SIEMENS

## Data sheet 3VA5222-7ED31-2AA0



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM210, FTFM, In=225A overload protection Ir=225A fixed short circuit protection Ii=10 x In w/o connection

| | |
|---|---|
| **Model** | |
| product designation / according to UL file | CFAS |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type) | No |
| design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) | No |
| design of the overcurrent release | TM210 |
| protection function of the overcurrent release | LI |
| number of poles | 3 |
| **General technical data** | |
| insulation voltage / rated value | 800 V |
| operating voltage / at DC / rated value | 750 V |
| operating voltage / at AC / rated value | 690 V |
| power loss [W] / maximum | 51 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 17.1 W |
| mechanical service life (operating cycles) / typical | 20 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 8 000 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 4 000 |
| electrical endurance (operating cycles) / at 480 V | 8 000 |
| electrical endurance (operating cycles) / at 600 V | 4 000 |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No |
| product function | |
| ● communication function | No |
| ● other measurement function | No |
| Net Weight | 2 100 g |
| **Current** | |
| marking / according to UL 489 / 100%-rated breaker | Yes |
| operational current | |
| ● at 40 °C | 225 A |
| ● at 45 °C | 220 A |
| ● at 50 °C | 216 A |
| ● at 55 °C | 211 A |
| ● at 60 °C | 206 A |
| ● at 65 °C | 201 A |
| ● at 70 °C | 197 A |
| **Switching capacity according to IEC 60947** | |
| switching capacity class of the circuit breaker | C |
| maximum short-circuit current breaking capacity (Icu) | |


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| | |
|---|---|
| ● at 240 V | 200 kA |
| ● at 415 V | 110 kA |
| ● at 690 V | 10 kA |
| operating short-circuit current breaking capacity (Ics) | |
| ● at 240 V | 200 kA |
| ● at 415 V | 110 kA |
| ● at 690 V | 10 kA |
| short-circuit current making capacity (Icm) | |
| ● at 240 V | 440 kA |
| ● at 415 V | 242 kA |
| ● at 690 V | 17 kA |
| design of short-circuit protection | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |
| **Switching capacity according to UL 489** | |
| current breaking capacity | |
| ● at 240 V | 200 kA |
| ● at 480 V | 100 kA |
| ● at 600 V | 35 kA |
| **Adjustable parameters** | |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic | |
| ● minimum | 225 A |
| ● maximum | 225 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| ● minimum | 1 s |
| ● maximum | 1 s |
| adjustable response value setting current (Ii) / for I-tripping | |
| ● minimum | 2 250 A |
| ● maximum | 2 250 A |
| adjustable setting current (InN) / for N-tripping | |
| ● minimum | 0 A |
| ● maximum | 0 A |
| product function / grounding protection | No |
| **Mechanical Design** | |
| product component | |
| ● undervoltage release | No |
| ● voltage trigger | No |
| ● trip indicator | No |
| height [in] | 7.28 in |
| height | 185 mm |
| width [in] | 4.13 in |
| width | 105 mm |
| depth [in] | 3.27 in |
| depth | 83 mm |
| **Connections** | |
| arrangement of electrical connectors / for main current circuit | Without connection |
| type of electrical connection / for main current circuit | Without |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) | silver |
| **Auxiliary circuit** | |
| number of CO contacts / for auxiliary contacts | 0 |
| **Accessories** | |
| product extension / optional / motor drive | Yes |
| manufacturer's article number | |
| ● of the supplied basic switch | 3VA52227ED312AA0 |
| **Environmental conditions** | |
| protection class IP / on the front | IP40 |
| ambient temperature | |
| ● during operation / minimum | -25 °C |
| ● during operation / maximum | 70 °C |


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| | |
|---|---|
| ● during storage / minimum | -40 °C |
| ● during storage / maximum | 80 °C |
| reference code / according to IEC 81346-2 | Q |

## Approvals / Certificates

### General Product Approval

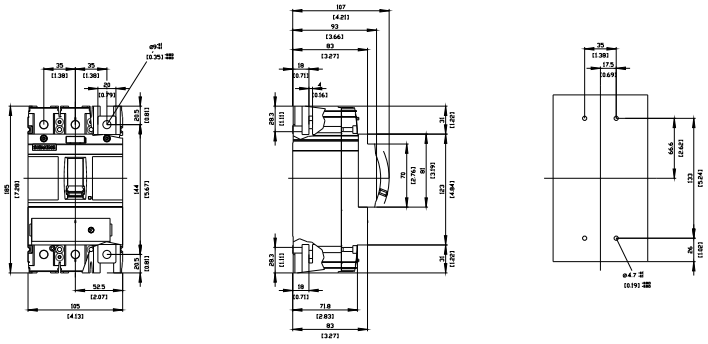
Confirmation | Miscellaneous

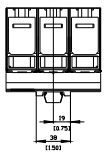
| General Product Approval | Marine / Shipping | other |
|---|---|---|

Miscellaneous | Confirmation

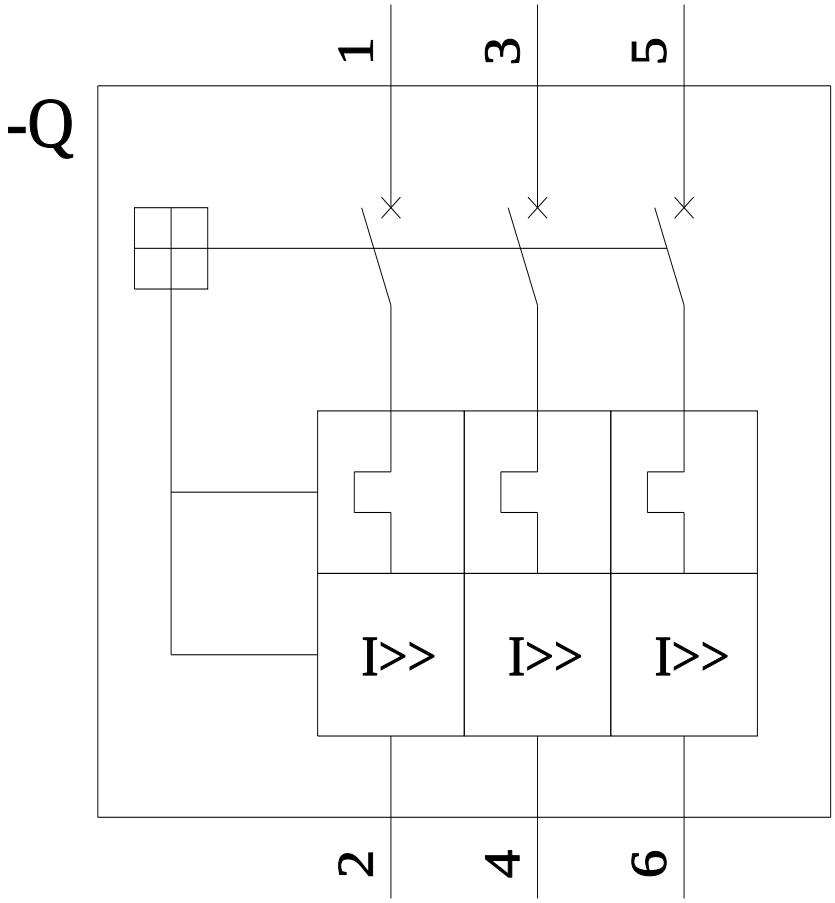
## Further information

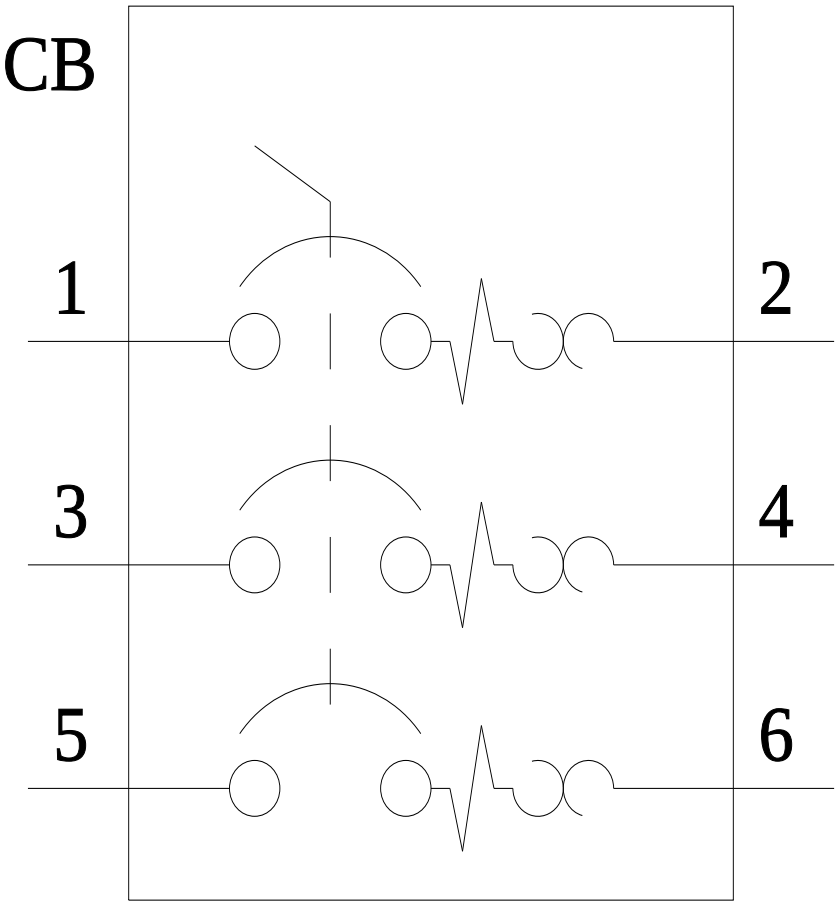
**Siemens has decided to exit the Russian market (see here).**
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
**Siemens is working on the renewal of the current EAC certificates.**
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875
**Information- and Downloadcenter (Catalogs, Brochures,…)**
http://www.siemens.com/lowvoltage/catalogs
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5222-7ED31-2AA0
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA5222-7ED31-2AA0
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5222-7ED31-2AA0
**CAx-Online-Generator**
http://www.siemens.com/cax
**Tender specifications**
http://www.siemens.com/specifications






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