

Circuit breaker size S2 For transformer protection A-release 14...20 A Short-circuit release 416 A Screw terminal Standard switching capacity !!! Phased-out product !!! Successor is SIRIUS 3RV2 Preferred successor type is >>3RV2431-4BA10<<



| | |
|-----------------------|----------------------------|
| 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 | 20 A |

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 | -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 | 14 ... 20 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 | 20 A |
| 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 (I_{cu}) | |
| <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 |
|--|----------------|

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 | |

- with side-by-side mounting
 - Backwards 0 mm
 - at the side 0 mm

Connections/ Terminals

| | |
|--|---|
| Product function | No |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | |
| Type of electrical connection | <ul style="list-style-type: none"> • for main current circuit screw-type terminals with box terminals • for auxiliary and control current circuit screw-type terminals |
| 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 2x (0.75 ... 16 mm²) — stranded 2x (0.75 ... 25 mm²), 1x (0.75 ... 35 mm²) — finely stranded with core end processing 2x (0.75 ... 16 mm²), 0.75 ... 25 mm² • at AWG conductors for main contacts 2x (18 ... 2), 1x (18 ... 2) |

Certificates/ approvals

General Product Approval



[Miscellaneous](#)

Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

Marine / Shipping



other

[Miscellaneous](#)

[Confirmation](#)



Railway

[Special Test Certificate](#)

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=3RV1431-4BA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1431-4BA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4BA10>

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

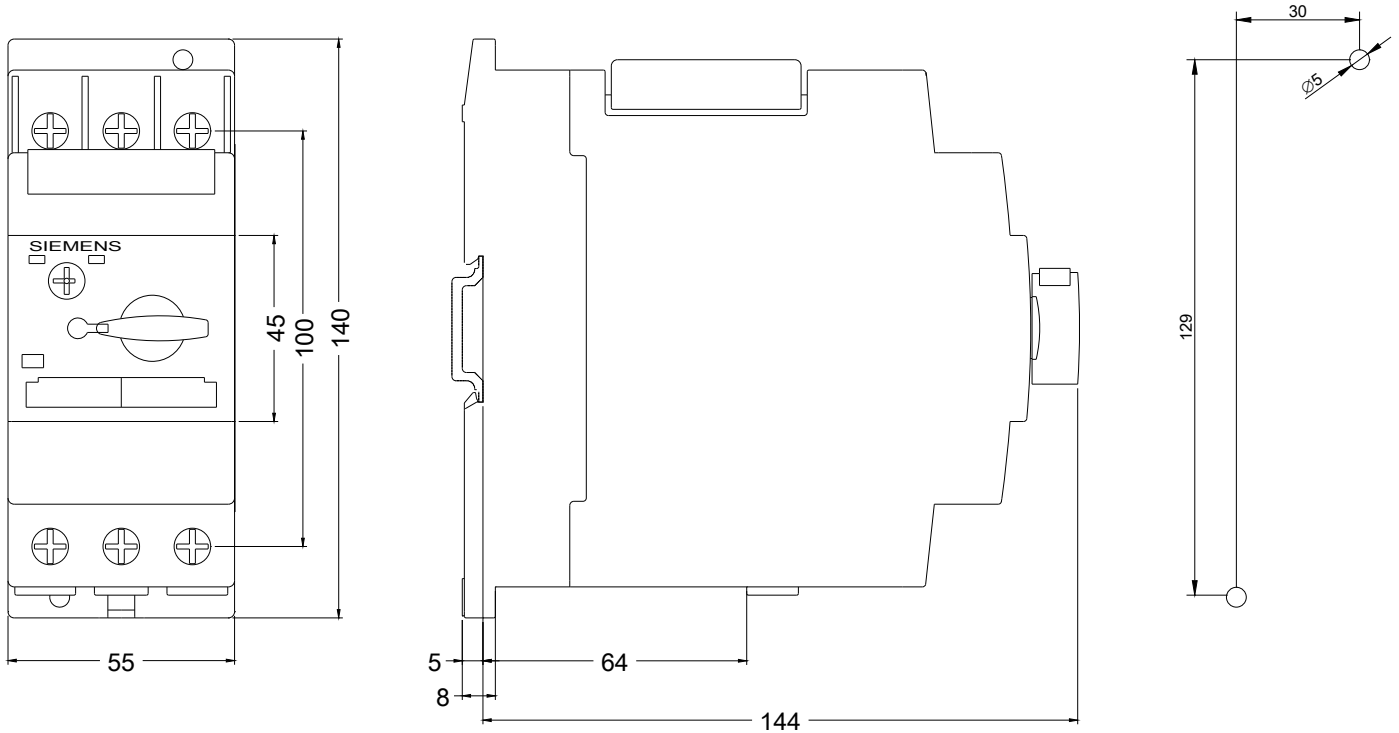
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1431-4BA10&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4BA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1431-4BA10&objecttype=14&gridview=view1>





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