# **SIEMENS**

## Data sheet

### 3RU2136-4KB0



OVERLOAD RELAY 62...73 A FOR MOTOR PROTECTION SIZE S2, CLASS 10A CONTACTOR MOUNTING MAIN CIRCUIT: SCREW TERM. AUX. CIRCUIT: SCREW TERM. MANUAL/AUTOMATIC RESET

1	
product brand name	

Product designation

SIRIUS
3RU2 thermal overload relay

General technical data:		
Active power loss total typical	W	13
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- dependent overload releaseA62 73Operating voltage• at AC-3 Rated valueV690• at AC-3 Rated valueHz50 60Operating current Rated valueA73Operating current Rated valueA73Operating current Rated valueA73• at AC-3• at AC-3• at 400 V Rated valueA73Auxiliary cortacts1- at 400 V Rated valueA73Auxiliary contacts1• for auxiliary contacts1- Notefor contactor disconnectionNumber of NC contacts1• for auxiliary contacts1- Notefor message "Tripped"Number of CO contacts0• for auxiliary contacts0• for auxiliary contacts0• for auxiliary contacts0• for auxiliary contacts0• at 24 VA• at 10 VA• at 125 VA• at 224 VA• at 224 VA• at 224 VA• at 110 VA• at 224 VA• at 125 VA• at 224 VA• at 125 VA• at 224 VA• at 224 VA• at 224 VA• at 224 VA• at 225 VA• at 224 VA• at 224 VA• at		1	
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Number of NC contactsV690Operating current Rated valueHz50 60Operating current Rated valueA73Operating current • at AC-3 — at 400 V Rated valueA73Auxiliary circuit:A73Number of NC contacts • for auxiliary contacts1- notefor contactor disconnectionNumber of NO contacts1• for auxiliary contacts1- Notefor contactor disconnectionNumber of NO contacts0• for auxiliary contacts0Operating current of the auxiliary contacts at AC-150• at 24 VA3• at 120 VA3• at 230 VA2• at 200 VA3• at 200 VA2• at 200 VA2• at 200 VA2• at 100 VA2• at 200 VA2	Operating voltage		
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Operating current Rated valueA73Operating currentat AC-373- at 400 V Rated valueA73Auxiliary circuit:A73Number of NC contacts1- Notefor contactor disconnectionNumber of NO contacts1- Notefor contactor disconnectionNumber of Contacts1- Note0Number of CO contacts1of rauxiliary contacts1- Note0Design of the auxiliary switch0Operating current of the auxiliary contacts at AC-153• at 24 VA3• at 110 VA3• at 120 VA3• at 230 VA2• at 400 VA3• at 24 VA3• at 120 VA3• at 24 VA3• at 120 VA3• at 120 VA2• at 100 VA2• at 100 VA2• at 100 VA2• at 100 VA1• at 24 VA2• at 24 VA2• at 24 VA3• at 24 VA2• at 110 VA </td <td><ul> <li>at AC-3 Rated value maximum</li> </ul></td> <td>V</td> <td>690</td>	<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current • at AC-3 - at 400 V Rated valueA73Auxiliary circuit:A73Number of NC contacts • for auxiliary contacts1Image: notable of the auxiliary contacts1Operating current of the auxiliary contacts at AC-15 • for auxiliary contacts1Operating current of the auxiliary contacts at AC-15 • at 24 VA3at 110 VA3at 125 VA3at 24 VA2at 100 VA1Operating current of the auxiliary contacts at DC-13 • at 24 VAA3A3A3A4A4A4A4A4A4A4A4	Operating frequency Rated value	Hz	50 60
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• for auxiliary contactsImage: Contact of the auxiliary switchImage: Contact of the auxiliary contacts at AC-15• at 24 VA3• at 24 VA3• at 10 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 400 VA1• at 24 VA2• at 100 VA1	— Note		for message "Tripped"
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Operating current of the auxiliary contacts at AC-15Image: Mark Mark Mark Mark Mark Mark Mark Mark	<ul> <li>for auxiliary contacts</li> </ul>		0
$\cdot$ at 24 VA3 $\cdot$ at 110 VA3 $\cdot$ at 120 VA3 $\cdot$ at 125 VA3 $\cdot$ at 230 VA2 $\cdot$ at 400 VA1Operating current of the auxiliary contacts at DC-13 $\cdot$ at 24 VA2 $\cdot$ at 110 VA2	Design of the auxiliary switch		integrated
$\cdot$ at 110 V       A       3 $\cdot$ at 120 V       A       3 $\cdot$ at 125 V       A       3 $\cdot$ at 230 V       A       2 $\cdot$ at 400 V       A       1         Operating current of the auxiliary contacts at DC-13 $\cdot$ at 24 V       A       2 $\cdot$ at 110 V       A       2	Operating current of the auxiliary contacts at AC-15		
● at 120 V       A       3         ● at 125 V       A       3         ● at 230 V       A       2         ● at 400 V       A       1         Operating current of the auxiliary contacts at DC-13       -       -         ● at 24 V       A       2         ● at 110 V       A       0.22	• at 24 V	А	3
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• at 400 VA1Operating current of the auxiliary contacts at DC-13• at 24 VA2• at 110 VA0.22	• at 125 V	А	3
Operating current of the auxiliary contacts at DC-13     A     2       • at 24 V     A     0.22	• at 230 V	A	2
• at 24 V A 2 • at 110 V A 0.22	• at 400 V	А	1
• at 110 V A 0.22	Operating current of the auxiliary contacts at DC-13		
	• at 24 V	A	2
• at 125 V A 0.22	• at 110 V	А	0.22
	• at 125 V	А	0.22
• at 220 V A 0.11	• at 220 V	А	0.11
Design of the miniature circuit breaker	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 equ	• for short-circuit protection of the auxiliary switch		6A (SCC less than equal to 0.5 kA; U less than equal
required to 260V)	required		to 260V)
Protective and monitoring functions:			
Trip class CLASS 10A	-		
Design of the overload circuit breaker thermal	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     73	• at 480 V Rated value	A	73

• at 600 V Rated value	А	73
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: 160 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>	screw-type terminals
Arrangement of electrical connectors for main current	Top and bottom
circuit	
Product function	

<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		No
Type of connectable conductor cross-section		
<ul> <li>for main contacts</li> </ul>		
— single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		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 1,5 mm²), 2x (0,75 2,5 mm²)
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 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		
<ul> <li>for main contacts</li> </ul>		M6
<ul> <li>of the auxiliary and control contacts</li> </ul>		M3
Safety related data:		
Protection against electrical shock		finger-safe when touched vertically from front acc. to
		IEC 60529
Mechanical data:		
Size of overload relay		S2
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-40 +70
• during storage	°C	-55 +80
<ul> <li>during transport</li> </ul>	°C	-55 +80
Relative humidity during operation	%	0 90
Display:		
Display version		
• for switching status		Slide switch
Certificates/ approvals:		

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

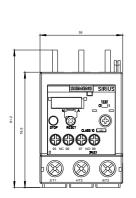
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

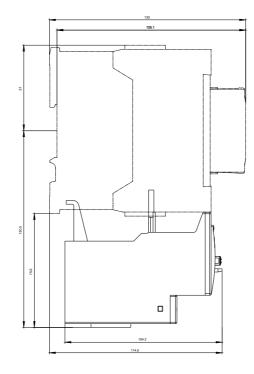
#### Cax online generator

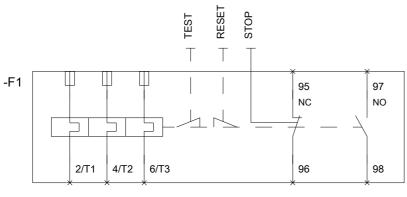
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU21364KB0&lang=en







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