

**Siemens**  
**EcoTech**



circuit breaker 3VA6 UL Frame 150 breaking capacity class C 100 kA @ 480 V 3-pole, line protection ETU850, LSI, In=40 A overload protection Ir=16 A ...40 A short-circuit protection Isd=0.6..10x In, li=1.5..12x In neutral conductor protection optionally with ext. CT; up to 160% nut keeper kit on two sides



| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SENTRON                     |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | CDAE                        |
| 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                                                                                          | ETU850                      |
| protection function of the overcurrent release                                                                             | LSI                         |
| 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/retrofittable / short-circuit and overload proof                     | Yes                         |
| ground-fault monitoring version                                                                                            | without                     |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | Yes                         |
| • other measurement function                                                                                               | Yes                         |
| Net Weight                                                                                                                 | 2.645 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                                                                         |                             |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|
| switching capacity class of the circuit breaker                                                                   | C                           |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                                |                             |
| • at 240 V                                                                                                        | 150 kA                      |
| • at 415 V                                                                                                        | 110 kA                      |
| • at 690 V                                                                                                        | 2.5 kA                      |
| operating short-circuit current breaking capacity (I <sub>cs</sub> )                                              |                             |
| • at 240 V                                                                                                        | 150 kA                      |
| • at 415 V                                                                                                        | 110 kA                      |
| • at 690 V                                                                                                        | 2.5 kA                      |
| short-circuit current making capacity (I <sub>cm</sub> )                                                          |                             |
| • at 240 V                                                                                                        | 330 kA                      |
| • at 415 V                                                                                                        | 242 kA                      |
| • at 690 V                                                                                                        | 3.8 kA                      |
| Switching capacity according to UL 489                                                                            |                             |
| current breaking capacity                                                                                         |                             |
| • at 240 V                                                                                                        | 200 kA                      |
| • at 480 V                                                                                                        | 100 kA                      |
| • at 600 V                                                                                                        | 35 kA                       |
| Adjustable parameters                                                                                             |                             |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic |                             |
| • minimum                                                                                                         | 15 A                        |
| • maximum                                                                                                         | 40 A                        |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic     |                             |
| • minimum                                                                                                         | 0.5 s                       |
| • maximum                                                                                                         | 25 s                        |
| adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>0t</sub> characteristic    |                             |
| • minimum                                                                                                         | 24 A                        |
| • maximum                                                                                                         | 400 A                       |
| adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>2t</sub> characteristic    |                             |
| • minimum                                                                                                         | 24 A                        |
| • maximum                                                                                                         | 400 A                       |
| adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic    |                             |
| • minimum                                                                                                         | 0.05 s                      |
| • maximum                                                                                                         | 0.5 s                       |
| adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic    |                             |
| • minimum                                                                                                         | 0.05 s                      |
| • maximum                                                                                                         | 0.5 s                       |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping                                      |                             |
| • minimum                                                                                                         | 60 A                        |
| • maximum                                                                                                         | 480 A                       |
| adjustable setting current (I <sub>nN</sub> ) / for N-tripping                                                    |                             |
| • minimum                                                                                                         | 0.38 A                      |
| • maximum                                                                                                         | 1.6 A                       |
| design of the N-conductor protection                                                                              | adjustable OFF; 40% to 160% |
| 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                       |
| <b>Connections</b>                                                                        |                             |
| arrangement of electrical connectors / for main current circuit                           | Front connection            |
| type of electrical connection / for main current circuit                                  | nut keeper kit on both ends |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum | 13 x 1 mm                   |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 25 x 8.5 mm                 |
| <b>Auxiliary circuit</b>                                                                  |                             |
| number of CO contacts / for auxiliary contacts                                            | 0                           |
| <b>Accessories</b>                                                                        |                             |
| product extension / optional / motor drive                                                | Yes                         |
| <b>Environmental conditions</b>                                                           |                             |
| 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                       |
| <b>Environmental footprint</b>                                                            |                             |
| Environmental Product Declaration (EPD)                                                   | Yes                         |
| global warming potential [CO2 eq] / total                                                 | 61.814 kg                   |
| global warming potential [CO2 eq] / during manufacturing                                  | 14.6 kg                     |
| global warming potential [CO2 eq] / during operation                                      | 48.9 kg                     |
| global warming potential [CO2 eq] / after end of life                                     | -2.2 kg                     |
| Siemens Eco Profile (SEP)                                                                 | Siemens EcoTech             |
| reference code / according to IEC 81346-2                                                 | Q                           |
| <b>Approvals / Certificates</b>                                                           |                             |
| <b>General Product Approval</b>                                                           |                             |

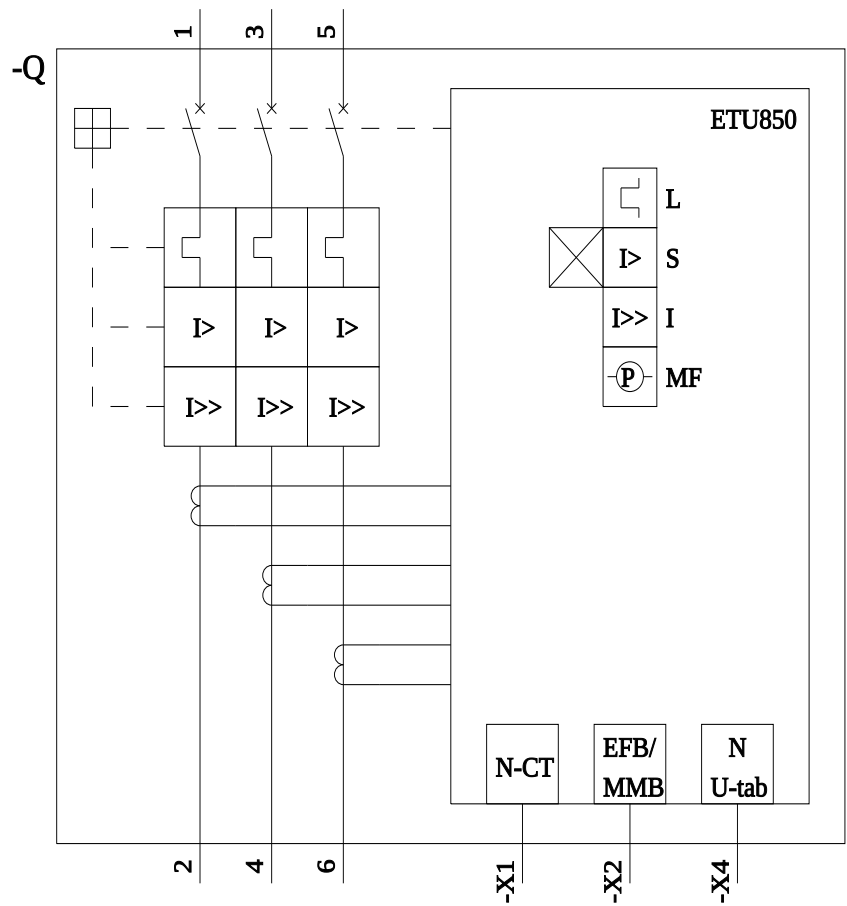
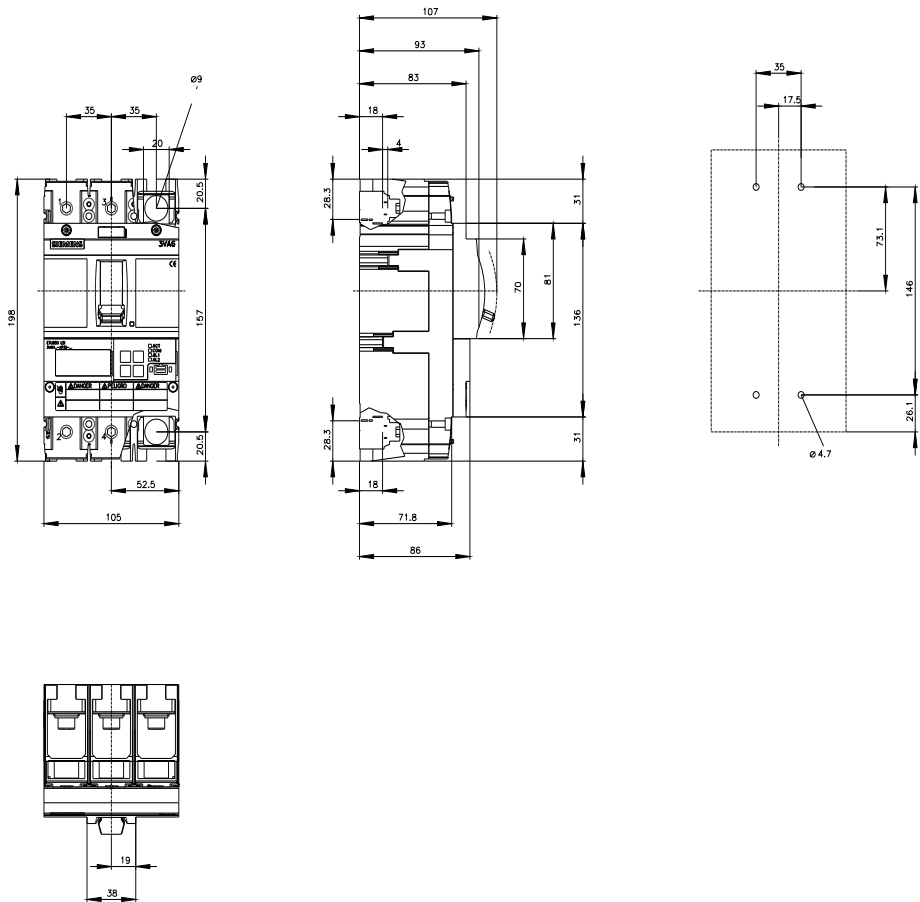


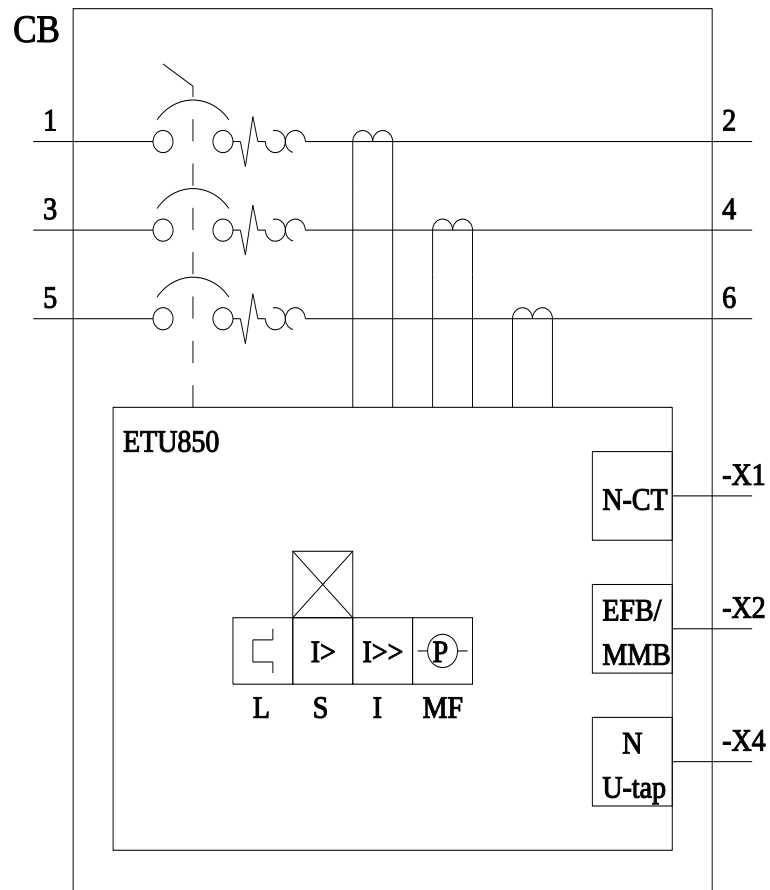
[Miscellaneous](#)

|                          |     |       |                              |                               |                                       |
|--------------------------|-----|-------|------------------------------|-------------------------------|---------------------------------------|
| General Product Approval | EMV | other | Dangerous goods              |                               |                                       |
|                          |     |       | <a href="#">Confirmation</a> | <a href="#">Miscellaneous</a> | <a href="#">Transport Information</a> |

|                    |  |                                             |
|--------------------|--|---------------------------------------------|
| <b>Environment</b> |  |                                             |
|                    |  | <a href="#">Environmental Confirmations</a> |

|                                                                                                                                                                                                                                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Further information</b>                                                                                                                                                                                                                                                 |  |
| Information on the packaging<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>                                                                                                    |  |
| Information for data generation and storage<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a>                                                                                     |  |
| Information- and Downloadcenter (Catalogs, Brochures,...)<br><a href="http://www.siemens.com/lowvoltage/catalogs">http://www.siemens.com/lowvoltage/catalogs</a>                                                                                                           |  |
| Industry Mall (Online ordering system)<br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6140-7KP32-0AA0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6140-7KP32-0AA0</a>                                          |  |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,...)<br><a href="https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-7KP32-0AA0">https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-7KP32-0AA0</a>                                                |  |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)<br><a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-7KP32-0AA0">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-7KP32-0AA0</a> |  |
| CAx-Online-Generator<br><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                                                                                                                                                                |  |





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