SIEMENS

Data sheet 3RA2832-2DG10

Electronic timing relay OFF delay With control signal and semiconductor output 24-90 V AC/DC Time range 0.05...100 s Can be snapped on at the front For contactors 3RT2, S2, S3 and 3RH2 S00 contactor relays Spring-type terminal

product brand name	SIRIUS
product designation	function module
product type designation	3RA28
General technical data	
size of contactor can be combined company-specific	S2, S3
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
mechanical service life (switching cycles)	
● with contactor 3R.2 of frame size S2	5 000 000
● with contactor 3R.2 of frame size S3	3 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	10 000 000
electrical endurance (switching cycles)	
● with contactor 3R.2 of frame size S2	5 000 000
● with contactor 3R.2 of frame size S3	3 000 000
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 acc. to IEC 81346-2	K
relative repeat accuracy	1 %
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 ... 90 V

● at 60 Hz	24 ... 90 V
control supply voltage frequency 1	50 ... 60 Hz
● control supply voltage 1 at DC	24 ... 90 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	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	
● 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	Yes
● 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 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
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	
type of voltage	AC/DC
Inputs/ Outputs	
product function	
● 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	
touch protection against electrical shock	finger-safe
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	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
● connectable conductor cross-section finely stranded with core end processing	0.5 ... 2.5 mm²
● connectable conductor cross-section finely stranded without core end processing	0.25 ... 1.5 mm²
● AWG number as coded connectable conductor cross section solid	20 ... 14
● AWG number as coded connectable conductor cross section 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
● ambient temperature during storage	-40 ... +85 °C
● ambient temperature during transport	-40 ... +85 °C
relative humidity during operation	0 ... 95 %

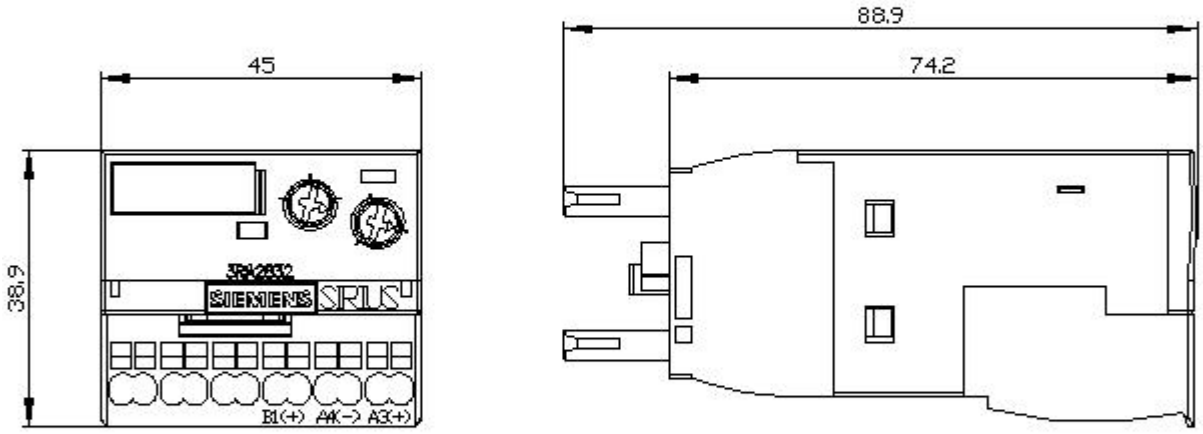
Certificates/ approvals

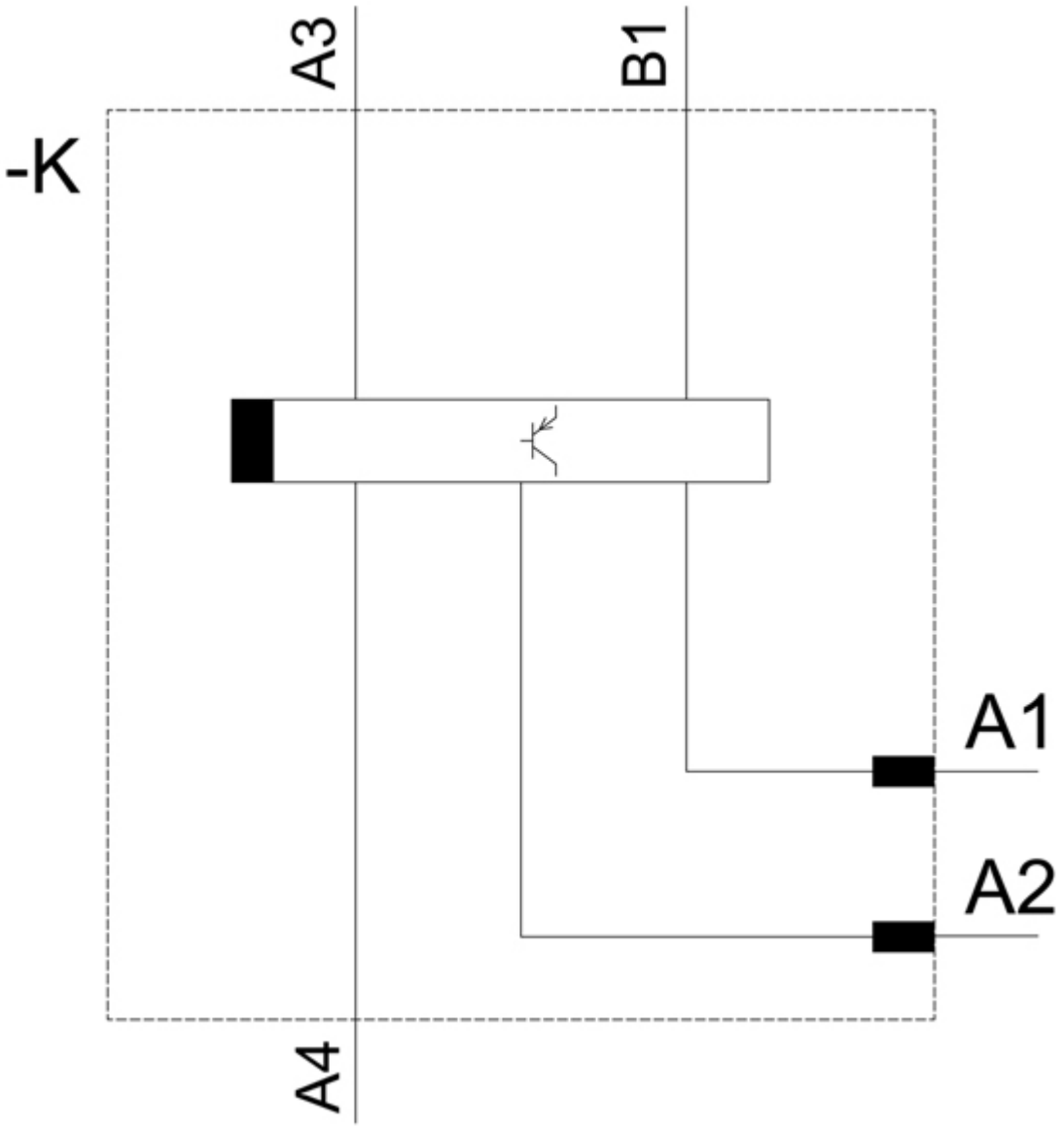
General Product Approval	Test Certificates	Marine / Shipping
UL, EAC	Type Test Certificates/Test Report	ABS, Bureau Veritas, Lloyd's Register LRS

Marine / Shipping	other
PRS, RINA, RMRS, DNV-GL	Confirmation

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=3RA2832-2DG10
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2832-2DG10
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2832-2DG10
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2832-2DG10&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RA2832-2DG10/manual





last modified: 10/16/2020