## **SIEMENS**

Data sheet 3RU2136-4BB0



• in networks with grounded star point between

main and auxiliary circuit

Figure similar

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

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay
General technical data:	
Size of overload relay	S2
Size of contactor can be combined company-specific	S2
Power loss [W] total typical	8 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between	415 V
auxiliary and auxiliary circuit	
• in networks with grounded star point between	415 V
auxiliary and auxiliary circuit	
• in networks with grounded star point between	690 V
main and auxiliary circuit	

690 V

IP20
IP00
8g / 11 ms
10 min
10 min
10 min
Ex e
DMT 98 ATEX G 001
finger-safe when touched vertically from front acc. to IEC 60529
F

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-40 +70 °C
during storage	-55 +80 °C
during transport	-55 +80 °C
Temperature compensation	-40 +60 °C

Main circuit:	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	14 20 A
dependent overload release	
Operating voltage	
• rated value	690 V
<ul><li>at AC-3 rated value maximum</li></ul>	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	20 A

Auxiliary circuit:	
Design of the auxiliary switch	integrated
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
Operating current of auxiliary contacts at AC-15	



● at 24 V	3 A
● at 110 V	3 A
● at 120 V	3 A
● at 125 V	3 A
● at 230 V	2 A
● at 400 V	1 A
Operating current of auxiliary contacts at DC-13	
● at 24 V	2 A
● at 110 V	0.22 A
● at 125 V	0.22 A
● at 220 V	0.11 A
Design of the miniature circuit breaker	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
Protective and monitoring functions:	

Totective and monitoring functions.	
Trip class	CLASS 10
Design of the overload release	thermal
LII (00 A)	
UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	20 A
● at 600 V rated value	20 A
Contact rating of auxiliary contacts according to UL	B600 / R300

# Short-circuit protection Design of the fuse link

 for short-circuit protection of the auxiliary switch required

fuse gG: 6 A, quick: 10 A

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



0 mm
10 mm
10 mm
10 mm
10 mm
0 mm
10 mm
10 mm
10 mm

Connections/ Terminals:	
Product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
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
Type of connectable conductor cross-sections	
• 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>at AWG conductors for main contacts</li> </ul>	2x (18 2), 1x (18 1)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
<ul><li>— single or multi-stranded</li></ul>	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>at 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>	3 4.5 N·m
• for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
Design of screwdriver shaft	5 to 6 mm diameter
Design of the thread of the connection screw	
• for main contacts	M6
• of the auxiliary and control contacts	M3
Note to a late delate	

Safety related data:	
T1 value for proof test interval or service life acc. to	20 y
IEC 61508	

Disp	olay	version



#### Certificates/approvals

#### **General Product Approval**

For use in hazardous locations







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Declaration of Conformity	Test Certificates	other
CC	Typprüfbescheinigu spezielle ng/Werkszeugnis Prüfbescheinigu	<u>Umweltbestätigung</u> nge

### Further information

EG-Konf.

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU21364BB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21364BB0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RU21364BB0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU21364BB0&lang=en







