## **SIEMENS**

Data sheet 3RA2831-1DG10



SOLID-STATE TIME RELAY ON-DELAY WITH SEMICONDUCTOR OUTPUT 24...240V AC/DC, TIME RANGE 0.05...100S, FOR SNAPPING ONTO THE FRONT, FOR 3RT2 CONTACTORS SCREW TERMINALS

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
Design of the product		slow-operating
Protection class IP on the front		IP20
Protection class IP of the terminal		IP20
Degree of pollution		3
Insulation voltage with degree of pollution 3 Rated	V	300
value		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during storage</li></ul>	°C	-40 +85
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60
during transport	°C	-40 <b>+</b> 85
EMI immunity acc. to IEC 60947-1		ambience A (industrial sector)
EMC emitted interference acc. to IEC 60947-1		CISPR11, ambience A (industrial sector)
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV network connection / 1 kV control connection
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5		
Electrostatic discharge acc. to IEC 61000-4-2		8 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Shock resistance		15g / 11 ms

Vibration resistance		10 55 Hz / 0.35 mm
Surge voltage resistance Rated value	kV	4
Equipment marking acc. to DIN 40719 extended		Κ
according to IEC 204-2 acc. to IEC 750		
Equipment marking acc. to DIN EN 61346-2		К
Adjustable time	s	0.05 100
Switching function		
<ul><li>ON-delay</li></ul>		Yes
OFF delay		No
Switching function		
• with control signal		
— OFF delay		Yes
— pulse-shaping		No
<ul> <li>without control signal OFF delay</li> </ul>		No
Product component semi-conductor output		Yes
Product expansion		
<ul> <li>optional remote control</li> </ul>		No
<ul> <li>required remote control</li> </ul>		No
Product function		
• star-delta circuit		No
Control circuit/ Control:		
Design of the surge suppressor		with varistor
Supply voltage required Auxiliary voltage		No
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage 1		
• for DC	V	24 90

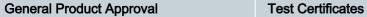
Control circuit/ Control:		
Design of the surge suppressor		with varistor
Supply voltage required Auxiliary voltage		No
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage 1		
• for DC	V	24 90
• with AC		
— at 50 Hz	V	24 90
— at 60 Hz	V	24 90
Operating range factor control supply voltage rated value of the magnet coil		0.85 1.1

Installation/ mounting/ dimensions:		
Mounting type		clip-on
Width	mm	45
Height	mm	38
Depth	mm	74
Required spacing with side-by-side mounting		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
Backwards	mm	0

• at the side	mm	0
Required spacing for grounded parts		
• upwards	mm	0
<ul><li>downwards</li></ul>	mm	0
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
Required spacing for live parts		
• upwards	mm	0
<ul><li>downwards</li></ul>	mm	0
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0

Connections/ Terminals:	
Type of electrical connection for auxiliary and control	screw-type terminals
current circuit	
Product function removable terminal for auxiliary and	Yes
control circuit	
Type of connectable conductor cross-section	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)
— finely stranded	
<ul> <li>— with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul> <li>— without core end processing</li> </ul>	2x (0.5 1.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 14)

Certificates/ approvals:	
Certificate of suitability	CE / UL / CSA
<ul> <li>EC declaration of conformity</li> </ul>	Yes
<ul><li>CSA-approval</li></ul>	Yes
• UL approval	Yes







Type Test Certificates/Test Report Environmental Confirmations

other

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

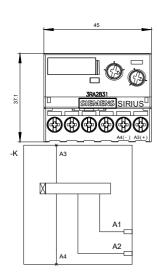
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

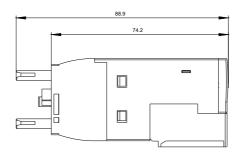
## Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA28311DG10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="http://support.automation.siemens.com/WW/view/en/3RA28311DG10/all">http://support.automation.siemens.com/WW/view/en/3RA28311DG10/all</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RA28311DG10&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RA28311DG10&lang=en</a>





last modified: 09.03.2015