SIEMENS

## Data sheet 3VA2116-0KP46-0AA0

circuit breaker 3VA2 IEC frame 160 breaking capacity class E Icu=200 kA @ 415 V 4-pole, line protection ETU850, LSI, In=160A overload protection Ir=63A ... 160A short circuit protection Isd=0,6...10xIn, Ii=1,5...12xIn neutral protection adjustable(OFF up to 100%) cable connection

| | |
|---|---|
| **Model** | |
| product brand name | SENTRON |
| product designation | Molded case circuit breaker |
| design of the product | Line protection |
| design of the overcurrent release | ETU850 |
| protection function of the overcurrent release | LSI |
| number of poles | 4 |
| **General technical data** | |
| insulation voltage / rated value | 800 V |
| operating voltage / at AC / rated value | 690 V |
| power loss [W] / maximum | 19.7 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 6.57 W |
| mechanical service life (operating cycles) / typical | 25 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 14 000 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 9 800 |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No |
| ground-fault monitoring version | Without |
| product function | |
| ● communication function | Yes |
| ● other measurement function | Yes |
| Net Weight | 3.3 kg |
| **Current** | |
| operational current | |
| ● at 40 °C | 160 A |
| ● at 45 °C | 160 A |
| ● at 50 °C | 160 A |
| ● at 55 °C | 160 A |
| ● at 60 °C | 160 A |
| ● at 65 °C | 160 A |
| ● at 70 °C | 160 A |
| **Switching capacity according to IEC 60947** | |
| switching capacity class of the circuit breaker | E |
| maximum short-circuit current breaking capacity (Icu) | |
| ● at 415 V | 200 kA |
| ● at 690 V | 85 kA |
| operating short-circuit current breaking capacity (Ics) | |
| ● at 415 V | 200 kA |
| ● at 690 V | 65 kA |
| short-circuit current making capacity (Icm) | |


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| | |
|---|---|
| ● at 415 V | 440 kA |
| ● at 690 V | 187 kA |
| **Adjustable parameters** | |
| product feature / for L-tripping / can be switched on/off | No |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic | |
| ● minimum | 63 A |
| ● maximum | 160 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| ● minimum | 0.5 s |
| ● maximum | 25 s |
| adjustable response value setting current (Isd) / of S-trip / with I0t characteristic | |
| ● minimum | 96 A |
| ● maximum | 1 600 A |
| adjustable response value setting current (Isd) / of S-trip / with I2t characteristic | |
| ● minimum | 96 A |
| ● maximum | 1 600 A |
| adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.5 s |
| adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.5 s |
| adjustable response value setting current (Ii) / for I-tripping | |
| ● minimum | 240 A |
| ● maximum | 1 920 A |
| adjustable absolute value setting current (InN) / for N-tripping | |
| ● minimum | 32 A |
| ● maximum | 160 A |
| design of the N-conductor protection | adjustable OFF; 20% to 100% |
| product function / grounding protection | No |
| **Mechanical Design** | |
| product component | |
| ● undervoltage release | No |
| ● voltage trigger | No |
| ● trip indicator | No |
| height [in] | 7.13 in |
| height | 181 mm |
| width [in] | 5.51 in |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded | 1 x (25 - 185 mm²) |
| width | 140 mm |
| depth [in] | 3.39 in |
| depth | 86 mm |
| **Connections** | |
| arrangement of electrical connectors / for main current circuit | Front terminal |
| type of electrical connection / for main current circuit | double-sided box terminal |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) | tin |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) | tin |
| **Auxiliary circuit** | |
| number of CO contacts / for auxiliary contacts | 0 |
| **Accessories** | |
| product extension / optional / motor drive | Yes |
| **Environmental conditions** | |
| protection class IP / on the front | IP40 |
| ambient temperature | |


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| | |
|---|---|
| ● during operation / minimum | -25 °C |
| ● during operation / maximum | 70 °C |
| ● during storage / minimum | -40 °C |
| ● during storage / maximum | 80 °C |

## Certificates

| | |
|---|---|
| reference code / according to IEC 81346-2 | Q |

| General Product Approval | | | | | EMC |
|---|---|---|---|---|---|
| CCC | Confirmation | VDE | Miscellaneous | EAC | RCM |

| Declaration of Conformity | | Test Certificates | | Marine / Shipping | |
|---|---|---|---|---|---|
| EG-Konf. | UKCA | Miscellaneous | Special Test Certificate | BUREAU VERITAS | DNV |

| Marine / Shipping | other | | | Dangerous Good | Environment |
|---|---|---|---|---|---|
| CCS / China Classification Society | Miscellaneous | Confirmation | Miscellaneous | Transport Information | Environmental Confirmations |

## 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=3VA2116-0KP46-0AA0
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA2116-0KP46-0AA0
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-0KP46-0AA0
**CAx-Online-Generator**
http://www.siemens.com/cax
**Tender specifications**
http://www.siemens.com/specifications


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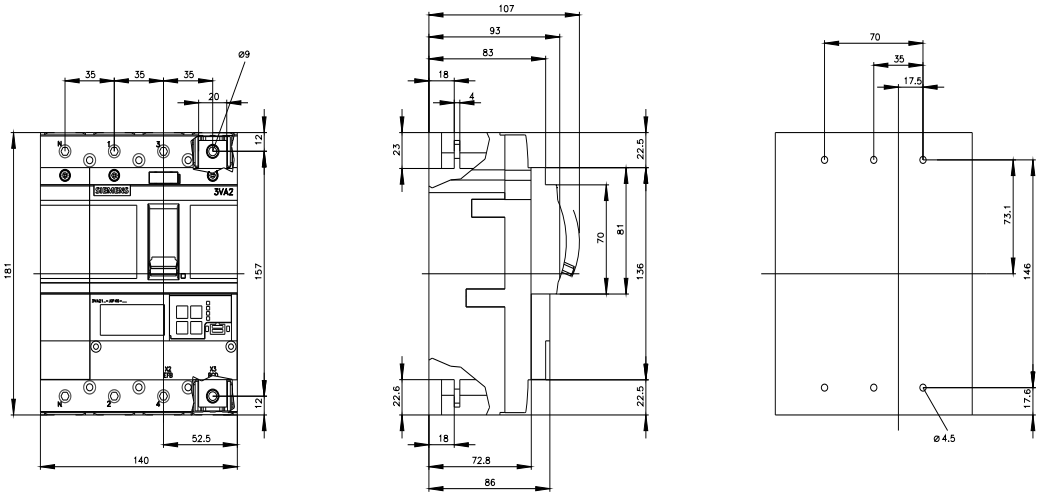


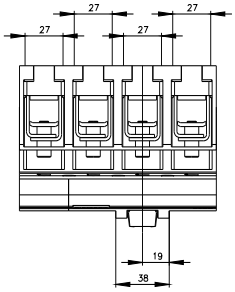


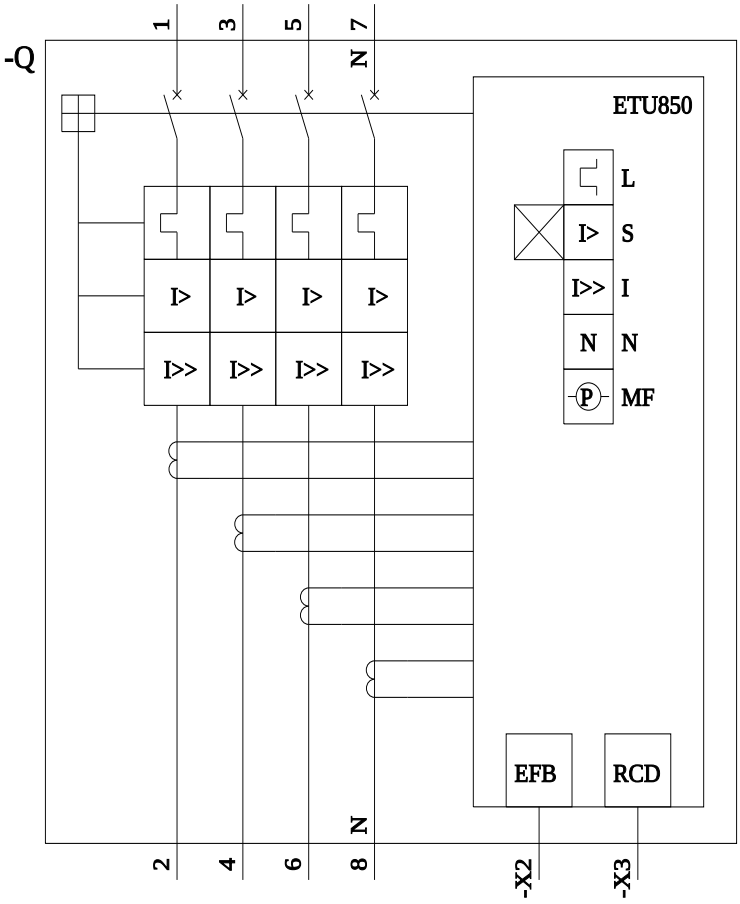


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