SIEMENS

Data sheet 5SY4215-8



Miniature circuit breaker 400 V 10kA, 2-pole, D, 1.6A, D=70 mm

| product brand name product designation Miniature circuit breaker General technical data number of poles 2 design of pole 2P tripping characteristic class D mechanical service life (operating cycles) typical 10 000 overvoltage category III degree of pollution 3 Voltage Type of voltage of the operating voltage IIII with single-phase operation at AC rated value 440 V with multi-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 450 °C rated value 1.52 A at 50 °C rated value 1.44 A at 55 °C rated value 1.44 A at 55 °C rated value 1.36 A at 60 °C rated value 1.36 A at AC rated value 1.6 A Supply voltage supply voltage supply voltage supply voltage at DC rated value maximum 72 V Protection class IP Product of class protection class IP IP20, with connected conductors Protection class IP IP20, with connected conductors 15 KA according to IEC 60947-2 rated value 35 KA Dissipation power loss IVII for rated value 60 to V operating state per pole Product details Voltage 1 | | |
|--|---|---------------------------------|
| product designation Miniature circuit breaker Ceneral technical data number of poles 2 design of pole 2P tripping characteristic class D mechanical service life (operating cycles) typical 10 000 overvoltage category III degree of pollution 3 Voltage type of voltage of the operating voltage AC insulation voltage (II) with single-phase operation at AC rated value with multi-phase operation at AC rated value 440 V with multi-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 230 V operational current at 40 °C rated value 1.52 A at 50 °C rated value 1.44 A at 50 °C rated value 1.44 A at 60 °C rated value 1.46 A at 60 °C rated value 1.6 A Supply voltage supply voltage supply voltage at AC rated value 400 V at AC rated value 60 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class P IP20, with connected conductors Protection class IP IP20, with connected conductors Protection class IP IP20, with connected conductors Dissipation power loss [W] for rated value 35 kA Dissipation power loss [W] for rated value 6 the current at AC in hot operating state per pole Product details | Model | |
| General technical data number of poles design of pole design of pole tripping characteristic class mechanical service life (operating cycles) typical novervoltage category degree of pollution 3 Voltage type of voltage of the operating voltage low with single-phase operation at AC rated value with single-phase operation at AC rated value with multi-phase operation at AC rated value a to 90° Crated value at 40° Crated value at 60° Crated value back of Crated value at 60° Crated value at 60° Crated value back of Crated | · | |
| design of pole 2P tripping characteristic class D mechanical service life (operating cycles) typical 10 000 overvoltage category III degree of pollution 3 Voltage type of voltage of the operating voltage as a vith multi-phase operation at AC rated value 440 V with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 440 V supply voltage 1.44 A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | | Miniature circuit breaker |
| design of pole tripping characteristic class D mechanical service life (operating cycles) typical 10 0000 overvoltage category III degree of pollution 3 Voltage Type of voltage of the operating voltage AC insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value 440 V supply voltage with single-phase operation at AC rated value 230 V operational current • at 40 °C rated value 1.52 A • at 50 °C rated value 1.44 A • at 60 °C rated value 1.45 A • at 60 °C rated value 1.46 A • at 60 °C rated value 1.46 A • at AC rated value 1.6 A Supply voltage • at AC rated value 400 V • at DC rated value 60 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value 10 KA • according to IEC 60947-2 rated value 10 KA Bissipation power loss IVIJ for rated value of the current at AC in hot operating state per pole Product details | General technical data | |
| tripping characteristic class mechanical service life (operating cycles) typical mechanical service life (operating cycles) typical overvoltage category lill degree of pollution 3 Voltage type of voltage of the operating voltage AC insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value • at 40 °C rated value • at 60 °C rated value • at 55 °C rated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at AC rated value • at C rated value • at AC rated value • at C rated value | number of poles | 2 |
| mechanical service life (operating cycles) typical overvoltage category degree of pollution 3 Voltage type of voltage of the operating voltage AC insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value 230 V operational current • at 40 °C rated value • at 55 °C rated value • at 55 °C rated value • at 60 °C rated value • at 60 °C rated value • at AC rated value • at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according tale per pole Product details | design of pole | 2P |
| degree of pollution 3 Voltage type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value operational current • at 40 °C rated value • at 50 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at AC rated value • at C rated value • at DC rated value • at DC rated value • at DC rated value maximum 72 ∨ Protection class protection class IP Breaking capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EC 60947-2 rated value • according to IEC 60947-2 rated value | tripping characteristic class | D |
| degree of pollution Voltage type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value operational current • at 40 °C rated value • at 50 °C rated value • at 55 °C rated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at AC rated value • at CC rated value • at | mechanical service life (operating cycles) typical | 10 000 |
| type of voltage of the operating voltage type of voltage of the operating voltage insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value • at 40 °C rated value • at 50 °C rated value • at 50 °C rated value • at 60 °C rated value • at AC rated value • at C rated value • at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC 60947-2 rated value | overvoltage category | III |
| type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value 230 V operational current • at 40 °C rated value • at 50 °C rated value • at 55 °C rated value • at 55 °C rated value • at 60 °C rated value • at AC rated value • at Crated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC 60947-2 rated value | degree of pollution | 3 |
| insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value operational current • at 40 °C rated value • at 50 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at AC rated value • at C rated value • at C rated value • at C rated value • at DC rated value | Voltage | |
| with single-phase operation at AC rated value with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value operational current | type of voltage of the operating voltage | AC |
| with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value operational current | insulation voltage (Ui) | |
| supply voltage with single-phase operation at AC rated value operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at AC rated value • at AC rated value • at C rated value • at C rated value • at DC rated value • at DC rated value • at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • at DC according to IEC 60947-2 rated value • according tate per pole Product details | with single-phase operation at AC rated value | 440 V |
| operational current • at 40 °C rated value • at 50 °C rated value • at 55 °C rated value • at 60 °C rated value • at AC rated value • at AC rated value • at AC rated value • at C rated value • at DC rated value • at DC rated value • at DC rated value • at DC rated value • at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • at DC according to IEC 60947-2 rated value • according to IEC 60947-2 rated value | with multi-phase operation at AC rated value | 440 V |
| at 40 °C rated value at 50 °C rated value 1.44 A at 50 °C rated value 1.4 A at 60 °C rated value 1.36 A at AC rated value 1.6 A Supply voltage supply voltage at AC rated value 400 V at AC rated value 60 V value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class IP Breaking Capacity switching capacity current at AC coording to IEC 60947-2 rated value 10 kA according to IEC 60947-2 rated value 11 kA power loss [W] for rated value of the current at AC in hot operating state per pole Product details | supply voltage with single-phase operation at AC rated value | 230 V |
| at 50 °C rated value at 55 °C rated value 1.4 A at 60 °C rated value 1.36 A at AC rated value 1.6 A Supply voltage supply voltage at AC rated value 400 V at DC rated value 60 V value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class IP Breaking Capacity switching capacity current at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value 15 kA according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | operational current | |
| at 455 °C rated value at 60 °C rated value 1.36 A at AC rated value 1.6 A Supply voltage supply voltage at AC rated value 400 V at DC rated value 60 V value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current at DC according to IEC 60947-2 rated value according to EN 60898 rated value according to IEC 60947-2 rated value saccording to IEC 60947-2 rated value 10 kA according to IEC 60947-2 rated value 10 kA bissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | at 40 °C rated value | 1.52 A |
| at AC rated value at AC rated value 1.36 A to A to A Supply voltage supply voltage at AC rated value at DC rated value 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current at DC according to IEC 60947-2 rated value according to EN 60898 rated value according to IEC 60947-2 rated value 10 kA according to IEC 60947-2 rated value according to IEC 60947-2 rated value 10 kA bissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | at 50 °C rated value | 1.44 A |
| at AC rated value supply voltage supply voltage at AC rated value at DC rated value tal DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum rate protection class protection class IP Breaking Capacity switching capacity current at DC according to IEC 60947-2 rated value according to EN 60898 rated value according to IEC 60947-2 rated value according to IEC 60947-2 rated value baccording to IEC 60947-2 rated value caccording to IEC 60947-2 rated value according to IEC 60947-2 rated value baccording to IEC 60947-2 rated value 10 kA according to IEC 60947-2 rated value 11 W Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | at 55 °C rated value | 1.4 A |
| Supply voltage • at AC rated value | at 60 °C rated value | 1.36 A |
| supply voltage • at AC rated value • at DC rated value 60 V value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 11 W Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | at AC rated value | 1.6 A |
| at AC rated value at DC rated value 60 V value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP IP20, with connected conductors Breaking Capacity switching capacity current at DC according to IEC 60947-2 rated value according to EN 60898 rated value according to IEC 60947-2 rated value 10 kA according to IEC 60947-2 rated value 15 kA INCOMPART OF TAILOR | Supply voltage | |
| at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value Product details | supply voltage | |
| value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP IP20, with connected conductors Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 15 kA INCOMPART OF TAXABLE OF TA | at AC rated value | 400 V |
| operating voltage at DC rated value maximum Protection class protection class IP IP20, with connected conductors Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 11 W Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | at DC rated value | 60 V |
| Protection class IP IP20, with connected conductors Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value To kA • according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | value range of the supply voltage frequency | 50/60 Hz |
| protection class IP Breaking Capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | operating voltage at DC rated value maximum | 72 V |
| Switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | Protection class | |
| switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | protection class IP | IP20, with connected conductors |
| at DC according to IEC 60947-2 rated value according to EN 60898 rated value according to IEC 60947-2 rated value according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | Breaking Capacity | |
| according to EN 60898 rated value according to IEC 60947-2 rated value 35 kA Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | switching capacity current | |
| according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details 35 kA 1 W Product details | at DC according to IEC 60947-2 rated value | 15 kA |
| Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details | according to EN 60898 rated value | 10 kA |
| power loss [W] for rated value of the current at AC in hot operating state per pole Product details 1 W | according to IEC 60947-2 rated value | 35 kA |
| operating state per pole Product details | Dissipation | |
| | | 1 W |
| product component | Product details | |
| | product component | |

| combined terminal top | Yes |
|--|--|
| combined terminal bottom | Yes |
| neutral conductor switching | No |
| product feature | |
| properties for main switches in accordance with EN 60204-1 | Yes |
| halogen-free | Yes |
| • sealable | Yes |
| • silicon-free | Yes |
| product extension installable supplementary devices | Yes |
| Product function | |
| set values setting current (li) for I-tripping | 13 |
| | x In |
| reference value setting current (Ii) for I-tripping | XIII |
| Short circuit | |
| short-circuit current breaking capacity (Icn) | |
| at AC according to UL 1077 and CSA C22.2 No.235 | 5 kA |
| Connections | |
| connectable conductor cross-section solid | |
| • minimum | 0.75 mm ² |
| • maximum | 35 mm² |
| connectable conductor cross-section stranded | |
| • minimum | 0.75 mm ² |
| • maximum | 35 mm² |
| connectable conductor cross-section finely stranded with core | |
| end processing | |
| • minimum | 0.75 mm² |
| • maximum | 25 mm² |
| AWG number as coded connectable conductor cross section | |
| • minimum | 18 |
| • maximum | 4 |
| | 7 |
| tightening torque [lbf·in] with screw-type terminals | 00 lb4 in |
| • minimum | 22 lbf·in |
| • maximum | 31 lbf·in |
| tightening torque with screw-type terminals | |
| • minimum | 2.5 N·m |
| • maximum | 3.5 N·m |
| position of power supply cord | Any |
| Mechanical Design | |
| height | 90 mm |
| width | 36 mm |
| depth | 76 mm |
| installation depth | 70 mm |
| number of modular width units | 2 |
| fastening method | Quick assembly system |
| mounting position | any |
| net weight | 321 g |
| Environmental conditions | |
| | may 05% to 55°C may 55% to 70°C may 25% to 75°C |
| influence of the surrounding temperature | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C |
| standard | IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 |
| vibration resistance according to IEC 60068-2-6 | ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz |
| ambient temperature during operation | |
| • minimum | -40 °C |
| • maximum | 70 °C |
| ambient temperature during storage | |
| • minimum | -40 °C |
| • maximum | 75 °C |
| number of test cycles for environmental testing according to IEC 60068-2-30 | 6 |
| Environmental footprint | |
| Environmental Product Declaration(EPD) | Yes |
| Global Warming Potential [CO2 eq] total | 16.8 kg |
| 2 F= == =41 | • |

| Global Warming Potential [CO2 eq] during manufacturing | 1.13 kg |
|--|-------------|
| Global Warming Potential [CO2 eq] during operation | 15.7 kg |
| Global Warming Potential [CO2 eq] after end of life | -0.00046 kg |

Approvals Certificates

General Product Approval





Confirmation







General Product Approval

EMV

Test Certificates



Miscellaneous



Miscellaneous



Miscellaneous

Test Certificates

Marine / Shipping

Special Test Certificate











other Railway Environment

Confirmation

Miscellaneous

Confirmation

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=5SY4215-8

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4215-8

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

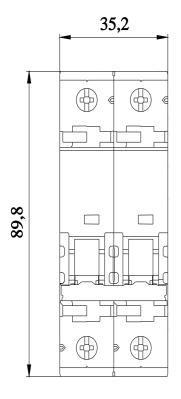
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4215-8

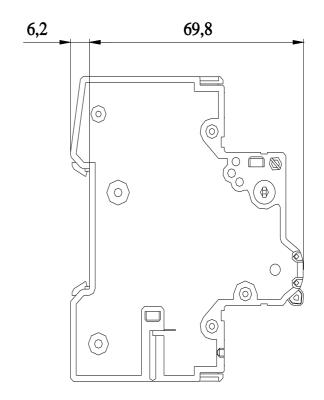
CAx-Online-Generator

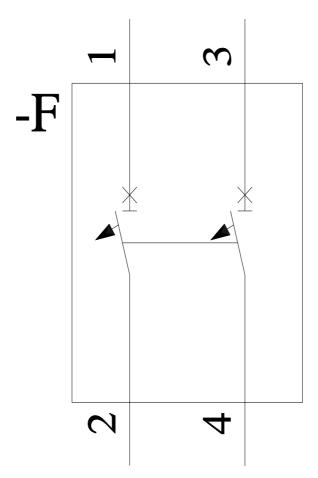
http://www.siemens.com/cax

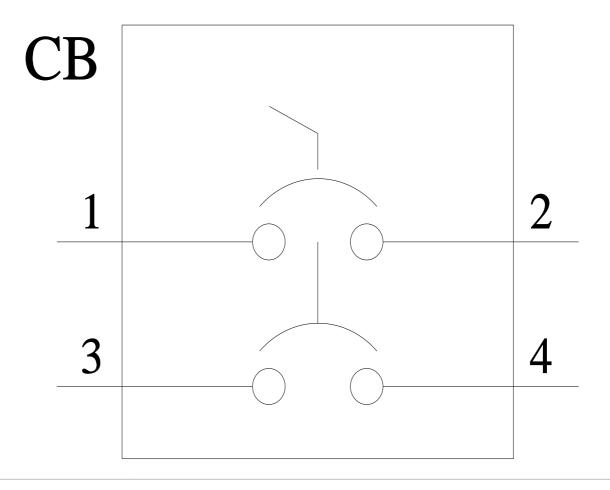
Tender specifications

http://www.siemens.com/specifications









last modified: 11/3/2023 🖸