



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 Screw terminal

product brand name	SIRIUS
product designation	function module
product type designation	3RA28
<b>General technical data</b>	
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) <ul style="list-style-type: none"> <li>• with contactor 3R.2 of frame size S2</li> <li>• with contactor 3R.2 of frame size S3</li> </ul>	5 000 000 3 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	10 000 000
electrical endurance (switching cycles) <ul style="list-style-type: none"> <li>• with contactor 3R.2 of frame size S2</li> <li>• with contactor 3R.2 of frame size S3</li> </ul>	5 000 000 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 %
<b>Product Function</b>	
product function star-delta circuit	No
<b>Control circuit/ Control</b>	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	24 ... 90 V

• at 60 Hz	24 ... 90 V
<b>control supply voltage frequency 1</b>	50 ... 60 Hz
• control supply voltage 1 at DC	24 ... 90 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>design of the surge suppressor</b>	with varistor
<b>Switching Function</b>	
<b>switching function</b>	
• ON-delay	No
• ON-delay/instantaneous contact	No
• passing make contact	No
• passing make contact/instantaneous contact	No
• OFF delay	Yes
<b>switching function</b>	
• 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
<b>switching function</b>	
• constant clock cycle with pulse start	No
• constant clock cycle with interval start	No
<b>switching function</b>	
• variably clocked with pulse start	No
• variably clocked with interval start	No
<b>switching function</b>	
• star-delta circuit with delay time	No
• star-delta circuit	No
<b>switching function with control signal</b>	
• 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
<b>switching function of interval relay with control signal</b>	
• retrotriggerable with deactivated control signal/instantaneous contact	No






<ul style="list-style-type: none"> <li>• retrotriggerable with switched-on control signal</li> </ul>	No
<ul style="list-style-type: none"> <li>• retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• retriggerable with deactivated control signal</li> </ul>	No
<b>design of the control terminal non-floating</b>	Yes
<b>Auxiliary circuit</b>	
<b>number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	1
<b>operating frequency with 3RT2 contactor maximum</b>	2 500 1/h
<b>influence of the surrounding temperature</b>	±1 %
<b>power supply influence</b>	±1 %
<b>Main circuit</b>	
<b>type of voltage</b>	AC/DC
<b>Inputs/ Outputs</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>• non-volatile</li> </ul>	No
<b>Electromagnetic compatibility</b>	
EMC immunity acc. to IEC 61812-1	Environment A (industrial area)
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>• due to burst acc. to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
<ul style="list-style-type: none"> <li>• due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	1 kV
<b>field-based interference acc. to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge acc. to IEC 61000-4-2</b>	8 kV
<b>Safety related data</b>	
<b>touch protection against electrical shock</b>	finger-safe
<b>type of insulation</b>	Basic insulation
<b>category acc. to EN 954-1</b>	none
<b>Connections/ Terminals</b>	
product function removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	0.5 ... 4 mm <sup>2</sup> , 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• at AWG cables solid</li> </ul>	2x (20 ... 14)
<ul style="list-style-type: none"> <li>• at AWG cables stranded</li> </ul>	2x (20 ... 14)
<ul style="list-style-type: none"> <li>• connectable conductor cross-section solid</li> </ul>	0.5 ... 4 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable conductor cross-section finely stranded with core end processing</li> </ul>	0.5 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable conductor cross-section finely stranded without core end processing</li> </ul>	0.25 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• AWG number as coded connectable conductor cross section solid</li> </ul>	20 ... 14
<ul style="list-style-type: none"> <li>• AWG number as coded connectable conductor cross section stranded</li> </ul>	20 ... 14
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any (like contactor)
<b>fastening method</b>	clip-on
<b>height</b>	38 mm
<b>width</b>	45 mm
<b>depth</b>	74 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting</li> </ul>	
<ul style="list-style-type: none"> <li>— forwards</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>— backwards</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>— upwards</li> </ul>	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
 	<a href="#">Type Test Certificates/Test Report</a>	  

Marine / Shipping	other
   	<a href="#">Confirmation</a>

#### 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=3RA2832-1DG10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2832-1DG10>

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

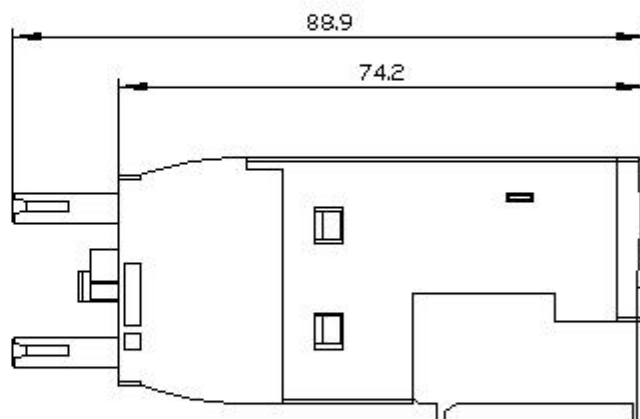
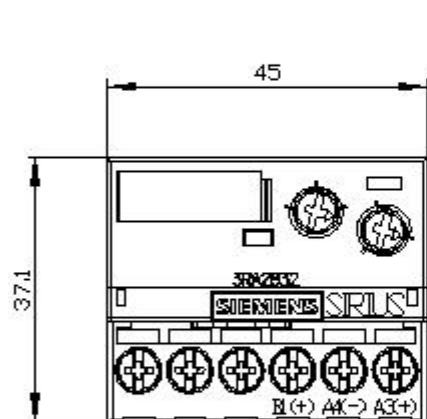
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2832-1DG10>

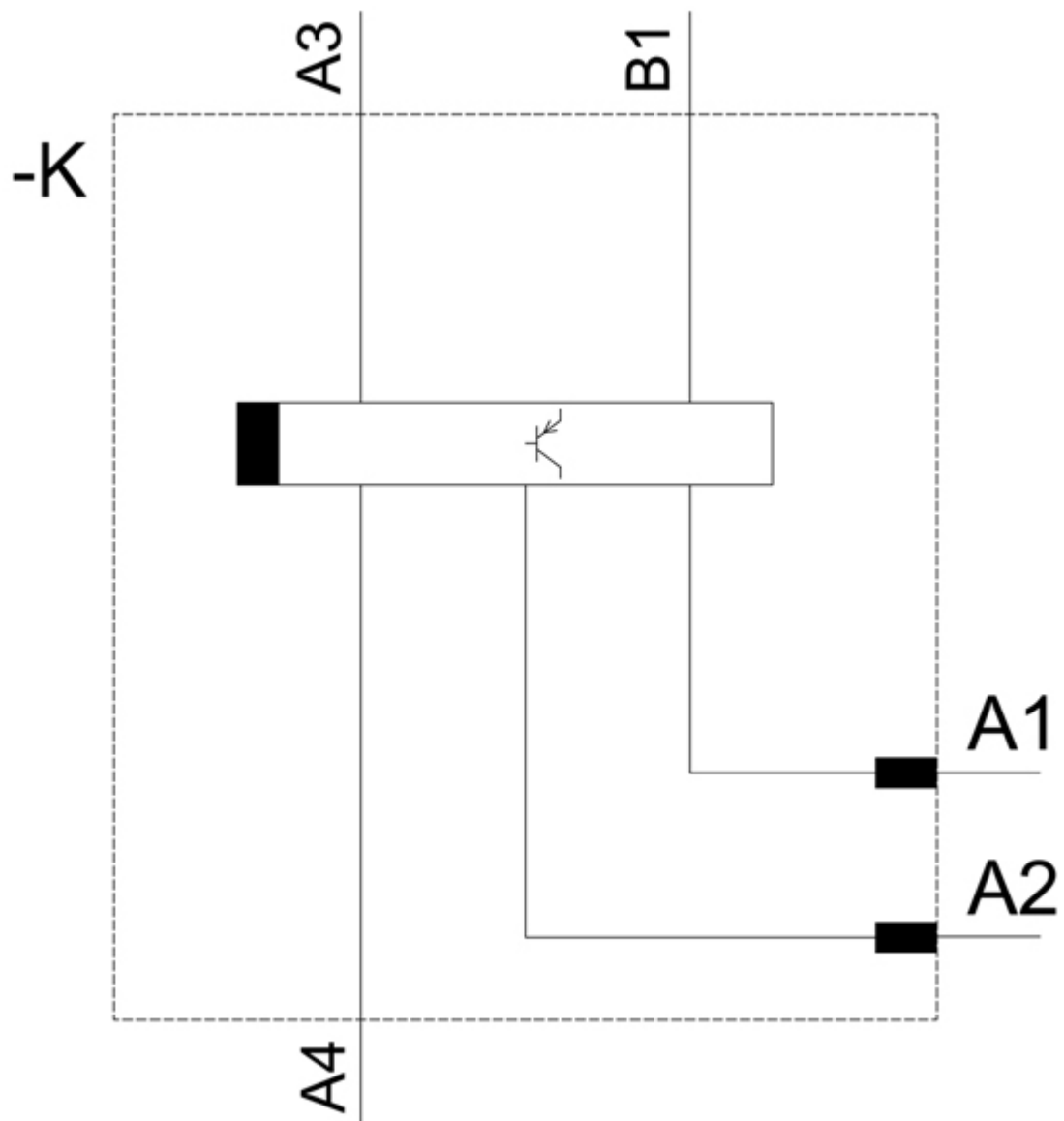
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2832-1DG10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2832-1DG10&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2832-1DG10/manual>





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