## **SIEMENS**

Data sheet 3RU2136-4RB0



OVERLOAD RELAY 70...80 A FOR MOTOR PROTECTION SIZE S2, CLASS 10A CONTACTOR MOUNTING MAIN CIRCUIT: SCREW TERM. AUX. CIRCUIT: SCREW TERM. MANUAL/AUTOMATIC RESET

, igai o annua	
product brand name	SIRIUS
Product designation	3RU2 thermal overload relay

General technical data:		
Active power loss total typical	W	14
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 <b>+</b> 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
<ul><li>of the terminal</li></ul>		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	3

Adjustable response value current of the current-	Α	70 80
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	Α	80
Operating current		
• at AC-3		
— at 400 V Rated value	Α	80
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		1
— Note		for contactor disconnection
Number of NO contacts		
for auxiliary contacts		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	Α	3
● at 110 V	Α	3
● at 120 V	Α	3
● at 125 V	Α	3
● at 230 V	Α	2
● at 400 V	Α	1
Operating current of the auxiliary contacts at DC-13		
● at 24 V	Α	2
● at 110 V	Α	0.22
● at 125 V	Α	0.22
• at 220 V	Α	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 10A
Design of the overload circuit breaker		thermal
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
<ul> <li>at 480 V Rated value</li> </ul>	Α	80

● at 600 V Rated value	Α	80
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
• for short-circuit protection of the auxiliary switch	fuse gG: 6 A, quick: 10 A
required	

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
• for grounded parts		
— 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	
• for main current circuit	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		
• for main contacts		
<ul> <li>single or multi-stranded</li> </ul>		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)
for auxiliary contacts		
— 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		
• for main contacts with screw-type terminals	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
<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 <b>+</b> 70
during storage	°C	-55 <b>+</b> 80
during transport	°C	-55 <b>+</b> 80
Relative humidity during operation	%	0 90
Display:		
Display version		
• for switching status		Slide switch
Certificates/ approvals:		

General Product Approval	For use in	Declaration of	Test
	hazardous	Conformity	Certificates
	locations		











Type Test Certificates/Test Report

Test Certificates	other	
Special Test	Confirmation	Environmental
Certificate		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

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21364RB0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU21364RB0/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=3RU21364RB0&lang=en





