



Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 1, 3-poles,  $I_n=2500\text{A}$  up to 690V AC 50/60Hz, breaking capacity  $N I_{cu}=55/42\text{kA}$  at 500/690V, Trip unit ETU600 LSI upgrade ready, color display, bluetooth and USB interface, Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection vertical, guide frame with shutter and position signal. switch (3xW), able to communication, 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, Remote trip alarm reset (RR) 208-240 V AC / 220-250 V DC for momentary duty, Undervoltage release (UVR) instantaneous (0,08 s) and short-delay (0,2 s), 24 V DC, without 1st Shunt trip

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	1
number of poles	3
position / of neutral conductor	no internal N-conductor
fastening method	withdrawable circuit breaker
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 LSI
Weight	80.879 kg
Net Weight	67.879 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	600 W
Current	
continuous current / rated value / maximum	2500 A
continuous current / rated value	2500 A
operational current	
• at 40 °C / rated value	2500 A
• at 45 °C / rated value	2500 A
• at 50 °C / rated value	2500 A
• at 55 °C / rated value	2500 A
• at 60 °C / rated value	2370 A
• at 70 °C / rated value	2060 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 ( $I_{cm}$ )	

<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> </ul>	121 kA
<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	88 kA
short-time withstand current (I <sub>cw</sub> ) / at 500 V AC	
<ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> </ul>	55 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	45 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	35 kA
short-time withstand current (I <sub>cw</sub> ) / at 690 V AC	
<ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> </ul>	42 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	42 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	42 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	35 kA
<b>Electronic release unit</b>	
product feature	
<ul style="list-style-type: none"> <li>• upgradable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Bluetooth and USB interface</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder for basic protection functions</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• display and function keys</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SENTRON powerconfig configuration software</li> </ul>	Yes
<b>Basic protection functions</b>	
product feature / for L-tripping	
<ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>	Yes
set values setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	0.5; 0.6; 0.7; 0.75; 0.8; 0.85; 0.9; 0.95; 1
reference value setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	x I <sub>n</sub>
set values delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	s
set values setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / for eSet	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	1000 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2500 A
set values delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / for eSet	0.5-30;0.001
set values setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>4t</sub> characteristic / for eSet	0.4-1;0.001
set values delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>4t</sub> characteristic / for eSet	0.5-5;0.001
adjustable absolute value setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>4t</sub> characteristic / for eSet	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	1000 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2500 A
<b>L: Overload protection N-conductor</b>	
product feature / with neutral conductor protection / can be switched on/off	Yes
setting values setting current (I <sub>nN</sub> ) / for N-tripping	0.2-2;0.001
reference value setting current (I <sub>nN</sub> ) / for N-tripping	x I <sub>n</sub>
adjustable setting current (I <sub>nN</sub> ) / for N-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	500 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	5000 A
<b>S: delayed short-circuit protection ST</b>	
product feature / for S-tripping	
<ul style="list-style-type: none"> <li>• independent of direction / can be switched on/off</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• independent of direction / selectable characteristic function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>	Yes
<b>S: delayed short-circuit protection ST, settings values I<sub>0t</sub></b>	

set values setting current (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic	x I <sub>r</sub>
set values delay time (t <sub>sd</sub> ) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (t <sub>sd</sub> ) / for S-tripping / with I0t characteristic	s
set values setting current (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I <sub>sd</sub> )	
<ul style="list-style-type: none"> <li>for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum</li> </ul>	1500 A
<ul style="list-style-type: none"> <li>at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> </ul>	40 kA
<ul style="list-style-type: none"> <li>at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> </ul>	33.6 kA
set values delay time (t <sub>sd</sub> ) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.02-0.4;0.001
<b>S: delayed short-circuit protection ST, settings values I2t</b>	
set values setting current (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic	x I <sub>r</sub>
set values delay time (t <sub>sd</sub> ) / for S-tripping / with I2t characteristic	0.1;0.2;0.3;0.4
set values setting current (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I <sub>sd</sub> )	
<ul style="list-style-type: none"> <li>for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum</li> </ul>	1500 A
<ul style="list-style-type: none"> <li>at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> </ul>	40 kA
<ul style="list-style-type: none"> <li>at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> </ul>	33.6 kA
set values delay time (t <sub>sd</sub> ) / 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"> <li>can be switched on/off</li> </ul>	Yes
<ul style="list-style-type: none"> <li>decoder and infinite adjustability are selectable (with eSet)</li> </ul>	Yes
set values setting current (I <sub>i</sub> ) / for I-tripping	1.5;2;3;4;6;8;10;12;15
reference value setting current (I <sub>i</sub> ) / for I-tripping	x I <sub>n</sub>
tripping factor setting current (I <sub>imax</sub> ) / for I-tripping	0.8
reference value setting current (I <sub>imax</sub> ) / for I-tripping	x I <sub>cs</sub>
set values setting current (I <sub>i</sub> ) / for I-tripping / for eSet	1.5-15;0.001
adjustable absolute value setting current (I <sub>i</sub> )	
<ul style="list-style-type: none"> <li>for I-tripping / for eSet / minimum</li> </ul>	3750 A
<ul style="list-style-type: none"> <li>at 500 V / for I-tripping / for eSet / maximum</li> </ul>	44 kA
<ul style="list-style-type: none"> <li>at 690 V / for I-tripping / for eSet / maximum</li> </ul>	33.6 kA
<b>G: ground fault GF</b>	
product feature / for G-tripping	
<ul style="list-style-type: none"> <li>selectable characteristic function</li> </ul>	No
<b>Further protective functions</b>	
protection function	
<ul style="list-style-type: none"> <li>maintenance mode DAS+</li> </ul>	Yes
<b>Measuring functions</b>	
measurement function	
<ul style="list-style-type: none"> <li>current measurement</li> </ul>	Yes
<b>Communication</b>	
communication function / prepared for communication (Ready4COM)	Yes
communication function	Yes
<b>Service Life</b>	
mechanical service life (operating cycles)	
<ul style="list-style-type: none"> <li>without support / typical</li> </ul>	15000

<ul style="list-style-type: none"> <li>with support / typical</li> </ul>	30000
electrical endurance (operating cycles)	
<ul style="list-style-type: none"> <li>at 690 V / without support / typical</li> </ul>	5000
<ul style="list-style-type: none"> <li>at 690 V / with support / typical</li> </ul>	30000

Dimensions	
height	468 mm
width	320 mm
depth	471 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	
<ul style="list-style-type: none"> <li>undervoltage release</li> </ul>	Yes
<ul style="list-style-type: none"> <li>voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>trip indicator</li> </ul>	Yes
<ul style="list-style-type: none"> <li>motor drive</li> </ul>	No

Environmental conditions	
protection class IP / on the front	IP20
ambient temperature / during operation	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	70 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	80 °C

Certificates	
reference code / according to IEC 81346-2	Q

**Approvals / Certificates**

Environment	General Product Approval
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[Confirmation](#)

General Product Approval	EMV	Radio Equipment Type Approval Certificate
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[Miscellaneous](#)

[Industry\\_Canada \(IC\)](#)

Radio Equipment Type Approval Certificate	Test Certificates	Maritime application
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[Miscellaneous](#)

[FCC](#)

[Miscellaneous](#)

[Special Test Certificate](#)



Maritime application	other
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[Manufacturer Declaration](#)

[Confirmation](#)

## Dangerous goods

[Transport Information](#)

## 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 (catalogues, leaflets,...)

<https://www.siemens.com/energy-automation>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1125-2CE61-0JL0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1125-2CE61-0JL0>

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

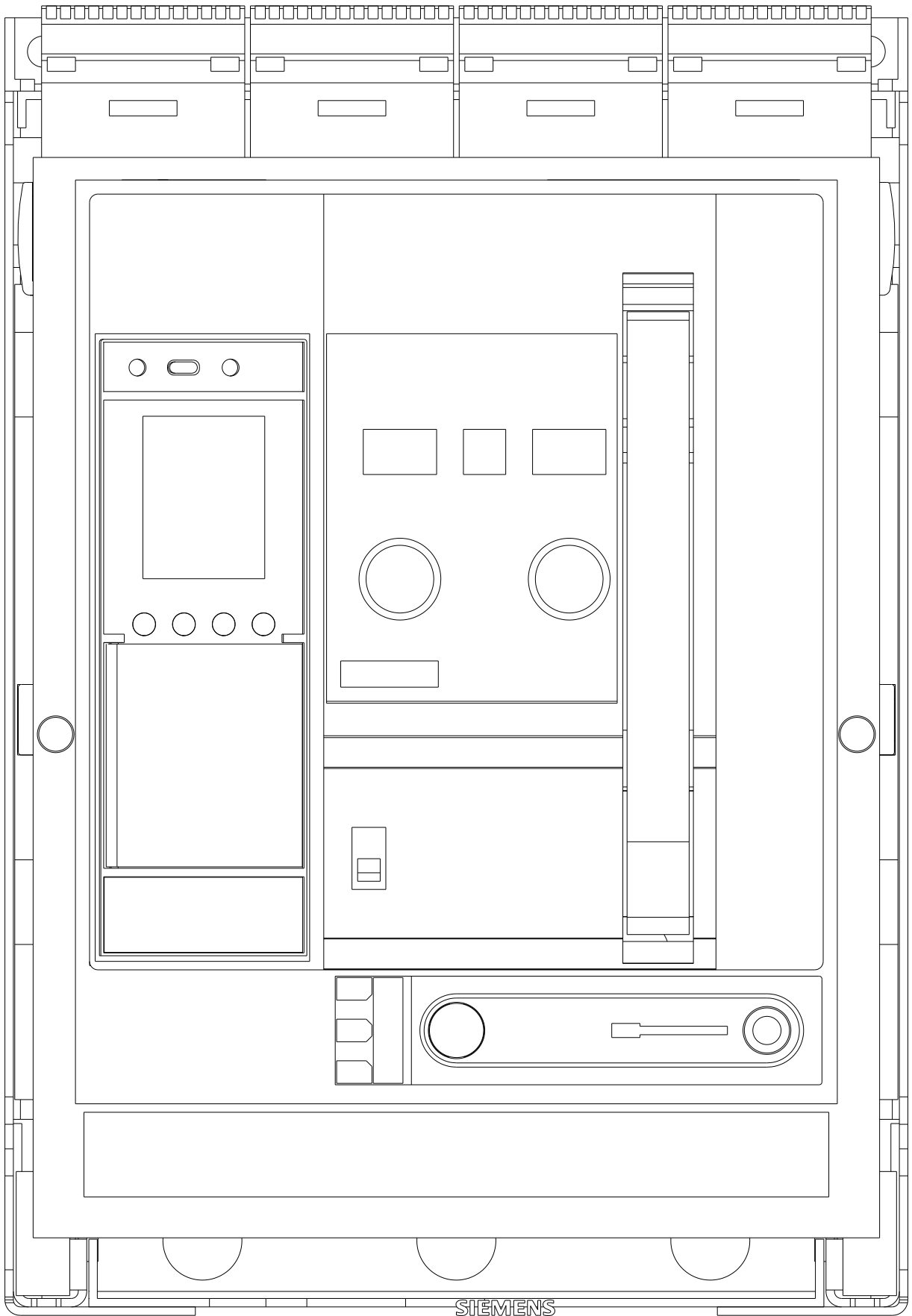
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1125-2CE61-0JL0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1125-2CE61-0JL0)

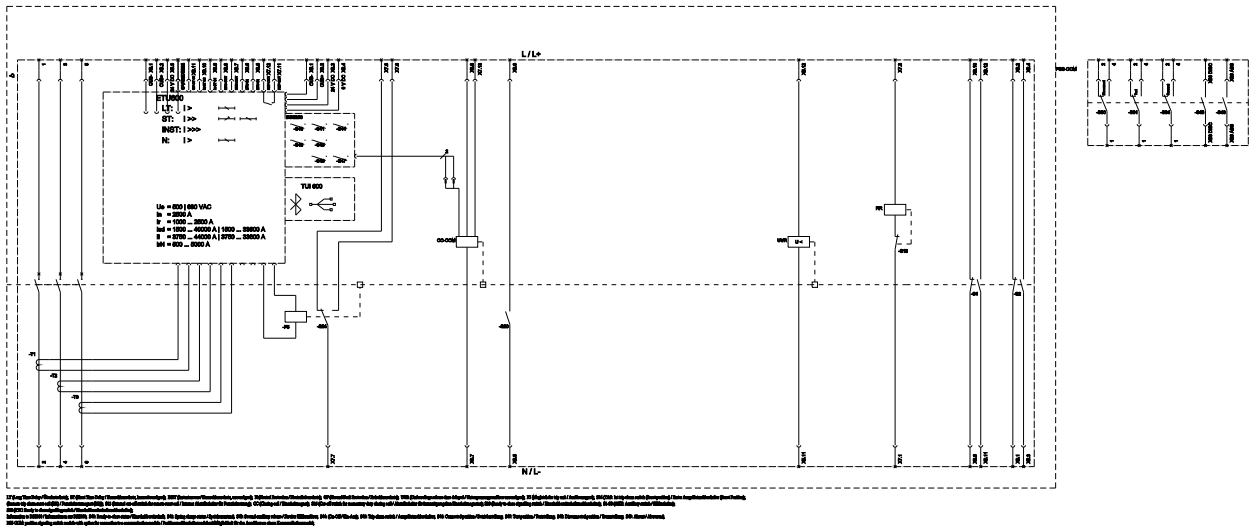
### CAX-Online-Generator

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

### 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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