3VA1163-6GE42-0AA0

Data sheet



circuit breaker 3VA1 IEC Frame 160 breaking capacity class H Icu=70 kA @ 415 V 4-pole, line protection TM220, ATFM, In=63 A overload protection Ir=44 A...63 A short-circuit protection Ii=10 x In neutral conductor protection 100% 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 | TM220 |
| protection function of the overcurrent release | LI |
| number of poles | 4 |
| General technical data | |
| insulation voltage / rated value | 800 V |
| operating voltage / at DC / rated value | 600 V |
| operating voltage / at AC / rated value | 690 V |
| power loss [W] / maximum | 17.3 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 5.77 W |
| mechanical service life (operating cycles) / typical | 20 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 9 000 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 6 300 |
| 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 | 1.236 kg |
| Current | |
| operational current | |
| ● at 40 °C | 63 A |
| • at 45 °C | 63 A |
| • at 50 °C | 63 A |
| • at 55 °C | 62 A |
| • at 60 °C | 61 A |
| • at 65 °C | 60 A |
| • at 70 °C | 58 A |
| Switching capacity according to IEC 60947 | |
| switching capacity class of the circuit breaker | Н |
| maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 100 kA |
| • at 415 V | 70 kA |
| • at 440 V | 55 kA |
| ● at 500 V | 10 kA |
| • at 690 V | 10 kA |

| operating short-circuit current breaking capacity (lcs) | |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • at 240 V | 100 kA |
| • at 415 V | 70 kA |
| • at 440 V | 40 kA |
| ● at 500 V | 5 kA |
| ● at 690 V | 5 kA |
| short-circuit current making capacity (lcm) | |
| • at 240 V | 220 kA |
| ● at 415 V | 154 kA |
| ● at 440 V | 121 kA |
| ● at 500 V | 17 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 |
| Adjustable parameters | on aprox |
| product feature / for L-tripping / can be switched on/off | No |
| adjustable response value setting current (Ir) / of the L-trip / with | 110 |
| 12t characteristic | |
| • minimum | 44 A |
| • maximum | 63 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| • minimum | 1s |
| • maximum | 1s |
| adjustable response value setting current (li) / for I-tripping | |
| • minimum | 630 A |
| • maximum | 630 A |
| adjustable setting current (InN) / for N-tripping | |
| • minimum | 63 A |
| • maximum | 63 A |
| design of the N-conductor protection | 100% |
| product function / grounding protection | No. |
| Mechanical Design | |
| product component | |
| undervoltage release | No |
| voltage trigger | No |
| trip indicator | No |
| height [in] | 5.12 in |
| | 130 mm |
| height width [in] | 4 in |
| width [in] | 101.6 mm |
| width | |
| depth [in] | 2.76 in |
| depth | 70 mm |
| Connections | Facel transition |
| arrangement of electrical connectors / for main current circuit | Front terminal |
| type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar | nut keeper kit on both ends 12 x 1 mm |
| terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 17 x 6,5 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) | Tin |
| Auxiliary circuit | |
| number of CO contacts / for auxiliary contacts | 0 |
| Accessories | |
| product extension / optional / motor drive | Yes |
| Environmental conditions | 100 |
| | ID40 |
| protection class IP / on the front | IP40 |
| ambient temperature | 25 °C |
| during operation / minimum | -25 °C |

| during operation / maximum | 70 °C |
|----------------------------------------------------------|---------|
| during storage / minimum | -40 °C |
| during storage / maximum | 80 °C |
| Environmental footprint | |
| Environmental Product Declaration(EPD) | Yes |
| Global Warming Potential [CO2 eq] / total | 190 kg |
| Global Warming Potential [CO2 eq] / during manufacturing | 4.67 kg |
| Global Warming Potential [CO2 eq] / during operation | 186 kg |

-0.826 kg

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Approvals / Certificates

General Product Approval





Confirmation





Miscellaneous

General Product Approval

EMV

Global Warming Potential [CO2 eq] / after end of life

reference code / according to IEC 81346-2

Test Certificates

Marine / Shipping





Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping









CCS (China Classification Society) Confirmation

other

other

Environment

Miscellaneous

Miscellaneous





Environmental Confirmations

Environmental Confirmations

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=3VA1163-6GE42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1163-6GE42-0AA0

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

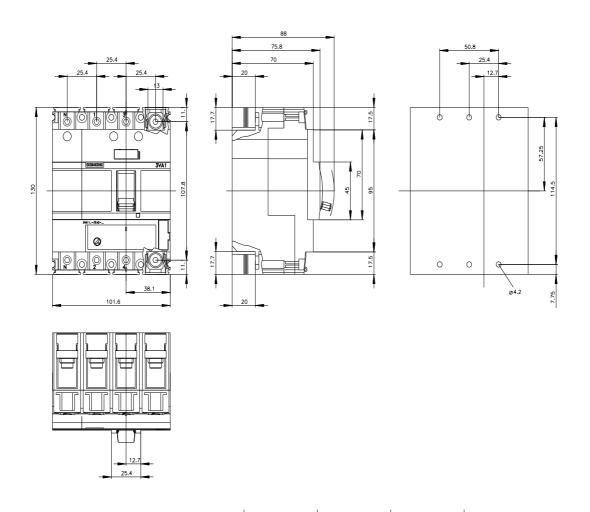
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1163-6GE42-0AA0

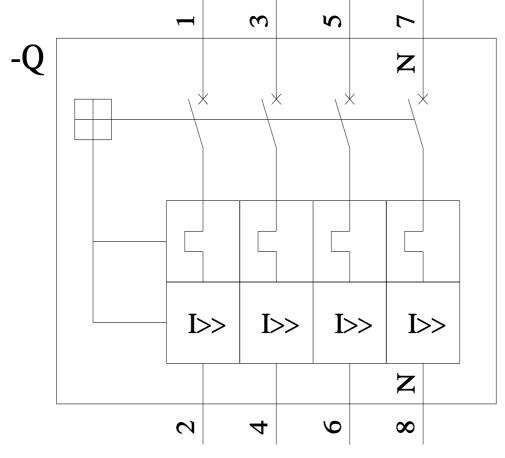
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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