



circuit breaker 3VA6 UL Frame 800 breaking capacity class M 35 kA @ 480 V 3-pole, line protection ETU856, LSI, In=800 A overload protection, 100% rated Ir=315 A ...800 A short-circuit protection I_{sd}=0.6..10x I_n, I_i=1.5..10x I_n neutral conductor protection optionally with ext. CT up to 160% ground fault alarm signaled via EFB300 or COM cable connection on two sides

| Model | |
|--|---|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | MMAE |
| design of the product | System 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 | ETU856 |
| protection function of the overcurrent release | LSI-G-alarm only |
| 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 | 231 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 77 W |
| mechanical service life (operating cycles) / typical | 10 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 5 800 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 4 000 |
| electrical endurance (operating cycles) / at 480 V | 5 800 |
| electrical endurance (operating cycles) / at 600 V | 4 000 |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | Yes |
| ground-fault monitoring version | Summation current formation L-conductor |
| product function | |
| • communication function | Yes |
| • other measurement function | Yes |
| Net Weight | 17.755 kg |
| Current | |
| marking / according to UL 489 / 100%-rated breaker | Yes |
| operational current | |
| • at 40 °C | 800 A |
| • at 45 °C | 800 A |
| • at 50 °C | 800 A |
| • at 55 °C | 776 A |
| • at 60 °C | 752 A |
| • at 65 °C | 708 A |
| • at 70 °C | 664 A |
| Switching capacity according to IEC 60947 | |
| switching capacity class of the circuit breaker | M |

| | |
|--|---------------------------|
| maximum short-circuit current breaking capacity (I _{cu}) | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V | 85 kA 55 kA 25 kA |
| operating short-circuit current breaking capacity (I _{cs}) | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V | 85 kA 55 kA 19 kA |
| short-circuit current making capacity (I _{cm}) | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V | 187 kA 121 kA 53 kA |

Switching capacity according to UL 489

| | |
|--|--------------------------|
| current breaking capacity | |
| <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V | 100 kA 35 kA 25 kA |

Adjustable parameters

| | |
|--|--------------------|
| adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 315 A 800 A |
| adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 0.5 s 25 s |
| adjustable response value setting current (I _{sd}) / of S-trip / with I _{0t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 480 A 8 000 A |
| adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 480 A 8 000 A |
| adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 0.05 s 0.5 s |
| adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 0.05 s 0.5 s |
| adjustable response value setting current (I _i) / for I-tripping | |
| <ul style="list-style-type: none"> • minimum • maximum | 1 200 A 8 000 A |
| adjustable current response value current / for G-tripping / with standard characteristic | |
| <ul style="list-style-type: none"> • initial value • full-scale value | 160 A 800 A |
| adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 0.05 s 0.8 s |
| adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 160 A 800 A |
| adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic | |
| <ul style="list-style-type: none"> • minimum • maximum | 0.05 s 0.8 s |
| adjustable setting current (I _n) / for N-tripping | |

| | |
|---|-----------------------------|
| • minimum | 0 A |
| • maximum | 0 A |
| design of the N-conductor protection | adjustable OFF; 20% to 160% |
| product function / grounding protection | Yes |

Mechanical Design

| | |
|---|-----------------------|
| product component | |
| • undervoltage release | No |
| • voltage trigger | No |
| • trip indicator | No |
| height [in] | 12.91 in |
| height | 328 mm |
| width [in] | 8.27 in |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded | 4 x (4/0 - 500 kcmil) |
| width | 210 mm |
| depth [in] | 4.72 in |
| depth | 120 mm |

Connections

| | |
|---|---|
| arrangement of electrical connectors / for main current circuit | Front connection |
| type of electrical connection / for main current circuit | circular conductor terminal on both sides |

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 | -40 °C |
| • during storage / maximum | 80 °C |
| reference code / according to IEC 81346-2 | Q |

Approvals / Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)



| | | | | |
|-----|----------------------|-------|-----------------|-------------|
| EMV | Maritime application | other | Dangerous goods | Environment |
|-----|----------------------|-------|-----------------|-------------|



[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)

[Environmental Confirmations](#)

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=3VA6580-5KT36-2AA0>

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

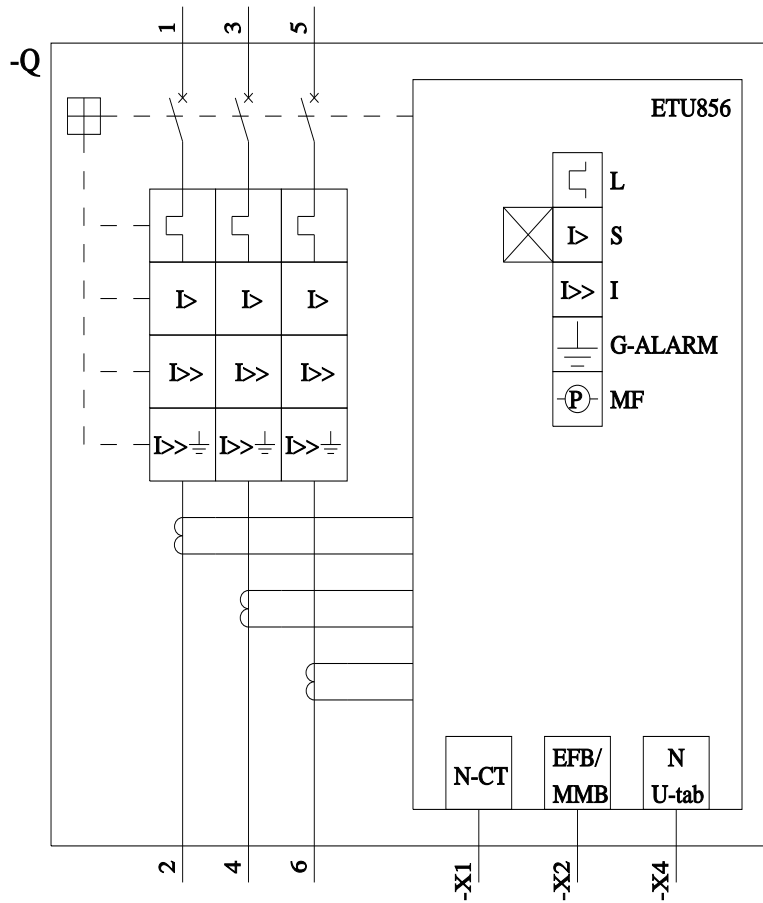
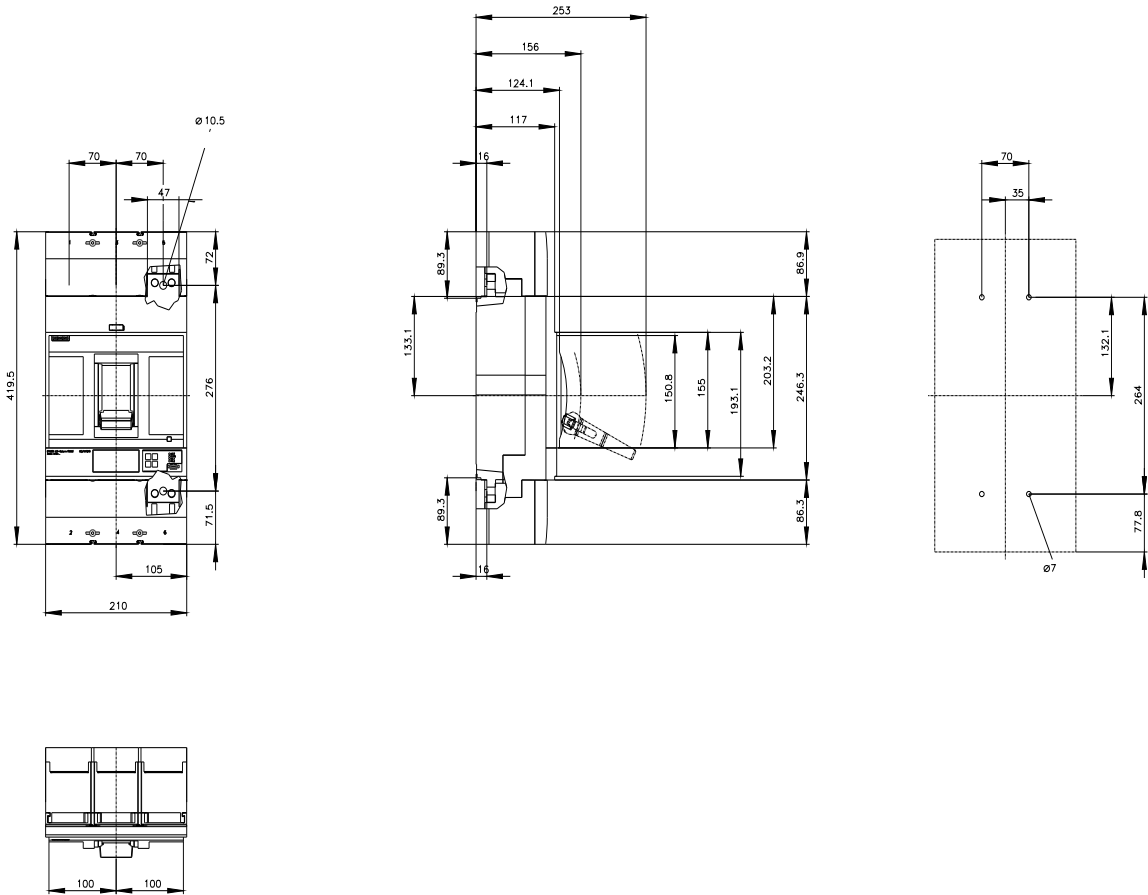
<https://support.industry.siemens.com/cs/ww/en/ps/3VA6580-5KT36-2AA0>

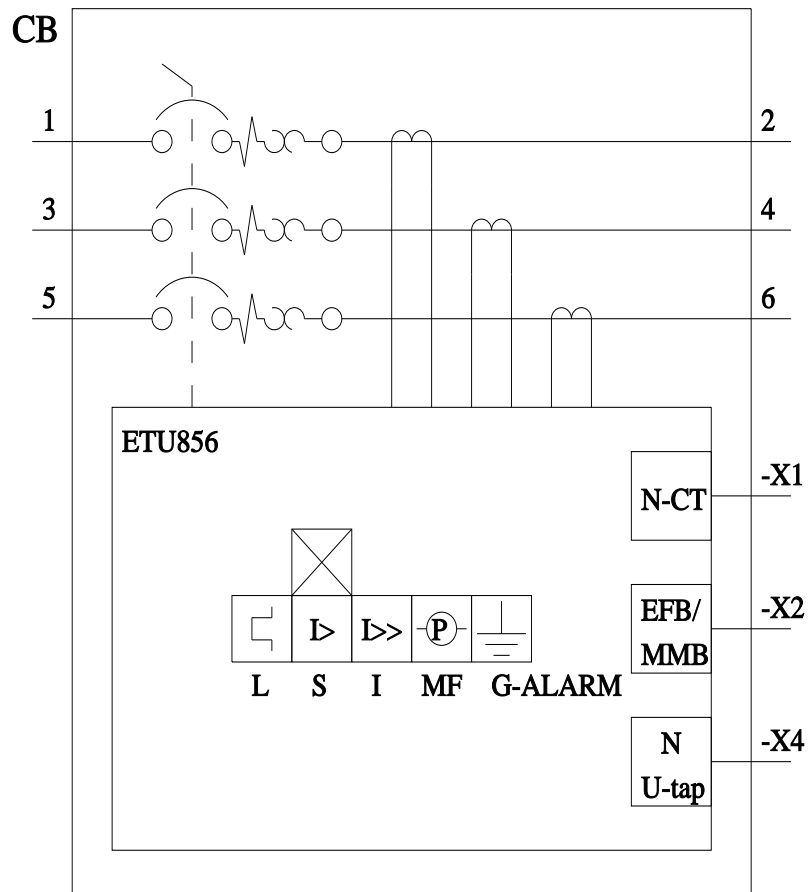
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6580-5KT36-2AA0

CAX-Online-Generator

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





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