SIEMENS

## Data sheet 3VA6712-6HL31-2AA0

Siemens EcoTech



circuit breaker 3VA6 UL frame 1200 breaking capacity class H 65kA @ 480 V 3-pole, line protection ETU320, LI, In=1200A 100%-rated, overload protection Ir=500A - 1200A short circuit protection Ii=1,5-10 x In w/o connection

| | |
|---|---|
| **Model** | |
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | HNAE |
| design of the product | System protection |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| design of the overcurrent release | ETU320 |
| protection function of the overcurrent release | LI |
| number of poles | 3 |
| **General technical data** | |
| insulation voltage / rated value | 800 V |
| operating voltage / at AC / rated value | 600 V |
| power loss [W] / maximum | 243 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 243 W |
| mechanical service life (operating cycles) / typical | 3 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 1 500 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 500 |
| electrical endurance (operating cycles) / at 480 V | 1 500 |
| electrical endurance (operating cycles) / at 600 V | 500 |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No |
| ground-fault monitoring version | without |
| product function | |
| ● communication function | No |
| ● other measurement function | No |
| Net Weight | 25.63 kg |
| **Current** | |
| marking / according to UL 489 / 100%-rated breaker | Yes |
| operational current | |
| ● at 40 °C | 1 200 A |
| ● at 45 °C | 1 200 A |
| ● at 50 °C | 1 200 A |
| ● at 55 °C | 1 200 A |
| ● at 60 °C | 1 200 A |
| ● at 65 °C | 1 200 A |


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| | |
|---|---|
| ● at 70 °C | 1 200 A |
| **Switching capacity according to IEC 60947** | |
| switching capacity class of the circuit breaker | H |
| maximum short-circuit current breaking capacity (Icu) | |
| ● at 240 V | 110 kA |
| ● at 415 V | 70 kA |
| ● at 690 V | 30 kA |
| operating short-circuit current breaking capacity (Ics) | |
| ● at 240 V | 55 kA |
| ● at 415 V | 35 kA |
| ● at 690 V | 15 kA |
| short-circuit current making capacity (Icm) | |
| ● at 240 V | 242 kA |
| ● at 415 V | 154 kA |
| ● at 690 V | 63 kA |
| **Switching capacity according to UL 489** | |
| current breaking capacity | |
| ● at 240 V | 100 kA |
| ● at 480 V | 65 kA |
| ● at 600 V | 35 kA |
| **Adjustable parameters** | |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic | |
| ● minimum | 500 A |
| ● maximum | 1 200 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| ● minimum | 2.5 s |
| ● maximum | 30 s |
| adjustable response value setting current (Ii) / for I-tripping | |
| ● minimum | 1 800 A |
| ● maximum | 12 000 A |
| product function / grounding protection | No |
| **Mechanical Design** | |
| product component | |
| ● undervoltage release | No |
| ● trip indicator | No |
| height [in] | 8.14 in |
| height | 206.9 mm |
| width [in] | 8.99 in |
| width | 228.4 mm |
| depth [in] | 16 in |
| depth | 406.3 mm |
| **Connections** | |
| type of electrical connection / for main current circuit | without terminals |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) | silver |
| 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 |
| **Environmental conditions** | |
| protection class IP / on the front | IP40 |
| ambient temperature | |
| ● during operation / minimum | -25 °C |
| ● during operation / maximum | 70 °C |
| ● during storage / minimum | -40 °C |
| ● during storage / maximum | 80 °C |
| **reference code / according to IEC 81346-2** | F |
| **Approvals / Certificates** | |


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| General Product Approval | | | | | |
|---|---|---|---|---|---|
| CCC | cULus | Miscellaneous | VDE | Miscellaneous | EAC |

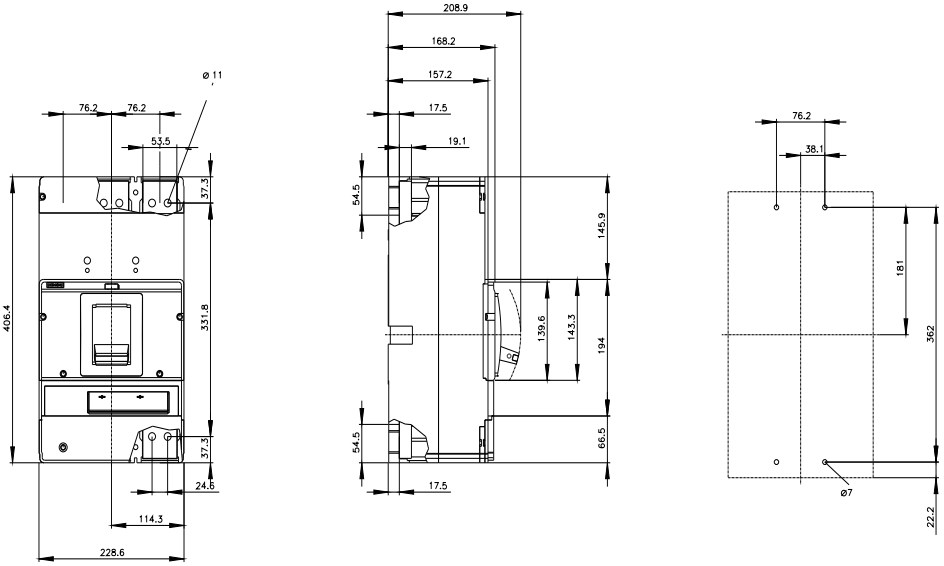
| General Product Approval | | | EMV | Test Certificates | Maritime application |
|---|---|---|---|---|---|
| Confirmation | CE EG-Konf. | UKCA | RCM | Type Test Certificates/Test Report | ABS |

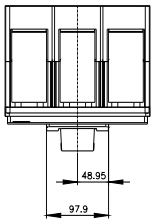
| other | | Dangerous goods | Environment | |
|---|---|---|---|---|
| Miscellaneous | Confirmation | Transport Information | Environmental Confirmations | Siemens EcoTech |

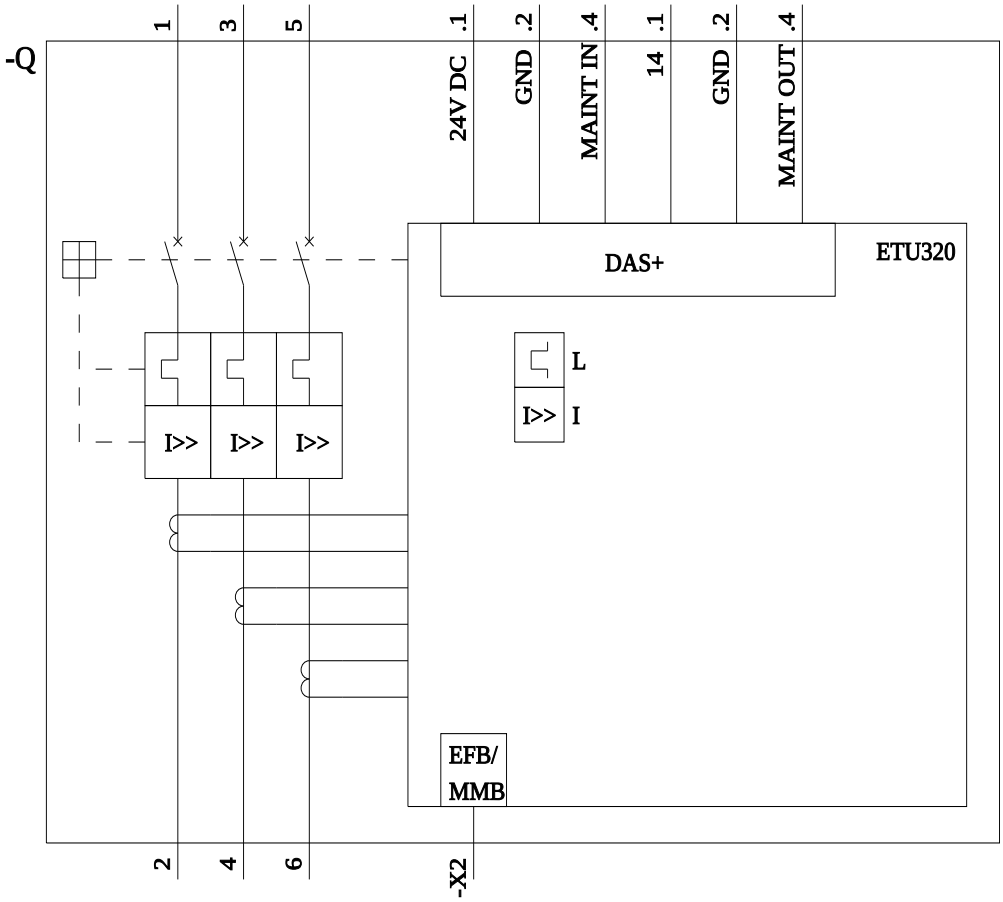
## Further information

**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875
**Information for data generation and storage**
https://support.industry.siemens.com/cs/ww/en/view/109995012
**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/lowvoltage/catalogs
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6712-6HL31-2AA0
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA6712-6HL31-2AA0
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6712-6HL31-2AA0
**CAx-Online-Generator**
https://www.siemens.com/cax
**Tender specifications**
https://www.siemens.com/specifications
**Characteristic curves**
https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod__no>


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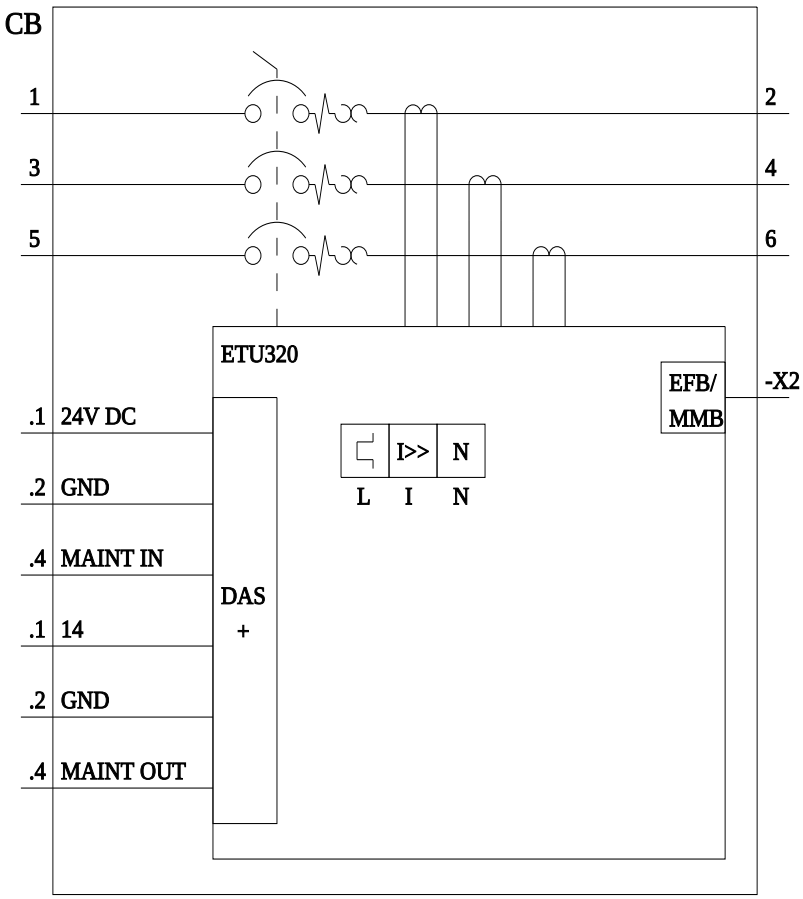




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