



circuit breaker 3VA1 IEC Frame 1000 breaking capacity class H Icu=70 kA @ 415 V 3-pole, line protection TM240, ATAM, In=800 A overload protection Ir=560 A...800 A short-circuit protection Ii=5...10 x In nut keeper kit

| Model | |
|-------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded case circuit breaker |
| design of the product | Line protection |
| design of the overcurrent release | TM240 |
| 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 | 240 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 80 W |
| mechanical service life (operating cycles) / typical | 10 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 4 600 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 3 200 |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | No |
| ground-fault monitoring version | Without |
| product function | |
| • communication function | No |
| • other measurement function | No |
| Net Weight | 13.211 kg |
| Current | |
| operational current | |
| • at 40 °C | 800 A |
| • at 45 °C | 800 A |
| • at 50 °C | 800 A |
| • at 55 °C | 780 A |
| • at 60 °C | 761 A |
| • at 65 °C | 741 A |
| • at 70 °C | 722 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 | 100 kA |
| • at 415 V | 70 kA |
| • at 440 V | 70 kA |
| • at 500 V | 55 kA |
| • at 690 V | 35 kA |

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|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| operating short-circuit current breaking capacity (Ics) | |
| • at 240 V | 100 kA |
| • at 415 V | 70 kA |
| • at 440 V | 70 kA |
| • at 500 V | 55 kA |
| • at 690 V | 19 kA |
| short-circuit current making capacity (Icm) | |
| • at 240 V | 220 kA |
| • at 415 V | 154 kA |
| • at 440 V | 154 kA |
| • at 500 V | 121 kA |
| • at 690 V | 73.5 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 |
| 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 | 560 A |
| • maximum | 800 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 | 4 000 A |
| • maximum | 8 000 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] | 12.6 in |
| height | 320 mm |
| width [in] | 8.27 in |
| width | 210 mm |
| depth [in] | 4.72 in |
| depth | 120 mm |
| Connections | |
| arrangement of electrical connectors / for main current circuit | Front terminal |
| type of electrical connection / for main current circuit | nut keeper kit on both ends |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum | 20 x 4 mm |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 50 x 28 mm |
| 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 |
| Accessories | |
| product extension / optional / motor drive | No |
| Environmental conditions | |
| protection class IP / on the front | IP40 |
| ambient temperature | |
| • during operation / minimum | -25 °C |
| • during operation / maximum | 70 °C |

- during storage / minimum
- during storage / maximum

-40 °C

80 °C

reference code / according to IEC 81346-2

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Approvals / Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)

General Product Approval

EMV

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



Marine / Shipping

other



[Confirmation](#)

[Miscellaneous](#)

other

Environment

[Miscellaneous](#)

[Environmental Conformations](#)

[Environmental Conformations](#)

Further information

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=3VA1580-6EF32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1580-6EF32-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1580-6EF32-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



