

Evaluation unit for full motor protection (monostable) Size S00...S12, class 5...30 Stand-alone installation Main circuit: -- Auxiliary circuit: Screw terminal Manual-Automatic-Reset



product brand name	SIRIUS
Product designation	solid-state overload relay
Product type designation	3RB22

General technical data

Size of overload relay	S00 ... S12
Size of contactor can be combined company-specific	S00 ... S12
Power loss [W] for rated value of the current <ul style="list-style-type: none"> • at AC in hot operating state • at AC in hot operating state per pole 	0.5 W 0.17 W
Insulation voltage with degree of pollution 3 at AC rated value	300 V
Surge voltage resistance rated value <ul style="list-style-type: none"> • protection class IP on the front 	4 kV IP20
Type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
Certificate of suitability according to ATEX directive 2014/34/EU	PTB 05 ATEX 3022
Reference code acc. to DIN EN 81346-2	F

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +80 °C
Wertebereich	100 %

Main circuit

Number of poles for main current circuit	3
adjustable pick-up value current of the current-dependent overload release	0.3 ... 630 A
Operating voltage	
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	1 000 V

Auxiliary circuit

Number of NC contacts for auxiliary contacts	2
Number of NO contacts for auxiliary contacts	2
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
<ul style="list-style-type: none"> • operating current of auxiliary contacts at AC-15 at 24 V 	6 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at AC-15 at 110 V 	6 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at AC-15 at 120 V 	6 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at AC-15 at 125 V 	6 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at AC-15 at 230 V 	3 A
<ul style="list-style-type: none"> • operating current of auxiliary contacts at DC-13 at 24 V 	2 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at DC-13 at 60 V 	0.55 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at DC-13 at 110 V 	0.3 A
<ul style="list-style-type: none"> • operating current of auxiliary contacts at DC-13 at 125 V 	0.3 A
<ul style="list-style-type: none"> • Operating current of auxiliary contacts at DC-13 at 220 V 	0.2 A

Protective and monitoring functions

Trip class	Class 5, 10, 20 and 30 adjustable
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Short-circuit protection

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

Installation/ mounting/ dimensions

• mounting position	any
Mounting type	stand-alone installation
Height	111 mm
Width	45 mm
Depth	95 mm
Required spacing	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— at the side	6 mm
— downwards	0 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	6 mm

Connections/ Terminals

Product function	
• removable terminal for auxiliary and control circuit	Yes
• Type of electrical connection for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— finely stranded with core end processing	0.5 ... 2.5 mm ² , 2x (0.5 ... 1.5 mm ²)
• at AWG conductors for auxiliary contacts	2x (24 ... 16)

Certificates/ approvals

General Product Approval	EMC	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[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=3RB2283-4AA1>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB2283-4AA1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB2283-4AA1>

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

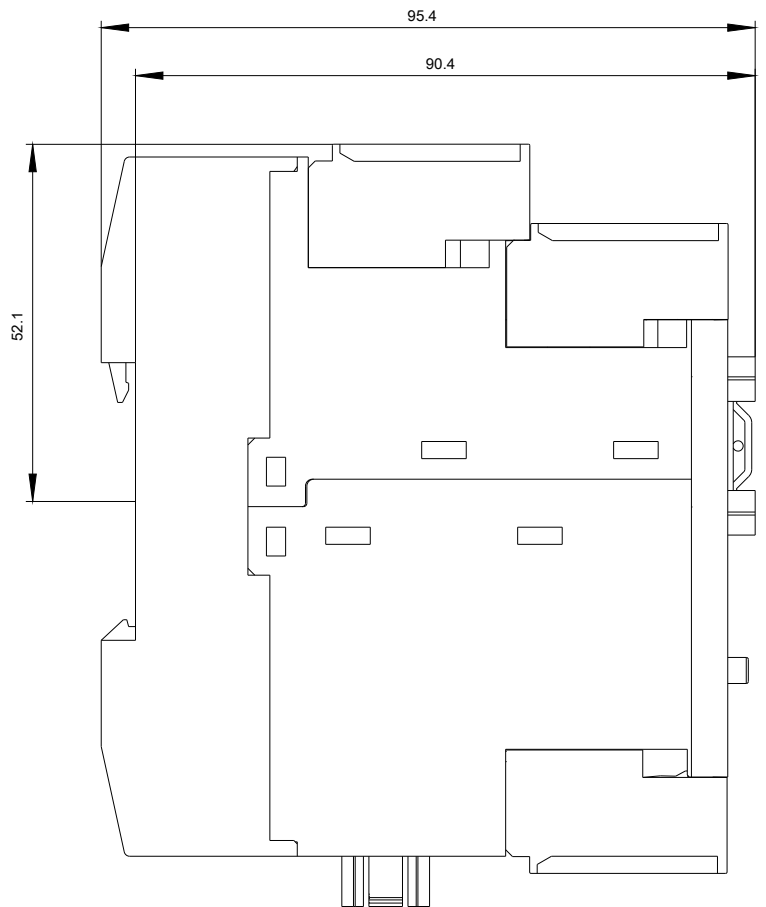
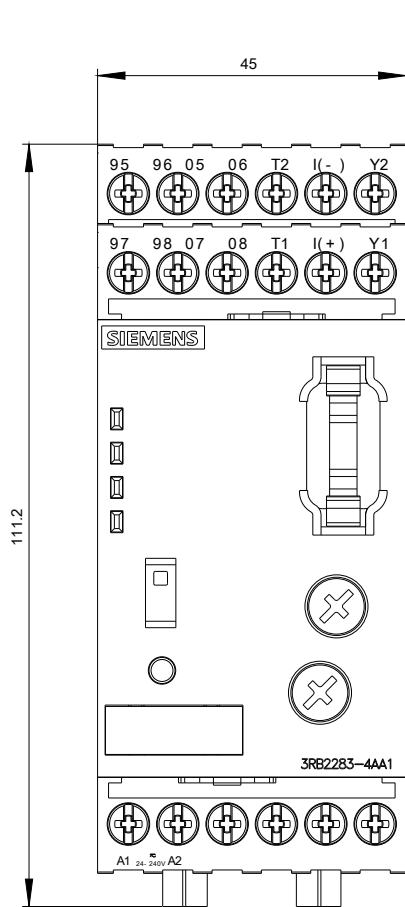
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2283-4AA1&lang=en

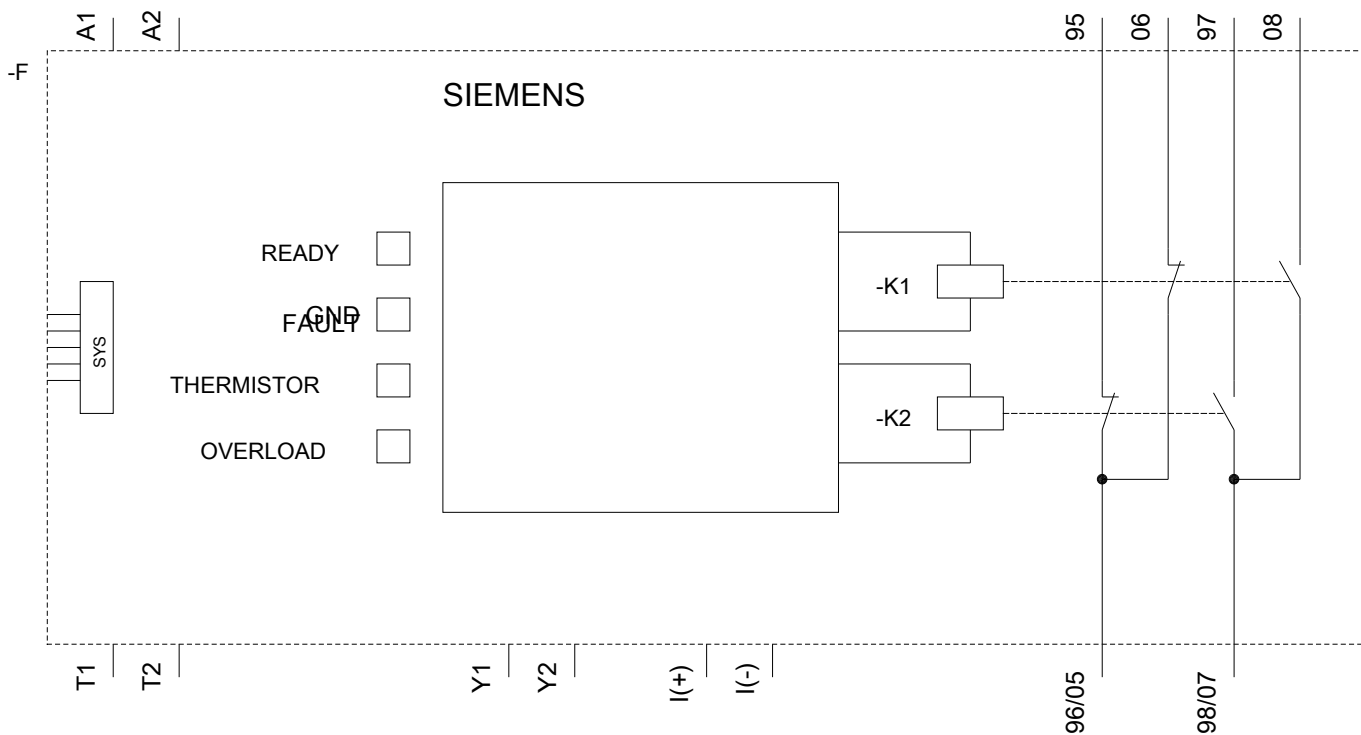
Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RB2283-4AA1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB2283-4AA1&objecttype=14&gridview=view1>





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