## **SIEMENS**

## Data sheet

## 3RU2136-4JB1



OVERLOAD RELAY 54...65 A FOR MOTOR PROTECTION SIZE S2, CLASS 10 STAND-ALONE INSTALLATION MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET.

Figure s	similar
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product brand name

SIRIUS
3RU2 thermal overload relay

General technical data:		
Active power loss total typical	W	12
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

dependent overload releaseImage: state of the	Adjustable response value current of the current-	А	54 65
Rated valueV690• at AC-3 Rated value maximumV690Operating frequency Rated valueHz50 60Operating current Rated valueA65Operating current • at AC-3 — at 400 V Rated valueA65Number of NC contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts1 Note1for contactor disconnectionNumber of NC contacts • for auxiliary contacts • for auxiliary contacts1 Notefor contactor disconnectionNumber of CO contacts • for auxiliary contacts0 Note0Design of the auxiliary contacts at AC-15 • at 24 VAat 24 VA3• at 110 VA3• at 120 VA3• at 120 VA3• at 120 VA3• at 120 VA3• at 230 VA2	dependent overload release		
InterventionV690Operating frequency Rated valueHz50 60Operating current Rated valueA65Operating current• at AC-3• at AOU V Rated valueA65Auxiliary circuit:-Number of NC contacts1• for auxiliary contacts0Design of the auxiliary contacts at AC-15-• at 24 VA3• at 210 VA3• at 125 VA3• at 230 VA2	Operating voltage		
Operating frequency Rated valueHz50 60Operating current at AC-3 - at 400 V Rated valueA65Operating current • at AC-3 - at 400 V Rated valueA65Auxiliary circuit:A65Auxiliary circuit:INumber of NC contacts - Note1• for auxiliary contacts - Note1• or auxiliary contacts • for auxiliary contacts • for auxiliary contacts1• Notefor contactor disconnectionNumber of CO contacts • for auxiliary contacts0• Design of the auxiliary contacts at AC-15 • at 24 VA• at 110 VA• at 120 VA• at 120 VA• at 120 VA• at 230 VA• at 230 VA	Rated value	V	690
Operating current Rated valueA65Operating current • at AC-3 — at 400 V Rated valueA65Auxiliary circuit:A65Auxiliary circuit:INumber of NC contacts • for auxiliary contacts1- Note1Number of NO contacts • for auxiliary contacts1- Note1Number of NO contacts • for auxiliary contacts1- Note1Number of CO contacts • for auxiliary contacts0Design of the auxiliary contacts at AC-150Operating current of the auxiliary contacts at AC-150• at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA2	<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current • at AC-3 — at 400 V Rated valueA65Auxiliary circuit:A65Auxiliary circuit:I 1 for contacts • for auxiliary contacts1 for contactor disconnectionNumber of NC contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts1 for contactor disconnectionNumber of NO contacts • for auxiliary contacts • for auxiliary contacts1 for message "Tripped"Number of CO contacts • for auxiliary contacts0Design of the auxiliary contacts at AC-150Operating current of the auxiliary contacts at AC-150• at 24 V • at 24 VA3• at 110 V • at 120 V • at 125 V • at 230 VA2	Operating frequency Rated value	Hz	50 60
• at AC-3 — at 400 V Rated valueA65Auxiliary circuit:I I for auxiliary contactsI I for contactor disconnection• hoteI I for contactor disconnectionNumber of NO contactsI I for contactor disconnection• hoteI I I for auxiliary contacts• hoteI I I I I I I INumber of CO contacts • for auxiliary contactsI <b< td=""><td>Operating current Rated value</td><td>А</td><td>65</td></b<>	Operating current Rated value	А	65
- at 400 V Rated valueA65Auxiliary circuit:Number of NC contacts1- Note1Number of NO contacts1- Notefor contactor disconnectionNumber of NO contacts1- Note0Number of CO contacts0- Note0Design of the auxiliary contacts at AC-150• at 24 VA3• at 24 VA3• at 110 VA3• at 120 VA3• at 230 VA2	Operating current		
Auxiliary circuit:Number of NC contacts1- Notefor contactor disconnectionNumber of NO contacts1- Notefor contactor disconnectionNumber of NO contacts1- Notefor message "Tripped"Number of CO contacts0- Note0Design of the auxiliary contacts at AC-150• at 24 VA• at 110 VA• at 125 VA• at 230 VA• at 230 VA	• at AC-3		
Number of NC contacts1• for auxiliary contacts1— Notefor contactor disconnectionNumber of NO contacts1• for auxiliary contacts1— Notefor message "Tripped"Number of CO contacts0• for auxiliary contacts0• for auxiliary contacts0• for auxiliary contacts0Design of the auxiliary switch• integrated• at 24 VA• at 24 VA• at 110 VA• at 120 VA• at 125 VA• at 230 VA	— at 400 V Rated value	А	65
• for auxiliary contacts1 Notefor contactor disconnectionNumber of NO contacts1• for auxiliary contacts1 Notefor message "Tripped"• for auxiliary contacts0• for auxiliary contacts0Design of the auxiliary contacts at AC-15integrated• at 24 VA• at 110 VA• at 120 VA• at 120 VA• at 125 VA• at 230 VA• at 230 VA	Auxiliary circuit:		
Initial contactsfor contactor disconnectionNumber of NO contacts1• for auxiliary contacts1Notefor message "Tripped"Number of CO contacts0• for auxiliary contacts0• for auxiliary contacts0Design of the auxiliary switchintegrated• at 24 VA• at 24 VA• at 110 VA• at 120 VA• at 120 VA• at 125 VA• at 230 VA• at 230 VA	Number of NC contacts		
Number of NO contacts1• for auxiliary contacts1 Notefor message "Tripped"Number of CO contacts0• for auxiliary contacts0Design of the auxiliary switch0Operating current of the auxiliary contacts at AC-15	<ul> <li>for auxiliary contacts</li> </ul>		1
• for auxiliary contacts1 Notefor message "Tripped"Number of CO contactsI• for auxiliary contacts0• for auxiliary contacts0Design of the auxiliary switchIntegrated• at 24 VA• at 24 VA• at 110 VA• at 120 VA• at 125 VA• at 230 VA• at 230 VA	— Note		for contactor disconnection
Notefor message "Tripped"Number of CO contacts• for auxiliary contacts0Design of the auxiliary switchOperating current of the auxiliary contacts at AC-15• at 24 VA• at 24 VA• at 110 VA• at 120 VA• at 125 VA• at 230 VA• at 230 VA	Number of NO contacts		
Number of CO contactsImage: Contact of the auxiliary contactsImage: Contact of the auxiliary switchImage: Contact of the auxiliary switchDesign of the auxiliary switchImage: Contact of the auxiliary contacts at AC-15Image: Contact of the auxiliary contacts at AC-15• at 24 VA3• at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA3	<ul> <li>for auxiliary contacts</li> </ul>		1
• for auxiliary contacts0Design of the auxiliary switchintegratedOperating current of the auxiliary contacts at AC-15integrated• at 24 VA3• at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA3	— Note		for message "Tripped"
Design of the auxiliary switchintegratedOperating current of the auxiliary contacts at AC-15integrated• at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA2	Number of CO contacts		
Operating current of the auxiliary contacts at AC-15         A         3           • at 24 V         A         3           • at 110 V         A         3           • at 120 V         A         3           • at 125 V         A         3           • at 230 V         A         3	<ul> <li>for auxiliary contacts</li> </ul>		0
• at 24 V       A       3         • at 110 V       A       3         • at 120 V       A       3         • at 125 V       A       3         • at 230 V       A       2	Design of the auxiliary switch		integrated
• at 110 V       A       3         • at 120 V       A       3         • at 125 V       A       3         • at 230 V       A       2	Operating current of the auxiliary contacts at AC-15		
• at 120 VA3• at 125 VA3• at 230 VA2	• at 24 V	А	3
• at 125 V A 3 • at 230 V A 2	• at 110 V	А	3
• at 230 V A 2	• at 120 V	А	3
	• at 125 V	А	3
• at 400 V A 1	• at 230 V	А	2
	• at 400 V	А	1
Operating current of the auxiliary contacts at DC-13	Operating current of the auxiliary contacts at DC-13		
• at 24 V A 2	• at 24 V	A	2
• at 110 V A 0.22	● at 110 V	А	0.22
• at 125 V A 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 equal	<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>		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 10	-		
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     65	• at 480 V Rated value	A	65

• at 600 V Rated value	А	65
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: 125 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		stand-alone installation	
Height	mm	105	
Width	mm	55	
Depth	mm	117	
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	
<ul> <li>for live parts</li> </ul>			
— 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 circuit	-	Top and bottom
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)
<ul> <li>— finely stranded with core end processing</li> </ul>		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

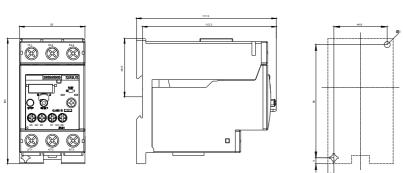
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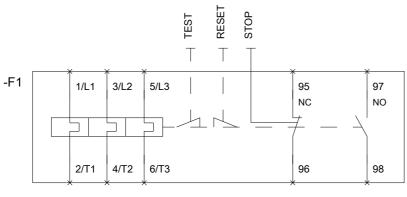
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