

Circuit breaker size S2 For transformer protection A-release 18...25 A Short-circuit release 520 A Screw terminal Standard switching capacity !!! Phased-out product !!! Successor is SIRIUS 3RV2 Preferred successor type is >>3RV2431-4DA10<<



Product brand name	SIRIUS
Product designation	circuit breaker
Design of the product	for transformer protection

General technical data

Product extension	
<ul style="list-style-type: none"> Auxiliary switch 	Yes
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> at AC in hot operating state 	14.5 W
<ul style="list-style-type: none"> at AC in hot operating state per pole 	4.8 W
Surge voltage resistance rated value	6 000 V
Protection class IP	
<ul style="list-style-type: none"> on the front 	IP20
Shock resistance	25g / 11 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> of the main contacts typical 	50 000
Continuous current rated value	25 A

Ambient conditions

Installation altitude at height above sea level	
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<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-20 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-50 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-50 ... +80 °C

Main circuit

Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	18 ... 25 A
Operating voltage	
<ul style="list-style-type: none"> • rated value 	690 V
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
Operating current	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	25 A
Operating power	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	11 kW
Operating frequency	
<ul style="list-style-type: none"> • at AC-3 maximum 	15 1/h

Auxiliary circuit

Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0

Protective and monitoring functions

Product function	
<ul style="list-style-type: none"> • Ground fault detection 	No
<ul style="list-style-type: none"> • Phase failure detection 	Yes
Trip class	CLASS 10
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at AC at 240 V rated value 	100 kA
<ul style="list-style-type: none"> • at AC at 400 V rated value 	50 kA
<ul style="list-style-type: none"> • at AC at 500 V rated value 	12 kA
<ul style="list-style-type: none"> • at AC at 690 V rated value 	5 kA

Short-circuit protection

Design of the overcurrent release and short-circuit release	thermomagnetic
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Installation/ mounting/ dimensions

Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Height	140 mm

Width	55 mm
Depth	149 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — Backwards — at the side 	0 mm 0 mm




Connections/ Terminals

Product function	No
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	
Type of electrical connection	screw-type terminals with box terminals screw-type terminals
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	
Arrangement of electrical connectors for main current circuit	front side
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — stranded — finely stranded with core end processing • at AWG conductors for main contacts 	2x (0.75 ... 16 mm ²) 2x (0.75 ... 25 mm ²), 1x (0.75 ... 35 mm ²) 2x (0.75 ... 16 mm ²), 0.75 ... 25 mm ² 2x (18 ... 2), 1x (18 ... 2)

Certificates/ approvals

General Product Approval				Declaration of Conformity	
					Miscellaneous
CCC	CSA	UL		EG-Konf.	

Test Certificates		Marine / Shipping			
Special Test Certificate	Type Test Certificates/Test Report				
		ABS	BUREAU VERITAS	LRS	RINA

Marine / Shipping		other		Railway	
		Miscellaneous	Confirmation		Special Test Certificate
RMRS	DNV-GL DNVGL.COM/AF			VDE	

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=3RV1431-4DA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1431-4DA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4DA10>

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

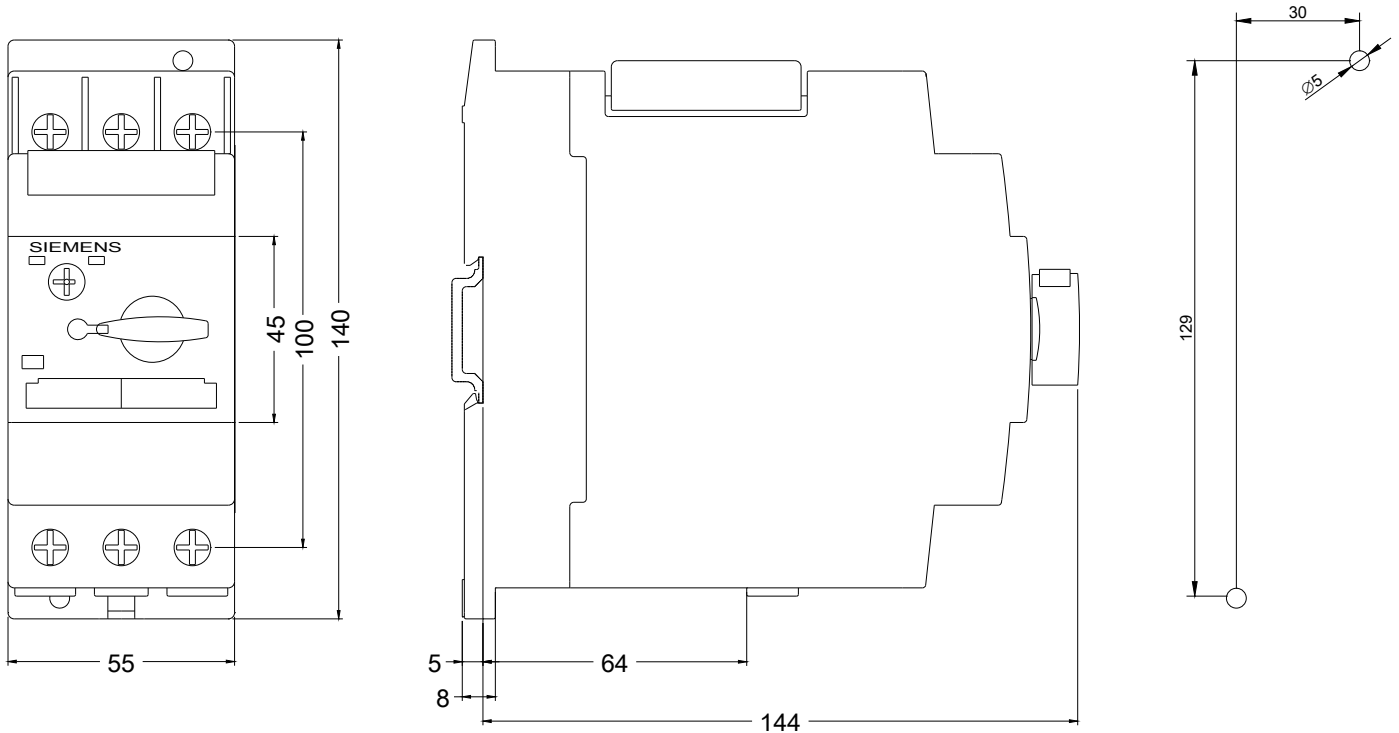
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1431-4DA10&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4DA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1431-4DA10&objecttype=14&gridview=view1>





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