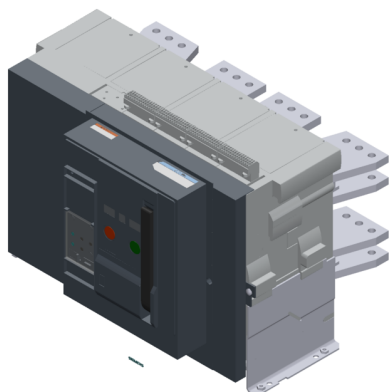


**Siemens**  
**EcoTech**



fixed-mounted circuit breaker, IEC 60947-2, size 1, 4-pole, N pole on left,  $I_n=4000$  A up to 690 V AC 50/60 Hz, breaking capacity  $M I_{cu}=85/66$  kA at 500/690 V, tripping unit ETU300 LSI optimized for standard applications, without display, basic protection LT, ST, INST, including protection of the N conductor (internal neutral point sensor available) trip alarm switch (1 x CO), connection at rear horizontal without Com & metering function Manual operating mechanism with mechanical closing, without Spring charging motor, Ready-to-close signal. switch, Auxiliary switches 2NO+2NC, without Closing coil (CC), manual operating mechanism with mechanical closing, 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	II
number of poles	4
position / of neutral conductor	neutral left
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	ETU300 LSI
Weight	106.151 kg
Net Weight	93.151 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	830 W
Current	
continuous current / rated value / maximum	4000 A
continuous current / rated value	4000 A
operational current	
• at 40 °C / rated value	4000 A
• at 45 °C / rated value	4000 A
• at 50 °C / rated value	4000 A
• at 55 °C / rated value	4000 A
• at 60 °C / rated value	4000 A
• at 70 °C / rated value	3860 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity ( $I_{cu}$ )	
• at 500 V / rated value	85 kA
• at 690 V / rated value	66 kA
operating short-circuit current breaking capacity ( $I_{cs}$ )	
• at 500 V / rated value	85 kA
• at 690 V / rated value	66 kA
short-circuit current making capacity ( $I_{cm}$ )	
• at 500 V / rated value	187 kA

<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	145 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>	85 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	85 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	85 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	75 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>	66 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	66 kA
<b>Electronic release unit</b>	
product feature	
<ul style="list-style-type: none"> <li>• upgradable</li> </ul>	No
<ul style="list-style-type: none"> <li>• Bluetooth and USB interface</li> </ul>	No
<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>	No
<ul style="list-style-type: none"> <li>• SENTRON powerconfig configuration software</li> </ul>	No
<b>Basic protection functions</b>	
product feature / for L-tripping	
<ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>	No
<ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>	No
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>	No
set values setting current (I <sub>r</sub> ) / for L-tripping / with I2t characteristic	0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1.0
reference value setting current (I <sub>r</sub> ) / for L-tripping / with I2t characteristic	x I <sub>n</sub>
set values delay time (t <sub>r</sub> ) / for L-tripping / with I2t characteristic	0.75;1;2;5;8;10;14;17;21;25
reference value delay time (t <sub>r</sub> ) / for L-tripping / with I2t characteristic	s
<b>L: Overload protection N-conductor</b>	
product feature / with neutral conductor protection / can be switched on/off	No
setting values setting current (I <sub>nN</sub> ) / for N-tripping	1
reference value setting current (I <sub>nN</sub> ) / for N-tripping	x I <sub>n</sub>
<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>	No
<b>S: delayed short-circuit protection ST, settings values I0t</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
<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	0.08;0.15;0.22;0.3;0.4
product feature / for I-tripping	
<ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>	No
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable (with eSet)</li> </ul>	No
set values setting current (I <sub>i</sub> ) / for I-tripping	1.5;2;3;4;5;6;8;10;12;15
reference value setting current (I <sub>i</sub> ) / for I-tripping	x I <sub>n</sub>
<b>G: ground fault GF</b>	
product feature / for G-tripping	
<ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>	No

Further protective functions			
protection function		Yes	
• maintenance mode DAS+			
Measuring functions			
measurement function		Yes	
• current measurement			
Communication			
communication function		No	
Service Life			
mechanical service life (operating cycles)		10000	
• without support / typical			
• with support / typical		20000	
electrical endurance (operating cycles)		2000	
• at 690 V / without support / typical			
• at 690 V / with support / typical		20000	
Dimensions			
height		437 mm	
width		590 mm	
depth		357 mm	
Main connection			
arrangement of electrical connectors / for main current circuit		main connection on the rear, horizontal	
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		No	
• undervoltage release			
• voltage trigger			
• trip indicator			
• motor drive		No	
Environmental conditions			
protection class IP / on the front		IP20	
ambient temperature / during operation		-40 °C	
• minimum			
• maximum		70 °C	
ambient temperature / during storage		-40 °C	
• minimum			
• maximum		80 °C	
Environmental footprint			
Siemens Eco Profile (SEP)		Siemens EcoTech	
Certificates			
reference code		Q	
• according to IEC 81346-2			
General Product Approval		EMV	Radio Equipment Type Approval Certificate



[Miscellaneous](#)

Test Certificates	Maritime application	other
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[Special Test Certificate](#)

[Miscellaneous](#)



[Manufacturer Declaration](#)

[Confirmation](#)

[Transport Information](#)



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#### 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=3WA1240-4AB12-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1240-4AB12-0AA0>

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

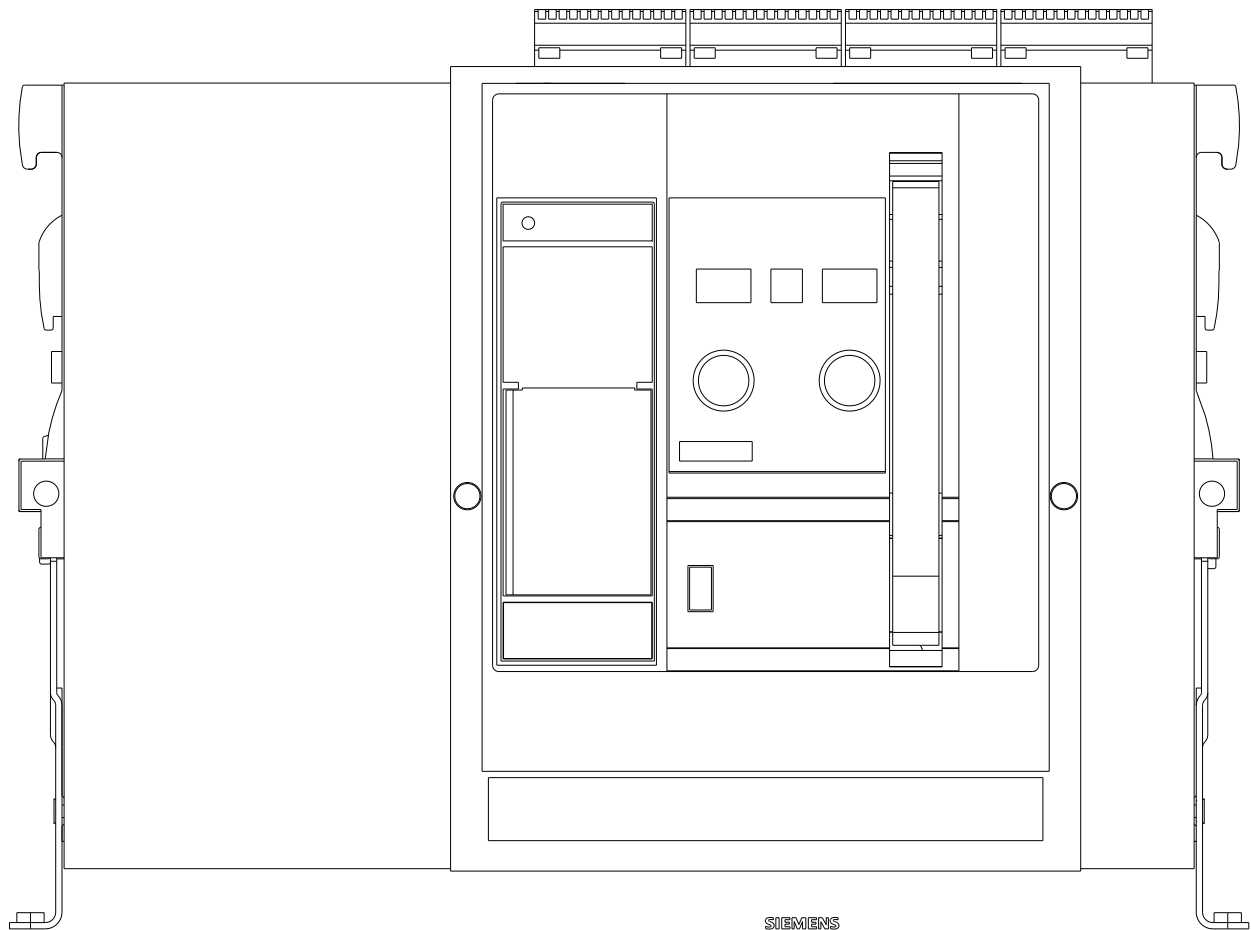
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1240-4AB12-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1240-4AB12-0AA0)

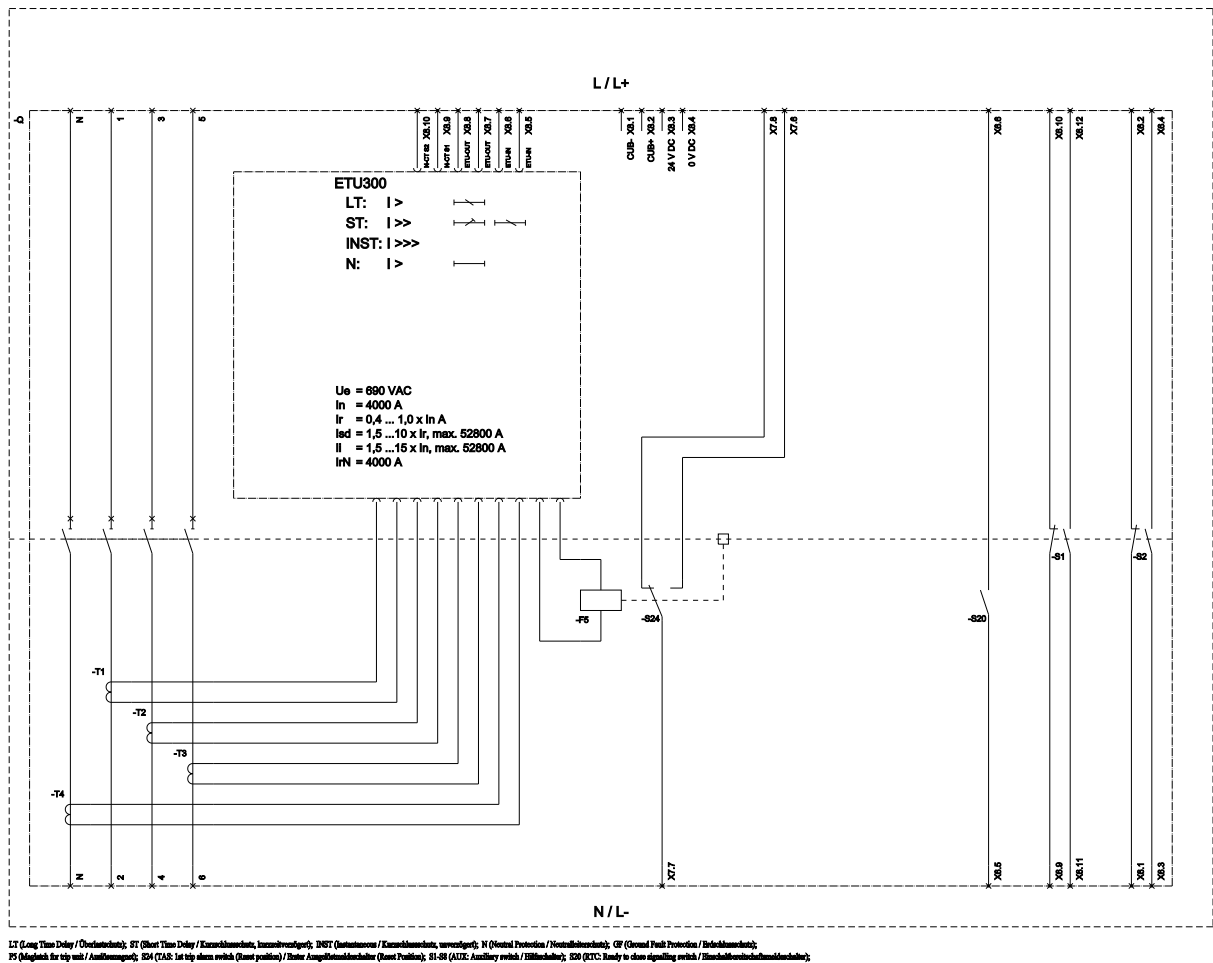
##### CAX-Online-Generator

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

##### Information- and Downloadcenter (catalogues, leaflets,...)

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





last modified:

6/2/2025

