



circuit breaker 3VA6 UL frame 150 3-pole, starter protection ETU310M, I, In=40A without overload protection short-circuit protection Ii=3...15 x In without connection

| Model | |
|--|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | CDAR |
| design of the product | Starter 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 | ETU310M |
| protection function of the overcurrent release | I |
| number of poles | 3 |
| General technical data | |
| insulation voltage / rated value | 800 V |
| operating voltage / at AC / rated value | 690 V |
| power loss [W] / maximum | 2.4 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 0.8 W |
| mechanical service life (operating cycles) / typical | 25 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 14 000 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 9 800 |
| electrical endurance (operating cycles) / at 480 V | 14 000 |
| electrical endurance (operating cycles) / at 600 V | 9 800 |
| 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 | 2.5 kg |
| Current | |
| marking / according to UL 489 / 100%-rated breaker | No |
| operational current | |
| • at 40 °C | 40 A |
| • at 45 °C | 40 A |
| • at 50 °C | 40 A |
| • at 55 °C | 40 A |
| • at 60 °C | 40 A |
| • at 65 °C | 40 A |

| | |
|--|--------------------|
| • at 70 °C | 40 A |
| Switching capacity according to IEC 60947 | |
| maximum short-circuit current breaking capacity (I _{cu}) | |
| • at 240 V | 150 kA |
| • at 415 V | 110 kA |
| • at 690 V | 2.5 kA |
| operating short-circuit current breaking capacity (I _{cs}) | |
| • at 240 V | 150 kA |
| • at 415 V | 110 kA |
| • at 690 V | 2.5 kA |
| Adjustable parameters | |
| adjustable response value setting current (I _i) / for I-tripping | |
| • minimum | 120 A |
| • maximum | 600 A |
| adjustable setting current (I _{nN}) / 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] | 7.8 in |
| height | 198 mm |
| width [in] | 4.13 in |
| width | 105 mm |
| depth [in] | 3.39 in |
| depth | 86 mm |
| Connections | |
| arrangement of electrical connectors / for main current circuit | Without connection |
| type of electrical connection / for main current circuit | Without |
| Auxiliary circuit | |
| number of CO contacts / for auxiliary contacts | 0 |
| Accessories | |
| product extension / optional / motor drive | Yes |
| 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 |
| Environmental footprint | |
| Environmental Product Declaration (EPD) | Yes |
| global warming potential [CO ₂ eq] / total | 61.814 kg |
| global warming potential [CO ₂ eq] / during manufacturing | 14.6 kg |
| global warming potential [CO ₂ eq] / during operation | 48.9 kg |
| global warming potential [CO ₂ eq] / after end of life | -2.2 kg |
| Siemens Eco Profile (SEP) | Siemens EcoTech |
| reference code / according to IEC 81346-2 | Q |
| Approvals / Certificates | |
| General Product Approval | |



Miscellaneous



Miscellaneous



| | | |
|--------------------------|-----|-------------------|
| General Product Approval | EMV | Test Certificates |
|--------------------------|-----|-------------------|



[Confirmation](#)



EG-Konf.



RCM

[Type Test Certificates/Test Report](#)

| | | |
|----------------------|-------|-----------------|
| Maritime application | other | Dangerous goods |
|----------------------|-------|-----------------|



ABS



DNV



LRS

[Miscellaneous](#)

[Confirmation](#)

[Transport Information](#)

Environment

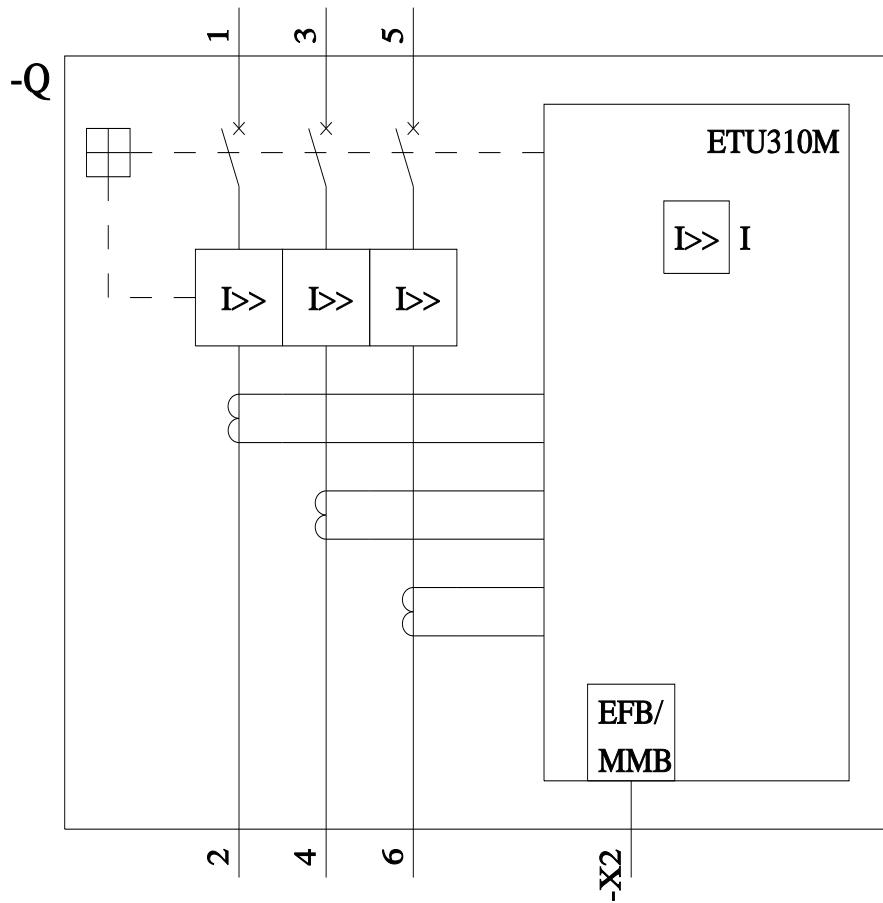
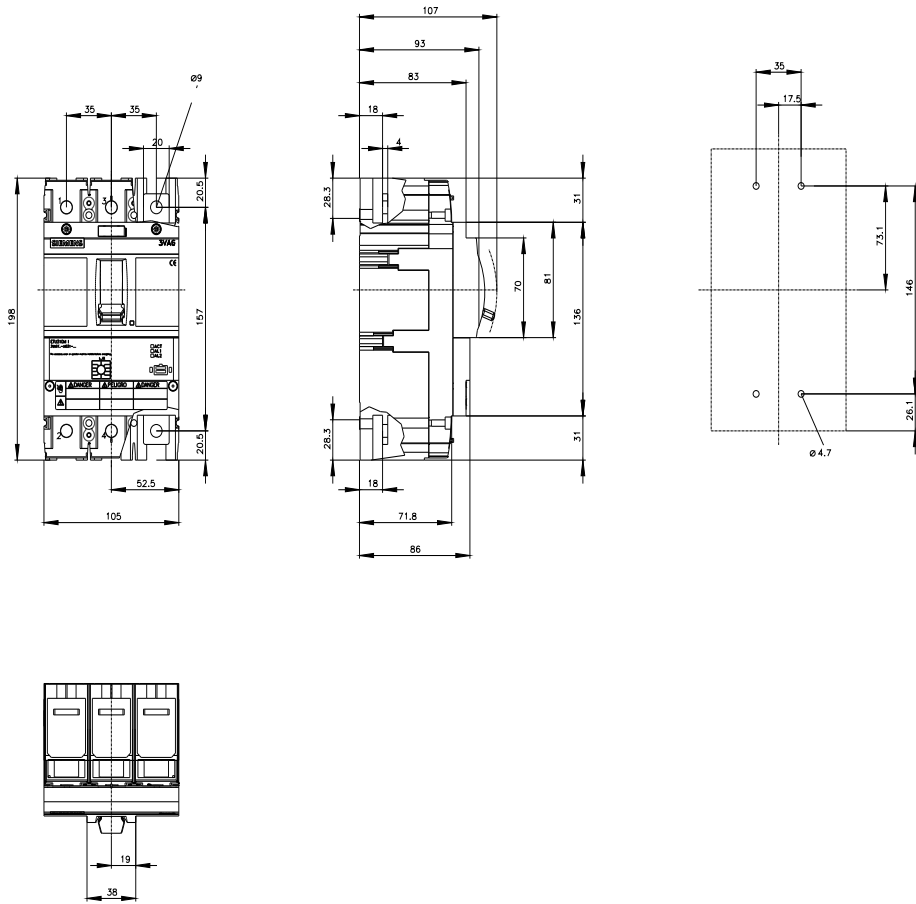
[Environmental Conformations](#)

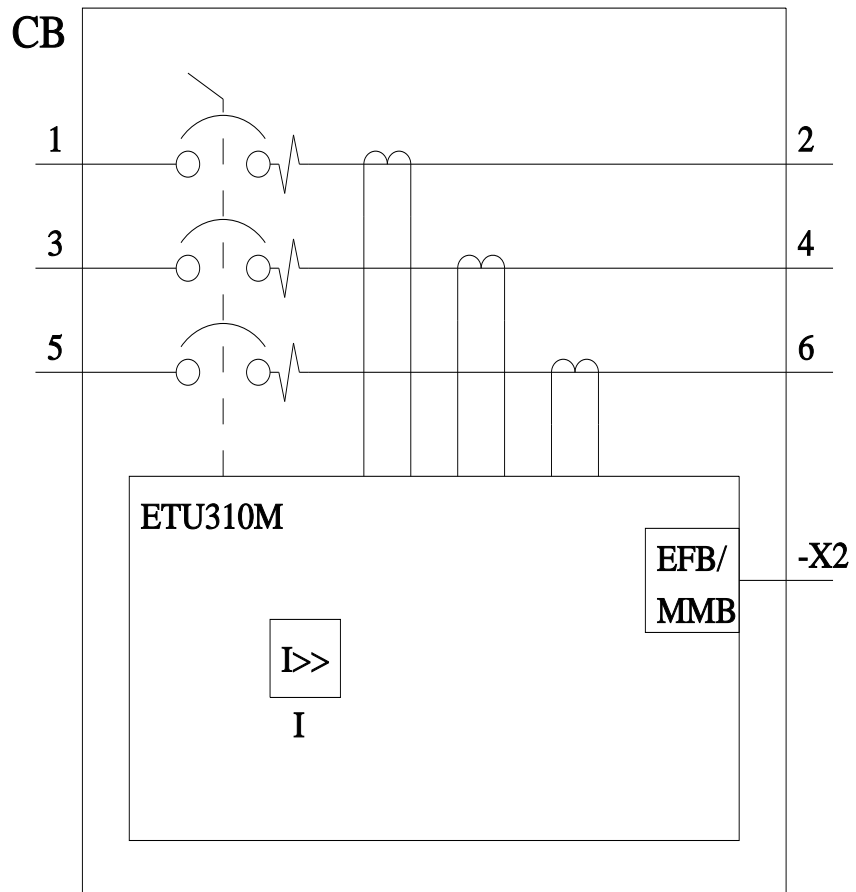
Siemens EcoTech



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=3VA6140-1MS31-0AA0>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-1MS31-0AA0>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-1MS31-0AA0
- 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>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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