

Overload relay 12.5...50 A For motor protection Size S3, Class 5...30
Contactor mounting Main circuit: Screw terminal Auxiliary circuit:
Spring-type terminal Manual-Automatic-Reset Internal ground fault
detection !!! Phased-out product !!! Successor is SIRIUS 3RB3
Preferred successor type is >>3RB3133-4UD0<<



Figure similar

Product brand name	SIRIUS
Product designation	solid-state overload relay
General technical data	
Size of contactor can be combined company-specific	S3
Power loss [W] for rated value of the current	
• at AC in hot operating state	0.05 W
• at AC in hot operating state per pole	0.02 W
Insulation voltage	
• with degree of pollution 3 at AC rated value	1 000 V
Surge voltage resistance rated value	8 kV
Protection class IP	
• on the front	IP00
Shock resistance	15g / 11 ms
Type of protection	PTB 06 ATEX 3001 Ex II (2) GD
Reference code acc. to DIN EN 81346-2	F
Ambient conditions	
Installation altitude at height above sea level	

• maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
Relative humidity during operation	100 %

Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	12.5 ... 50 A
Operating voltage	
• at AC-3 rated value maximum	1 000 V

Auxiliary circuit	
Number of NC contacts for auxiliary contacts	1
Number of NO contacts for auxiliary contacts	1
Number of CO contacts	
• for auxiliary contacts	0
Operating current of auxiliary contacts at AC-15	
• at 24 V	4 A
• at 110 V	4 A
• at 120 V	4 A
• at 125 V	4 A
• at 230 V	3 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	2 A
• at 60 V	0.55 A
• at 110 V	0.3 A
• at 125 V	0.3 A
• at 220 V	0.11 A

Protective and monitoring functions	
Trip class	CLASS 5E, 10E, 20E and 30E adjustable

Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 6 A

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	Contactor mounting
Height	106 mm
Width	70 mm
Depth	124 mm

Required spacing	
• with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — Backwards — upwards — downwards — at the side	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm

Connections/ Terminals

Product function	
• removable terminal for auxiliary and control circuit	Yes
Type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals spring-loaded terminals
Type of connectable conductor cross-sections	
• for main contacts — solid — stranded — finely stranded with core end processing • at AWG conductors for main contacts	2x (2.5 ... 16 mm ²) 2x (10 ... 50 mm ²), 10 ... 70 mm ² 2x (2.5 ... 35 mm ²), 2.5 ... 50 mm ² 2x (10 ... 1/0), 1x (10 ... 2/0)
Type of connectable conductor cross-sections	
• for auxiliary contacts — solid — finely stranded with core end processing • at AWG conductors for auxiliary contacts	2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (24 ... 16)

Electromagnetic compatibility

Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3

- due to conductor-earth surge acc. to IEC 61000-4-5
- due to conductor-conductor surge acc. to IEC 61000-4-5

2 kV (line to earth) corresponds to degree of severity 3

1 kV (line to line) corresponds to degree of severity 3

Field-bound parasitic coupling acc. to IEC 61000-4-3

10 V/m

Electrostatic discharge acc. to IEC 61000-4-2

6 kV contact discharge / 8 kV air discharge

Certificates/ approvals

General Product Approval

EMC

For use in hazardous locations



CCC



CSA



UL



RCM



ATEX

Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



LRS

Marine / Shipping

other



RINA



DNVGL.COM/AF

[Miscellaneous](#)

[Confirmation](#)

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB2143-4UD0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB2143-4UD0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB2143-4UD0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

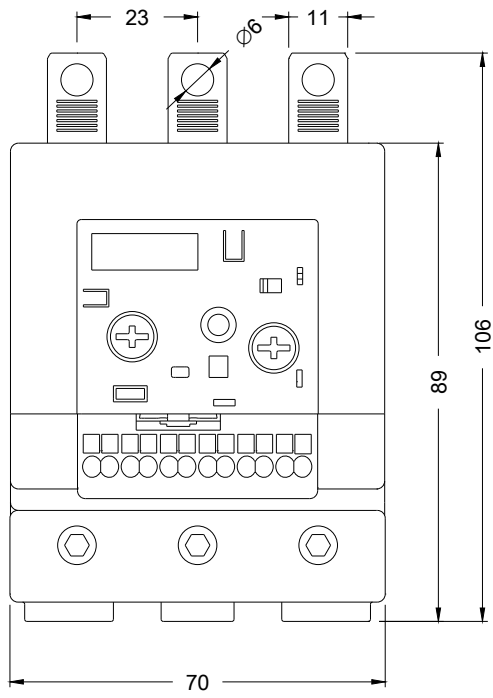
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2143-4UD0&lang=en

Characteristic: Tripping characteristics, I^2t , Let-through current

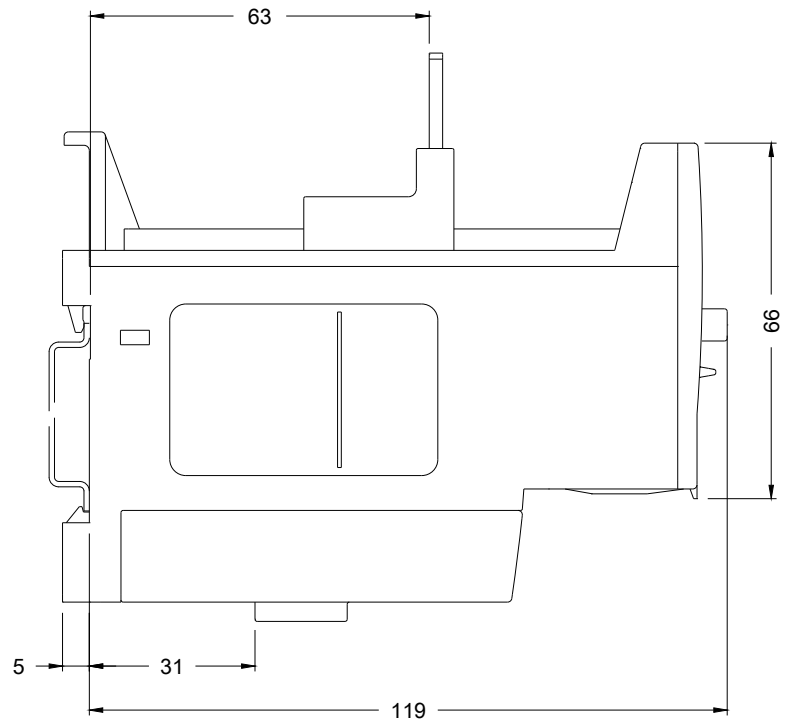
<https://support.industry.siemens.com/cs/ww/en/ps/3RB2143-4UD0/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB2143-4UD0&objecttype=14&gridview=view1>



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