SIEMENS

Data sheet 3RA2812-2DW10



electronic timing relay, off delayed, with control signal and semiconductor output, time range 0.05-100 s, 24-240 V AC/DC, 50/60 Hz, varistor for attenuation of the contactor coils integrated, spring-loaded terminal, can be snapped onto the front on contactors 3RT201 / 3RT202 and auxiliary contactors 3RH2

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
• at 240 V	7 mA
protection class IP of the terminal	IP20
shock resistance according to IEC 60068-2-27	15g / 11 ms
mechanical service life (operating cycles) typical	100 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	10 000 000
electrical endurance (operating 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 %
minimum ON period	35 ms
recovery time	50 ms
reference code according to IEC 81346-2	К
active principle	electronic
relative repeat accuracy	1 %
influence of the surrounding temperature	±1 %
power supply influence	±1 %
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Product Function	
product function star-delta circuit	No
Control circuit/ Control	

tune of voltage of the central cumply voltage	AC/DC
type of voltage of the control supply voltage control supply voltage 1 at AC	AOIDO
• 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	00 00 TIZ
•	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 operating range factor control supply voltage rated value at AC at 60 Hz	1.1
• initial value	0.85
• full-scale value	1.1
design of the surge suppressor	with varistor
Switching Function	
switching function	
ON-delay	No
ON-delay/instantaneous contact	No
passing make contact	No
 passing make contact/instantaneous contact 	No
OFF delay	Yes
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	Ale
 constant clock cycle with pulse start constant clock cycle with interval start 	No No
switching function	NU
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	Yes
OFF delay/instantaneous	No
pulse delayed	No
 pulse delayed/instantaneous 	No
• nulse shaning	
pulse-shaping	No
• pulse-shaping/instantaneous	No
pulse-shaping/instantaneousadditive ON-delay/instantaneous	No No
pulse-shaping/instantaneousadditive ON-delay/instantaneousON-delay/OFF-delay	No No No
 pulse-shaping/instantaneous additive ON-delay/instantaneous ON-delay/OFF-delay ON-delay/OFF-delay/instantaneous 	No No No
 pulse-shaping/instantaneous additive ON-delay/instantaneous ON-delay/OFF-delay ON-delay/OFF-delay/instantaneous passing make contact 	No No No No
 pulse-shaping/instantaneous additive ON-delay/instantaneous ON-delay/OFF-delay ON-delay/OFF-delay/instantaneous passing make contact passing make contact/instantaneous contact 	No No No
 pulse-shaping/instantaneous additive ON-delay/instantaneous ON-delay/OFF-delay ON-delay/OFF-delay/instantaneous passing make contact 	No No No No

• retretriggerable with switched on central	No
 retrotriggerable with switched-on control signal/instantaneous contact 	INO
retriggerable with deactivated control signal	No
design of the control terminal non-floating	Yes
Auxiliary circuit	
number of NO contacts	
delayed switching	1
operating frequency with 3RT2 contactor maximum	2 500 1/h
Main circuit	2 000 1/11
type of voltage	AC/DC
Inputs/ Outputs	ACIDO
product function	Na
• non-volatile	No
Electromagnetic compatibility	
EMC immunity according to IEC 61812-1	Environment A (industrial area)
conducted interference	
due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
 due to conductor-earth surge according to IEC 61000-4-5 	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	
category according to EN 954-1	none
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
type of insulation	Basic insulation
Connections/ Terminals	Sale mediateri
product component removable terminal for auxiliary and	Yes
control circuit	
	anning landed terminals
type of electrical connection for auxiliary and control circuit	spring-loaded terminals
type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	spring-loaded terminals
	0.5 4 mm², 2x (0.5 2.5 mm²)
type of connectable conductor cross-sections	
type of connectable conductor cross-sections • solid	0.5 4 mm², 2x (0.5 2.5 mm²)
type of connectable conductor cross-sections	0.5 4 mm², 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
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type of connectable conductor cross-sections	0.5 4 mm ² , 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (0.5 1.5 mm ²) 2x (20 14)
type of connectable conductor cross-sections	0.5 4 mm ² , 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (0.5 1.5 mm ²) 2x (20 14)
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type of connectable conductor cross-sections • solid • finely stranded with core end processing • finely stranded without core end processing • for AWG cables solid • for AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • finely stranded without core end processing AWG number as coded connectable conductor cross section • solid • stranded Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	0.5 4 mm², 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm² 0.5 2.5 mm² 0.25 1.5 mm² 20 14 20 14 20 14 any (like contactor) clip-on 38 mm 45 mm
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— 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

0 ... 95 %

Approvals Certificates

General Product Approval

relative humidity during operation

Test Certificates





Confirmation





Special Test Certificate

Test Certificates

Marine / Shipping

Type Test Certificates/Test Report











Marine / Shipping

other

Railway

Environment



Confirmation

Special Test Certificate

Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2812-2DW10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2812-2DW10

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

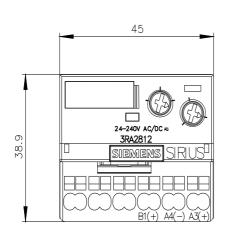
https://support.industry.siemens.com/cs/ww/en/ps/3RA2812-2DW10

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

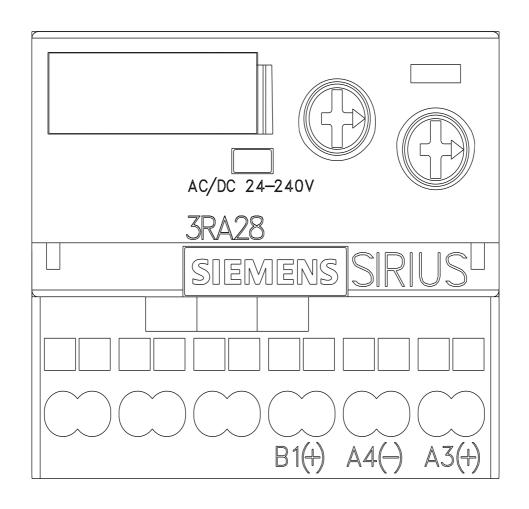
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2812-2DW10&lang=en

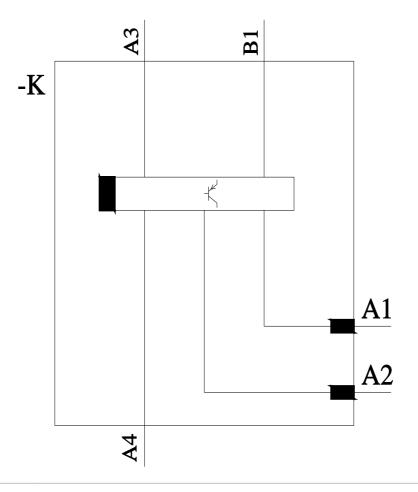
Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RA2812-2DW10/manual









last modified: 3/11/2024 🖸