# **SIEMENS**

## Data sheet

### 3RU2136-4BD0



OVERLOAD RELAY 14...20 A FOR MOTOR PROTECTION SIZE S2, CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SPRING-T. TERM. MANUAL-AUTOMATIC-RESET.

Figure similar	
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product brand name

Product	designation
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SIRIUS
3RU2 thermal overload relay

General technical data:		
Active power loss total typical	W	8
Insulation voltage	-	
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690
Shock resistance	-	
• acc. to IEC 60068-2-27		8g / 11 ms
Surge voltage resistance Rated value	kV	6
Temperature compensation	°C	-40 +60
Recovery time		
<ul> <li>after overload trip with automatic reset typical</li> </ul>	min	10
<ul> <li>after overload trip with remote-reset</li> </ul>	min	10
<ul> <li>after overload trip with manual reset</li> </ul>	min	10
Size of contactor can be combined company-specific		S2
Type of assignment		2
Protection class IP		
• on the front		IP20
• of the terminal		IP00
Type of protection		on request
Equipment marking		
• acc. to DIN EN 81346-2		F
Main circuit:		
Number of poles for main current circuit		3

Adjustable response value current of the current-	А	14 20
dependent overload release		
Operating voltage		
Rated value	V	690
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating frequency Rated value	Hz	50 60
Operating current Rated value	А	20
Operating current		
• at AC-3		
— at 400 V Rated value	А	20
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		1
— Note		for contactor disconnection
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		1
— Note		for message "Tripped"
Number of CO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		0
Design of the auxiliary switch		integrated
Operating current of the auxiliary contacts at AC-15		
● at 24 V	А	3
● at 110 V	А	3
• at 120 V	А	3
• at 125 V	А	3
• at 230 V	А	2
● at 400 V	А	1
Operating current of the auxiliary contacts at DC-13		
• at 24 V	А	2
● at 110 V	А	0.22
• at 125 V	А	0.22
• at 220 V	А	0.11
Design of the miniature circuit breaker		
• for short-circuit protection of the auxiliary switch		6A (SCC less than equal to 0.5 kA; U less than equal
required		to 260V)
Protective and monitoring functions:		
Trip class		CLASS 10
Design of the overload circuit breaker		thermal
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	A	20

• at 600 V Rated value	А	20
Contact rating of the auxiliary contacts acc. to UL		B600 / R300
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— required		Fuse gG: 50 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gG: 6 A, quick: 10 A

mounting position		any	
Mounting type		direct mounting	
Height	mm	90	
Width	mm	55	
Depth	mm	105	
Required spacing			
<ul> <li>with side-by-side mounting</li> </ul>			
— forwards	mm	10	
— Backwards	mm	0	
— upwards	mm	10	
— downwards	mm	10	
— at the side	mm	10	
<ul> <li>for grounded parts</li> </ul>			
— forwards	mm	10	
— Backwards	mm	0	
— upwards	mm	10	
— at the side	mm	10	
— downwards	mm	10	
• for live parts			
— forwards	mm	10	
— Backwards	mm	0	
— upwards	mm	10	
— downwards	mm	10	
— at the side	mm	10	

Connections/ Terminals:	
Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Product function	

<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		No
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
— finely stranded with core end processing		2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 2), 1x (18 1)
<ul> <li>for auxiliary contacts</li> </ul>		
— single or multi-stranded		2x (0,5 2,5 mm²)
— finely stranded with core end processing		2x (0.5 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.5 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 14)
Tightening torque	-	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	N∙m	3 4.5
Design of screwdriver shaft		5 to 6 mm diameter
Design of the thread of the connection screw		
• for main contacts		M6
Safety related data:		
Safety related data: Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
		-
Protection against electrical shock		-
Protection against electrical shock Mechanical data:		IEC 60529
Protection against electrical shock Mechanical data: Size of overload relay Ambient conditions: Installation altitude at height above sea level	m	IEC 60529
Protection against electrical shock Mechanical data: Size of overload relay Ambient conditions: Installation altitude at height above sea level maximum	m	IEC 60529 S2
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level         maximum         Ambient temperature	_	IEC 60529 S2 2 000
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level maximum         Ambient temperature         • during operation	°C	IEC 60529 S2 2 000 -40 +70
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level         maximum         Ambient temperature	°C °C	IEC 60529 S2 2 000 -40 +70 -55 +80
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level maximum         Ambient temperature         • during operation         • during storage         • during transport	°C °C °C	IEC 60529 S2 2 000 -40 +70 -55 +80 -55 +80
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level         maximum         Ambient temperature         • during operation         • during storage	°C °C	IEC 60529 S2 2 000 -40 +70 -55 +80
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level maximum         Ambient temperature         • during operation         • during storage         • during transport	°C °C °C	IEC 60529 S2 2 000 -40 +70 -55 +80 -55 +80
Protection against electrical shock Mechanical data: Size of overload relay Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation	°C °C °C	IEC 60529 S2 2 000 -40 +70 -55 +80 -55 +80
Protection against electrical shock         Mechanical data:         Size of overload relay         Ambient conditions:         Installation altitude at height above sea level         maximum         Ambient temperature         • during operation         • during storage         • during transport         Relative humidity during operation         Display:	°C °C °C	IEC 60529 S2 2 000 -40 +70 -55 +80 -55 +80

General Proc	duct Approval	For use in hazardous locations	Declaration of Conformity	Test Certificates
CSA	EHC	ATEX ATEX	EG-Konf.	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>

Test Certificates	other	
Special Test Certificate	Confirmation	Environmental Confirmations

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

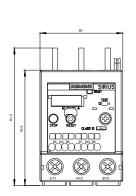
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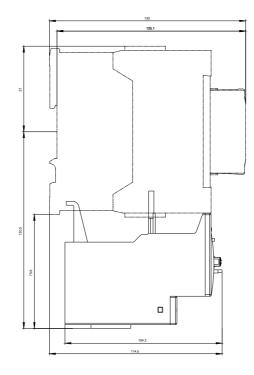
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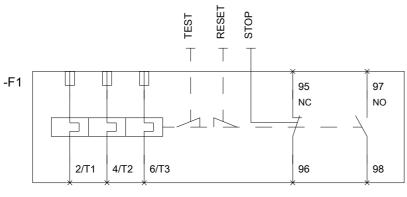
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21364BD0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU21364BD0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU21364BD0&lang=en







last modified:

11.03.2015