contacts	·
delayed switching	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	
 at the relay outputs switchover delayed/without delay 	No
non-volatile	No
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	
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	spring-loaded 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)
 finely stranded without core end processing 	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
 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
• 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 storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	0 95 %
Certificates/ approvals	
General Product Approval	Declaration of Conformity
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UK Declaration of Conformity **Test Certificates**

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping





Confirmation

other

Vibration and Shock

Railway

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=3RA2813-2FW10

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2813-2FW10}$

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

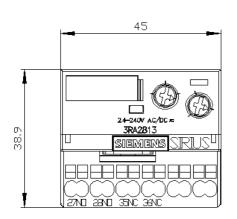
https://support.industry.siemens.com/cs/ww/en/ps/3RA2813-2FW10

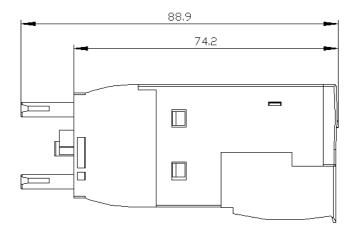
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

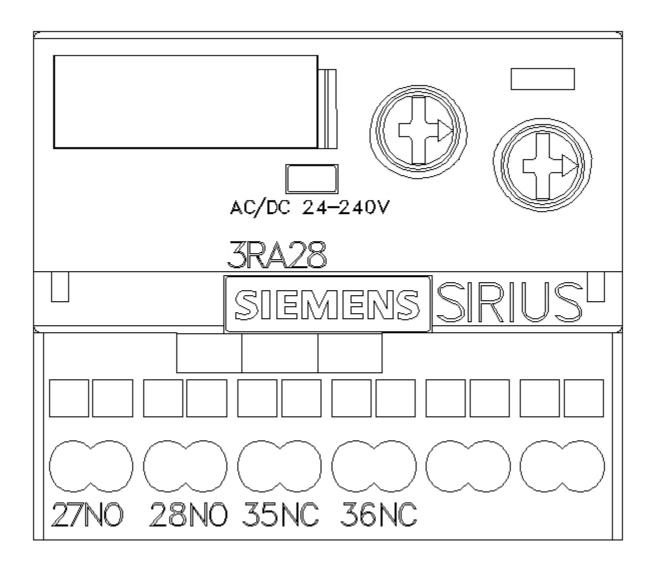
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2813-2FW10&lang=en

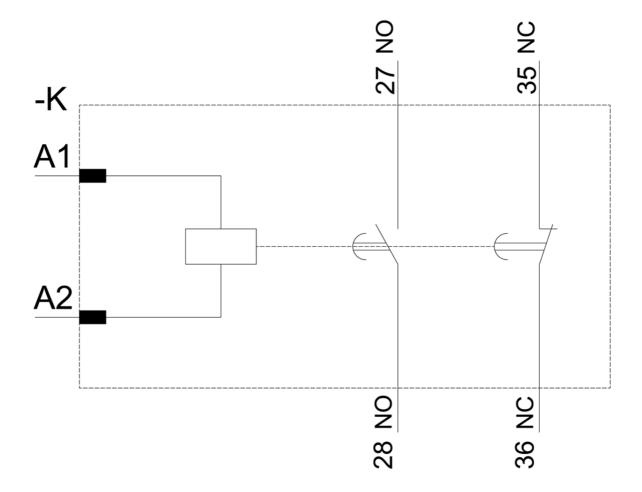
Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RA2813-2FW10/manual









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