



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 at AC in hot operating state	0.5 W
<ul style="list-style-type: none"> per pole 	0.17 W
insulation voltage with degree of pollution 3 at AC rated value	300 V
surge voltage resistance rated value	4 kV
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 according to IEC 81346-2	F
Substance Prohibitance (Date)	05/28/2009

Ambient conditions

installation altitude at height above sea level 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
relative humidity during operation	100 %

Main circuit

number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	0.3 ... 630 A
operational current rated value	630 A
control supply voltage at AC	
<ul style="list-style-type: none"> at 50 Hz rated value 	24 ... 240 V
<ul style="list-style-type: none"> at 60 Hz rated value 	24 ... 240 V

Auxiliary circuit

number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> at 24 V 	6 A
<ul style="list-style-type: none"> at 110 V 	6 A
<ul style="list-style-type: none"> at 120 V 	6 A
<ul style="list-style-type: none"> at 125 V 	6 A
<ul style="list-style-type: none"> at 230 V 	3 A

operational current of auxiliary contacts at DC-13			
<ul style="list-style-type: none"> • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V 	2 A 0.55 A 0.3 A 0.3 A 0.2 A		
Protective and monitoring functions			
trip class	CLASS 5, 10, 20 and 30 adjustable		
Short-circuit protection			
design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 6 A		
Installation/ mounting/ dimensions			
mounting position	any		
fastening method	stand-alone installation		
height	111 mm		
width	45 mm		
depth	95 mm		
required spacing			
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — 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 component removable terminal for auxiliary and control circuit	Yes		
type of electrical connection			
<ul style="list-style-type: none"> • for auxiliary and control circuit 	screw-type terminals		
type of connectable conductor cross-sections			
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — finely stranded with core end processing • at AWG cables for auxiliary contacts 	0.5 ... 2.5 mm ² , 2x (0.5 ... 1.5 mm ²) 2x (24 ... 16)		
Safety related data			
protection class IP on the front according to IEC 60529	IP20		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front		
Certificates/ approvals			
<table> <tr> <td>General Product Approval</td><td>EMC</td></tr> </table>		General Product Approval	EMC
General Product Approval	EMC		



[Confirmation](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other



[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, ...)

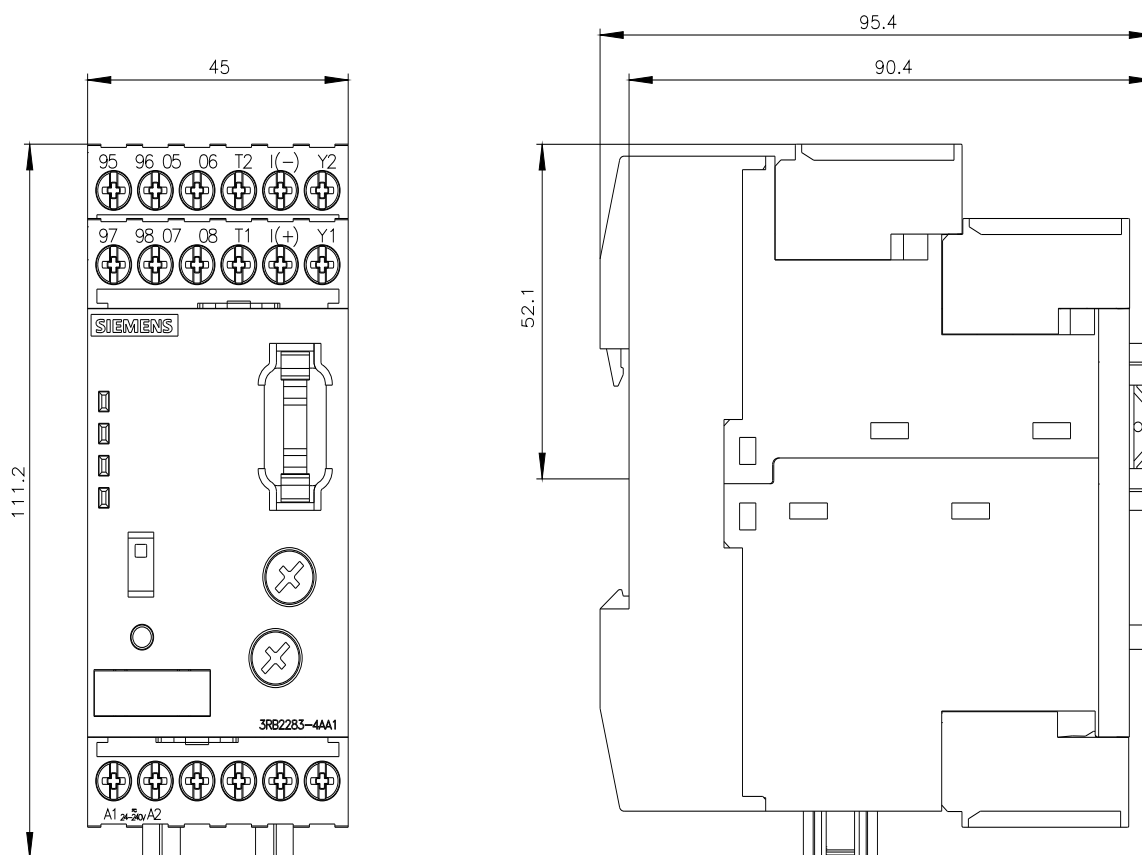
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2283-4AA1&lang=en

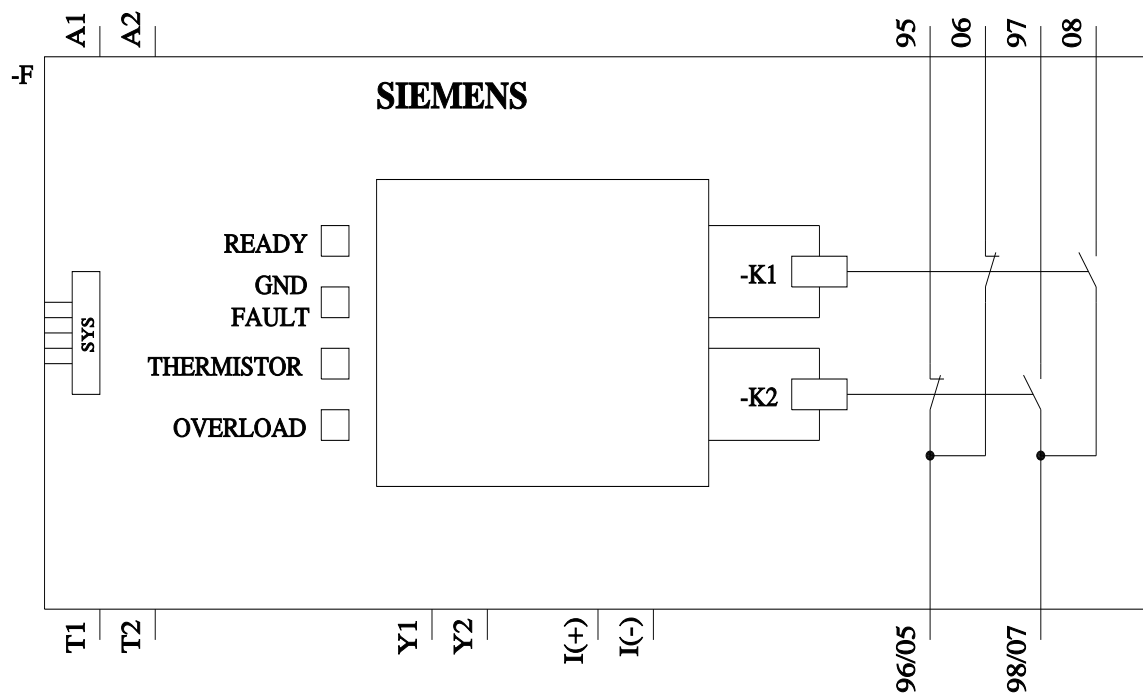
Characteristic: Tripping characteristics, I²t, Let-through current

<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>





last modified:

2/9/2022 