

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for Busbar system 8US 60 mm, flat terminal, Cover level 32/70 mm



| Model | |
|---|-------------------------------|
| Product brand name | SENTRON |
| Product designation | 3NP1 fuse switch disconnecter |
| Design of the product | cover level 32/70 mm |
| Busbar design | busbar thickness 5 or 10 mm |
| Design of the safety monitoring | Without |
| Design of the operating mechanism | Cover handle |
| Design of the load switch / Strip form | No |
| Type of the driving mechanism / motor drive | No |

| General technical data | |
|--|-----------------------------|
| Number of poles | 3 |
| Type of device | For 60 mm 8US busbar system |
| Size of disconnecting link | 1 and 0 |
| Size of fuse link | NH0, NH1 |
| Continuous current / at 35 °C / rated value | 250 A |
| Let-through current / with closed switch / maximum permissible | 32 kA |
| cut-off value $I^{*2}t_{max.}$ / 500 V | 780 000 A ² ·s |
| Power factor | |

| | |
|--|-------------|
| • at AC-22 B | 0.65 |
| • at AC-23 B | 0.45 |
| • with capacitive load | -0.25 |
| circuit-breaker / Design | 3NP11 |
| Mechanical service life (switching cycles) / typical | 1 600 |
| Fuse system | LV HRC fuse |
| Degree of pollution | 3 |

Voltage

| | |
|--|---------|
| Insulation voltage | |
| • rated value | 690 V |
| • with degree of pollution 3 / rated value | 690 V |
| • with degree of pollution 2 / rated value | 1 000 V |
| Power factor / at AC-21 B | 0.95 |
| Surge voltage resistance / rated value | 8 kV |
| Current / at AC / rated value | 250 A |
| Operating voltage | |
| • at AC / rated value / maximum | 690 V |
| • at DC / rated value | 440 V |
| • at DC / rated value / maximum | 440 V |

Protection class

| | |
|---|------|
| Protection class IP | |
| • with closed switch / with cover or cable lug cover | IP40 |
| • with closed switch / without cover or cable lug cover | IP30 |
| • on the front | IP40 |
| • open | IP20 |

Dissipation

| | |
|--|------|
| Power loss [W] | |
| • with conventional rated thermal current / without fuse / per pole | 8 W |
| • with conventional rated thermal current / without fuse / per device | 24 W |
| • for rated value of the current / at AC / in hot operating state / per pole | 31 W |
| • of the fuse / per fuse / maximum | 23 W |

Current

| | |
|---------------------------------------|-------|
| Operating current | |
| • at AC-23 B / at 690 V / rated value | 100 A |
| • at AC-23 B / at 500 V / rated value | 200 A |
| • at AC-23 B / at 400 V / rated value | 250 A |

| | |
|--|---------------------------|
| • at AC-23 B / at 240 V / rated value | 250 A |
| • at AC-22 B / at 690 V / rated value | 250 A |
| • at AC-22 B / at 500 V / rated value | 250 A |
| • at AC-22 B / at 400 V / rated value | 250 A |
| • at AC-22 B / at 240 V / rated value | 250 A |
| • at AC-21 B / at 690 V / rated value | 250 A |
| • at AC-21 B / at 500 V / rated value | 250 A |
| • at AC-21 B / at 400 V / rated value | 250 A |
| • at AC-21 B / at 240 V / rated value | 250 A |
| • at DC-23 B / at 440 V / rated value / maximum | 100 A |
| • at DC-23 B / at 240 V / rated value / maximum | 200 A |
| • at DC-23 B / at 120 V / rated value / maximum | 200 A |
| • at DC-22 B / at 440 V / rated value / maximum | 200 A |
| • at DC-22 B / at 240 V / rated value / maximum | 250 A |
| • at DC-22 B / at 120 V / rated value / maximum | 250 A |
| • at DC-21 B / at 440 V / rated value / maximum | 250 A |
| • at DC-21 B / at 240 V / rated value / maximum | 250 A |
| • at DC-21 B / at 120 V / rated value / maximum | 250 A |
| Continuous current | |
| • rated value | 250 A |
| • at 40 °C / rated value | 245 A |
| • at 45 °C / rated value | 240 A |
| • at 50 °C / rated value | 233 A |
| • at 55 °C / rated value | 233 A |
| Let-through current / with high-speed activation / maximum permissible | 25 kA |
| Let-through current / I _c / maximum permissible | |
| • 400 V | 32 000 A |
| • 500V | 32 000 A |
| cut-off value I ² t _{max.} / 400 V | 551 000 A ² ·s |
| Main circuit | |
| Operating current / with capacitive load | |
| • at 400 V / maximum | 72 A |
| • at 500 V / maximum | 55 A |
| Auxiliary circuit | |
| Number of CO contacts / for auxiliary contacts | 0 |
| Number of NC contacts / for auxiliary contacts | 0 |
| Number of NO contacts / for auxiliary contacts | 0 |
| Suitability | |
| Suitability for use | |
| • Main switch | No |

| | |
|-----------------------------|-----|
| • switch disconnector | Yes |
| • EMERGENCY OFF switch | No |
| • safety switch | Yes |
| • maintenance/repair switch | Yes |

Product details

| | |
|---|-----|
| Product feature / interlock | Yes |
| Product component | |
| • Trip indicator | No |
| • Phase failure monitoring | No |
| • undervoltage release | No |
| • undervoltage release with leading contact | No |
| Product feature / sealable | Yes |
| Product extension | |
| • Auxiliary switch | Yes |
| • optional | |
| — locking capability | Yes |
| — motor drive | No |
| — Phase failure monitoring | Yes |
| — fuse monitoring | Yes |
| — Voltage trigger | No |
| — Overvoltage protection monitoring | Yes |

Product function

| | |
|-------------------------------------|----|
| Product function | |
| • fuse monitoring | No |
| • Overvoltage protection monitoring | No |

Short circuit

| | |
|---|--------|
| Conditional short-circuit current (I _q) | |
| • rated value | 80 kA |
| • at AC / at 240 V / with high-speed activation / rated value | 80 kA |
| • at AC / at 500 V / with high-speed activation / rated value | 80 kA |
| • at AC / at 690 V / with high-speed activation / rated value | 50 kA |
| • with closed switch / at AC / at 240 V / rated value | 120 kA |
| • with closed switch / at AC / at 500 V / rated value | 120 kA |
| • with closed switch / at AC / at 690 V / rated value | 100 kA |

Connections





| | |
|---|----------------------------|
| Arrangement of electrical connectors / for main current circuit | other |
| Connectable conductor cross-section / for main contacts | |
| • single or multi-stranded | 16 ... 150 mm ² |
| • stranded | 16 ... 150 mm ² |
| Tightening torque / with screw-type terminals | 10 ... 12 N·m |
| Type of connection | Flat terminal |
| Type of electrical connection / for main current circuit | busbar connection |

Mechanical Design

| | |
|--|---------------------|
| Height | 306 mm |
| Width | 183.7 mm |
| Width | |
| • of the busbar | 12 ... 30 mm |
| Depth | 142.2 mm |
| Mounting type | busbar |
| Mounting type | |
| • floor mounting | No |
| • front mounting | No |
| • front mounting with 4-hole attachment | No |
| • front mounting with central attachment | No |
| • rail mounting | Yes |
| Mounting position | horizontal/vertical |
| Busbar center-to-center spacing | 60 mm |
| Net weight | 2.85 kg |
| • during operation | -25 ... +55 °C |
| • during storage | -50 ... +80 °C |

Certificates

| | |
|--------------------------|---|
| Reference code | |
| • acc. to DIN EN 61346-2 | Q |
| • acc. to DIN EN 81346-2 | Q |

| General Product Approval | | | Declaration of Conformity | Test Certificates |
|--|---|--|-------------------------------|---|
|  CCC |  UR |  VDE | Miscellaneous |  EG-Konf. |
| | | | | Type Test Certificates/Test Report |

| Test Certificates | Shipping Approval |
|-------------------|-------------------|
|-------------------|-------------------|

[Special Test Certificate](#)



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Further information

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=3NP1143-1BC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1BC10>

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

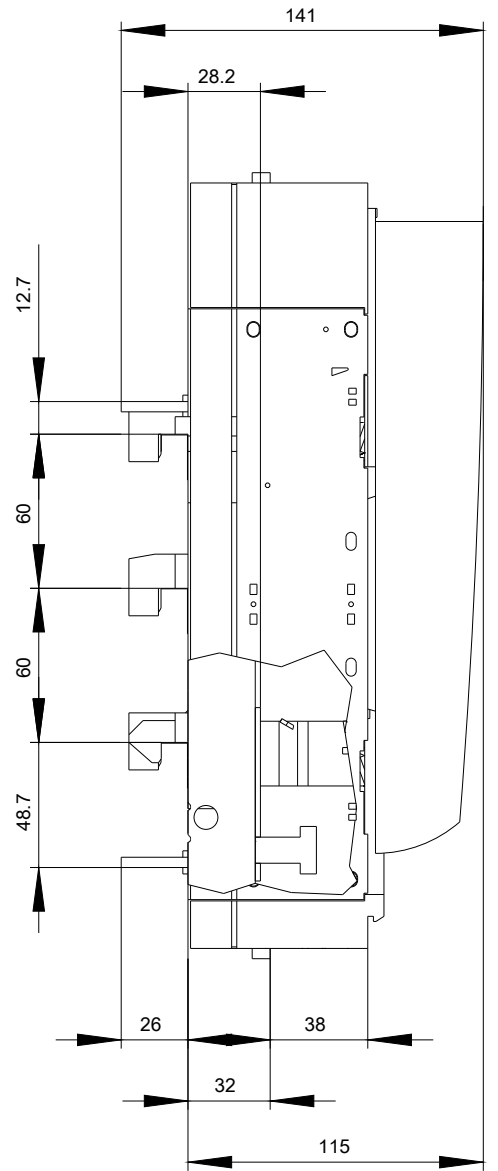
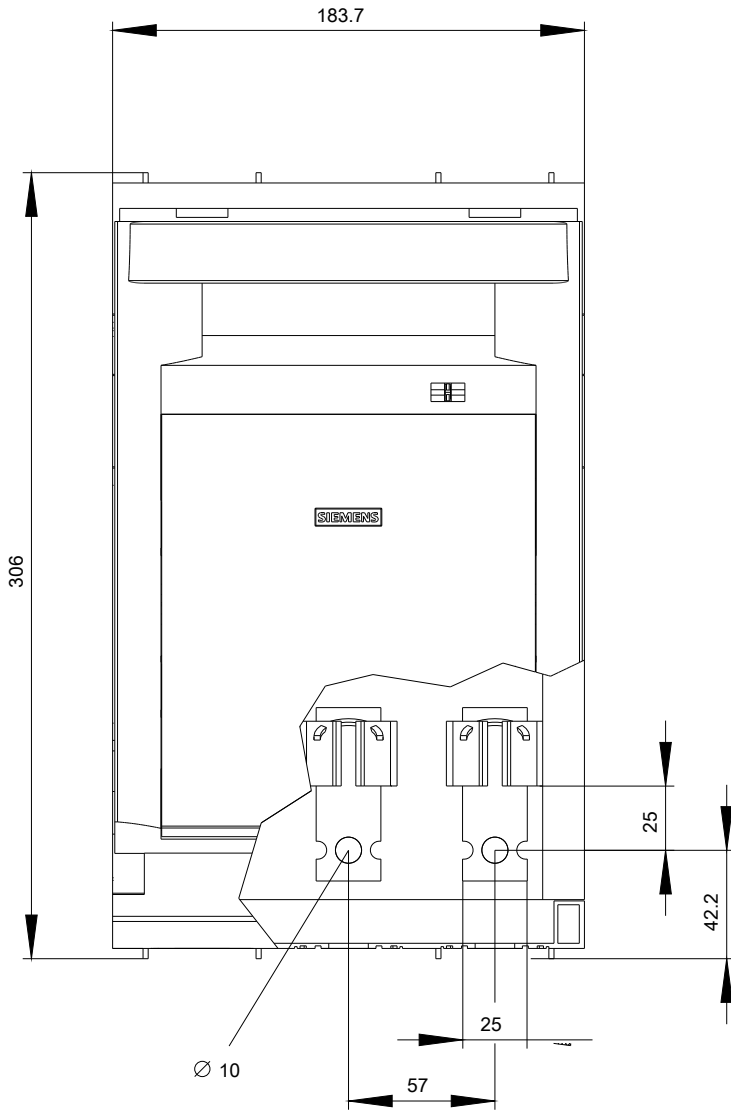
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1BC10

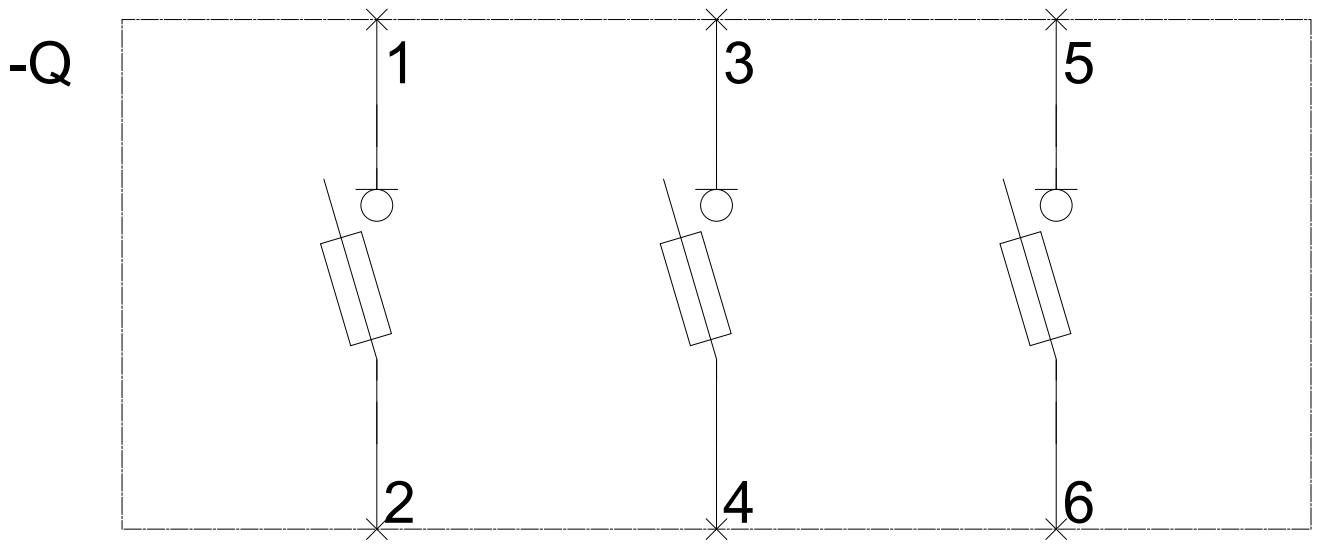
CAX-Online-Generator

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

Tender specifications

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





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