

Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 3-poles, $I_n=1000A$ up to 690V AC 50/60Hz, breaking capacity $N I_{cu}=55/42kA$ at 500/690V, Trip unit ETU600 LSIG upgrade ready, color display, bluetooth and USB interface, Protection LT, ST, INST, GFx, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection vertical, with internal voltage tap on upper stab of circuit breaker, with voltage tap module VTM680 and power supply of ETU600, able to communication, integrated metering type PMF-1 Energy Efficiency, Voltage, Active energy Ea Manual operating mechanism with mechanical closing, without Spring charging motor, Ready-to-close signal. switch, Auxiliary switches 2NO+2NC, Closing coil (CC) 100% OP 208-240 V AC / 220-250 V DC, applicable for continuous duty, without Remote trip alarm reset coil (RR), without 2nd shunt trip, without 1st Shunt trip

| Model | |
|---|--|
| product brand name | SENTRON |
| product designation | Air circuit breaker |
| suitability for use | circuit breaker |
| size of the circuit-breaker | I |
| number of poles | 3 |
| position / of neutral conductor | no internal N-conductor |
| fastening method | fixed-mounted circuit breakers |
| design of the product | AC application |
| type of the driving mechanism | manual operating mechanism with mechanical or electrical closing |
| design of the electronic trip unit | ETU600 LSIG |
| Weight | 46.992 kg |
| Net Weight | 33.992 kg |
| General technical data | |
| insulation voltage / rated value | 1000 V |
| operating voltage / at AC / at 50/60 Hz / rated value | 690 V |
| power loss [W] / maximum | 70 W |
| Current | |
| continuous current / rated value / maximum | 1000 A |
| continuous current / rated value | 1000 A |
| operational current | |
| • at 40 °C / rated value | 1000 A |
| • at 45 °C / rated value | 1000 A |
| • at 50 °C / rated value | 1000 A |
| • at 55 °C / rated value | 1000 A |
| • at 60 °C / rated value | 1000 A |
| • at 65 °C / rated value | 1000 A |
| • at 70 °C / rated value | 1000 A |
| Switching capacity and short-time withstand current, according to IEC 60947-2 | |
| switching capacity class of the circuit breaker | N |
| maximum short-circuit current breaking capacity (I_{cu}) | |
| • at 500 V / rated value | 55 kA |
| • at 690 V / rated value | 42 kA |
| operating short-circuit current breaking capacity (I_{cs}) | |
| • at 500 V / rated value | 55 kA |
| • at 690 V / rated value | 42 kA |
| short-circuit current making capacity (I_{cm}) | |
| • at 500 V / rated value | 121 kA |
| • at 690 V / rated value | 88 kA |
| short-time withstand current (I_{cw}) / at 500 V AC | |

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| <ul style="list-style-type: none"> • for 0.5 s / rated value • for 1 s / rated value • for 2 s / rated value • for 3 s / rated value | 55 kA 50 kA 35 kA 30 kA |
| short-time withstand current (I _{cw}) / at 690 V AC <ul style="list-style-type: none"> • for 0.5 s / rated value • for 1 s / rated value • for 2 s / rated value • for 3 s / rated value | 42 kA 42 kA 35 kA 30 kA |
| Electronic release unit | |
| product feature <ul style="list-style-type: none"> • upgradable • Bluetooth and USB interface • decoder for basic protection functions • display and function keys • SENTRON powerconfig configuration software | Yes Yes Yes Yes Yes |
| position / for voltage tap | top |
| Basic protection functions | |
| product feature / for L-tripping <ul style="list-style-type: none"> • can be switched on/off • selectable characteristic function • decoder and infinite adjustability are selectable with eSet | Yes Yes Yes |
| set values setting current (I _r) / for L-tripping / with I _{2t} characteristic | 0.5; 0.6; 0.7; 0.75; 0.8; 0.85; 0.9; 0.95; 1 |
| reference value setting current (I _r) / for L-tripping / with I _{2t} characteristic | x I _n |
| set values delay time (t _r) / for L-tripping / with I _{2t} characteristic | 1;2;5;8;10;14;17;21;25 |
| reference value delay time (t _r) / for L-tripping / with I _{2t} characteristic | s |
| set values setting current (I _r) / for L-tripping / with I _{2t} characteristic / for eSet | 0.4-1;0.001 |
| adjustable absolute value setting current (I _r) / for L-tripping / with I _{2t} characteristic / for eSet <ul style="list-style-type: none"> • minimum • maximum | 400 A 1000 A |
| set values delay time (t _r) / for L-tripping / with I _{2t} characteristic / for eSet | 0.5-30;0.001 |
| set values setting current (I _r) / for L-tripping / with I _{4t} characteristic / for eSet | 0.4-1;0.001 |
| set values delay time (t _r) / for L-tripping / with I _{4t} characteristic / for eSet | 0.5-5;0.001 |
| adjustable absolute value setting current (I _r) / for L-tripping / with I _{4t} characteristic / for eSet <ul style="list-style-type: none"> • minimum • maximum | 400 A 1000 A |
| L: Overload protection N-conductor | |
| product feature / with neutral conductor protection / can be switched on/off | Yes |
| setting values setting current (I _{nN}) / for N-tripping | 0.2-2;0.001 |
| reference value setting current (I _{nN}) / for N-tripping | x I _n |
| adjustable setting current (I _{nN}) / for N-tripping <ul style="list-style-type: none"> • minimum • maximum | 200 A 2000 A |
| S: delayed short-circuit protection ST | |
| product feature / for S-tripping <ul style="list-style-type: none"> • independent of direction / can be switched on/off • independent of direction / selectable characteristic function • decoder and infinite adjustability are selectable with eSet | Yes Yes Yes |
| S: delayed short-circuit protection ST, settings values I_{0t} | |
| set values setting current (I _{sd}) / for S-tripping / with I _{0t} characteristic | 1.5;2;2.5;3;4;5;6;8;10 |
| reference value setting current (I _{sd}) / for S-tripping / with I _{0t} characteristic | x I _r |

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| set values delay time (tsd) / for S-tripping / with I0t characteristic | 0.08;0.15;0.22;0.3;0.4 |
| reference value delay time (tsd) / for S-tripping / with I0t characteristic | s |
| set values setting current (Isd) / for S-tripping / with I0t characteristic / for eSet / independent of direction | 0.6-10;0.001 |
| adjustable absolute value setting current (Isd) <ul style="list-style-type: none"> for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum | 600 A 40 kA 33.6 kA |
| set values delay time (tsd) / for S-tripping / with I0t characteristic / for eSet / independent of direction | 0.02-0.4;0.001 |
| S: delayed short-circuit protection ST, settings values I2t | |
| set values setting current (Isd) / for S-tripping / with I2t characteristic | 1.5;2;2.5;3;4;5;6;8;10 |
| reference value setting current (Isd) / for S-tripping / with I2t characteristic | x Ir |
| set values delay time (tsd) / for S-tripping / with I2t characteristic | 0.1;0.2;0.3;0.4 |
| set values setting current (Isd) / for S-tripping / with I2t characteristic / for eSet / independent of direction | 0.6-10;0.001 |
| adjustable absolute value setting current (Isd) <ul style="list-style-type: none"> for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum | 600 A 40 kA 33.6 kA |
| set values delay time (tsd) / for S-tripping / with I2t characteristic / for eSet / independent of direction | 0.02-0.4; 0.001 |
| product feature / for I-tripping <ul style="list-style-type: none"> can be switched on/off decoder and infinite adjustability are selectable (with eSet) | Yes Yes |
| set values setting current (Ii) / for I-tripping | 1.5;2;3;4;6;8;10;12;15 |
| reference value setting current (Ii) / for I-tripping | x In |
| tripping factor setting current (Iimax) / for I-tripping | 0.8 |
| reference value setting current (Iimax) / for I-tripping | x Ics |
| set values setting current (Ii) / for I-tripping / for eSet | 1.5-15;0.001 |
| adjustable absolute value setting current (Ii) <ul style="list-style-type: none"> for I-tripping / for eSet / minimum at 500 V / for I-tripping / for eSet / maximum at 690 V / for I-tripping / for eSet / maximum | 1500 A 44 kA 33.6 kA |
| G: ground fault GF | |
| product feature / for G-tripping <ul style="list-style-type: none"> can be switched on/off selectable characteristic function | Yes Yes |
| set values setting current (Ilg) / for G-tripping / with I0t characteristic | 0.1-2.0;0.001 |
| reference value setting current (Ilg) / for G-tripping / with I0t characteristic | x In |
| set values delay time (tgg) / for G-tripping / with I0t characteristic | 0.02-5;0.001 |
| reference value delay time (tgg) / for G-tripping / with I0t characteristic | s |
| set values setting current (Ilg) / for G-tripping / with I2t characteristic | 0.1-2.0;0.001 |
| reference value setting current (Ilg) / for G-tripping / with I2t characteristic | x In |
| set values delay time (tgg) / for G-tripping / with I2t characteristic | 0.02-30; 0.001 |
| reference value delay time (tgg) / for G-tripping / with I2t characteristic | s |
| Further protective functions | |
| protection function <ul style="list-style-type: none"> maintenance mode DAS+ | Yes |
| Measuring functions | |
| type of measurement function | PMF-I |

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|---|---------------------------------------|
| measurement function | |
| • type according to IEC 61557-12 | Yes |
| • current measurement | Yes |
| • measurement of voltage and active energy | Yes |
| Communication | |
| communication function / prepared for communication (Ready4COM) | Yes |
| communication function | Yes |
| Service Life | |
| mechanical service life (operating cycles) | |
| • without support / typical | 15000 |
| • with support / typical | 30000 |
| electrical endurance (operating cycles) | |
| • at 690 V / without support / typical | 10000 |
| • at 690 V / with support / typical | 30000 |
| Dimensions | |
| height | 437 mm |
| width | 320 mm |
| depth | 357 mm |
| Main connection | |
| arrangement of electrical connectors / for main current circuit | main connection on the rear, vertical |
| Auxiliary circuit | |
| design of the auxiliary switch | 2 NO + 2 NC |
| number of NC contacts / for auxiliary contacts | 2 |
| number of NO contacts / for auxiliary contacts | 2 |
| number of CO contacts / for auxiliary contacts | 0 |
| Internal accessories | |
| product component | |
| • undervoltage release | No |
| • voltage trigger | No |
| • trip indicator | Yes |
| • motor drive | No |
| Environmental conditions | |
| protection class IP / on the front | IP20 |
| ambient temperature / during operation | |
| • minimum | -40 °C |
| • maximum | 70 °C |
| ambient temperature / during storage | |
| • minimum | -40 °C |
| • maximum | 80 °C |
| General Product Approval | EMV |



Radio Equipment Type Approval Certificate

Test Certificates

[Miscellaneous](#)



[Miscellaneous](#)

[FCC](#)



[Miscellaneous](#)

[Special Test Certificate](#)


Maritime application

other



| other | | Dangerous goods | | Environment | |
|--|------------------------------|---|---------------------------------------|---|---|
| Manufacturer Declaration | Confirmation | Dangerous goods information | Transport Information |  |  |

Environment



- Further information**
- Information on the packaging**
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
 - Industry Mall (Online ordering system)**
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1110-2LF01-0EA0>
 - Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<https://support.industry.siemens.com/cs/ww/en/ps/3WA1110-2LF01-0EA0>
 - Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1110-2LF01-0EA0
 - CAx-Online-Generator**
<http://www.siemens.com/cax>
 - Information- and Downloadcenter (catalogues, leaflets,...)**
<http://www.siemens.com/energy-automation>

