



Withdrawable circuit breaker without guide frame, IEC 60947-2, frame size 2, 4-poles, N-pole left,  $I_n=2500\text{A}$  up to 690V AC 50/60Hz, breaking capacity S  $I_{cu}=66/50\text{kA}$  at 500/690V, Trip unit ETU300 LSI optimized for standard applications, without display Protection LT, ST, INST, include N-protection, (internal N-sensor available), incl. trip alarm switch (1xCO), 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	withdrawable circuit breaker without guide frame
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	73.851 kg
Net Weight	60.851 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	690 V
Current	
continuous current / rated value / maximum	2500 A
continuous current / rated value	2500 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	S
maximum short-circuit current breaking capacity ( $I_{cu}$ )	
• at 500 V / rated value	66 kA
• at 690 V / rated value	50 kA
operating short-circuit current breaking capacity ( $I_{cs}$ )	
• at 500 V / rated value	66 kA
• at 690 V / rated value	50 kA
short-circuit current making capacity ( $I_{cm}$ )	
• at 500 V / rated value	145 kA
• at 690 V / rated value	105 kA
short-time withstand current ( $I_{cw}$ ) / at 500 V AC	
• for 0.5 s / rated value	66 kA
• for 1 s / rated value	66 kA
• for 2 s / rated value	66 kA
• for 3 s / rated value	55 kA
short-time withstand current ( $I_{cw}$ ) / at 690 V AC	

<ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> <li>• for 1 s / rated value</li> <li>• for 2 s / rated value</li> <li>• for 3 s / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> <li>• for 2 s / rated value</li> <li>• for 3 s / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> <li>• for 3 s / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	50 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
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
<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	

• current measurement	Yes
<b>Communication</b>	
communication function	No
<b>Service Life</b>	
mechanical service life (operating cycles)	
• without support / typical	10000
• with support / typical	20000
electrical endurance (operating cycles)	
• at 690 V / without support / typical	7500
• at 690 V / with support / typical	20000
<b>Dimensions</b>	
height	468 mm
width	590 mm
depth	471 mm
<b>Auxiliary circuit</b>	
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
<b>Internal accessories</b>	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	Yes
• motor drive	No
<b>Environmental conditions</b>	
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
<b>Certificates</b>	
reference code / according to IEC 81346-2	Q
<b>Approvals / Certificates</b>	
<b>Environment</b>	<b>General Product Approval</b>



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[Confirmation](#)



General Product Approval

EMV

Radio Equipment  
Type Approval Certificate

Test Certificates



[Miscellaneous](#)

[Special Test Certificate](#)

[Miscellaneous](#)

Maritime application

other



[Confirmation](#)



[Manufacturer Declaration](#)

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=3WA1225-3AB40-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1225-3AB40-0AA0>

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

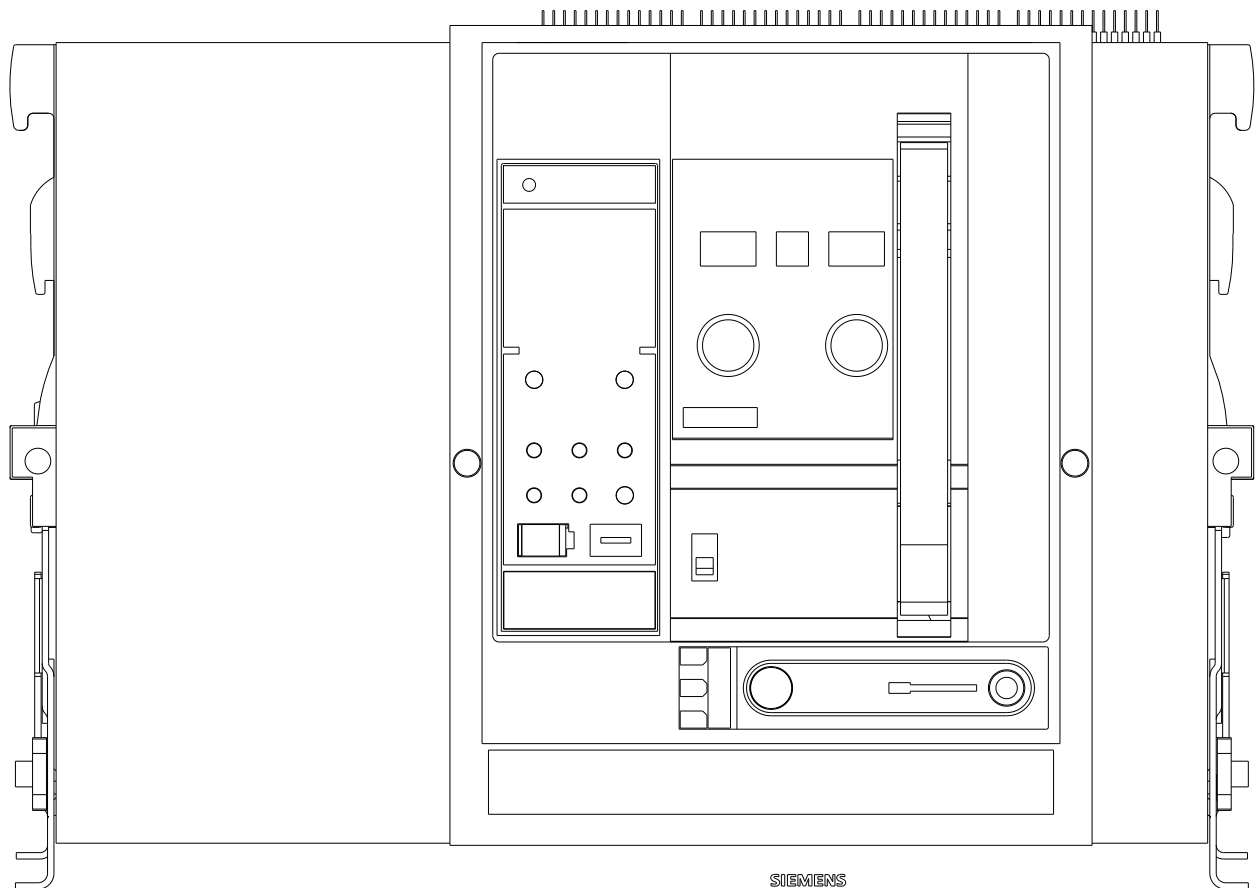
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1225-3AB40-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1225-3AB40-0AA0)

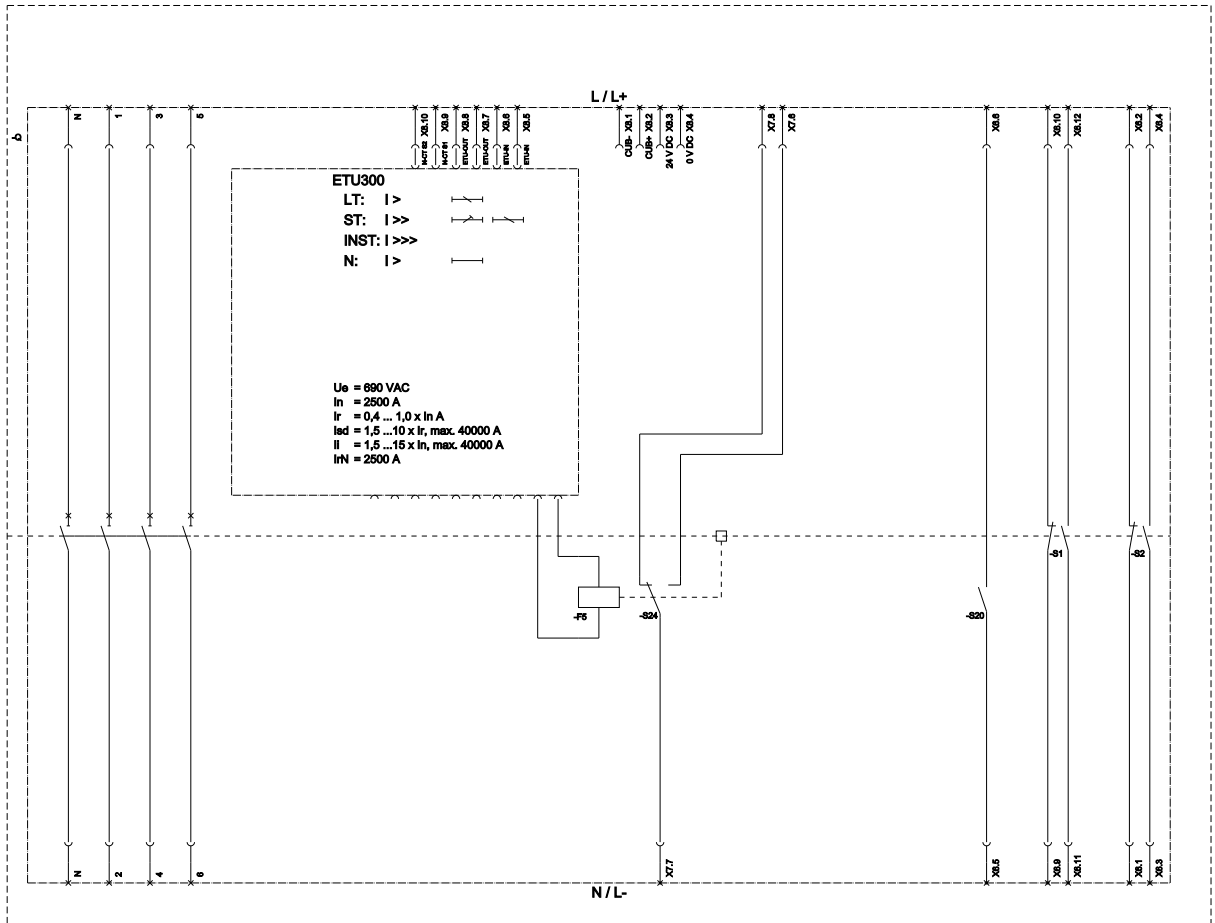
CAX-Online-Generator

<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=)





LT (Long Time Delay / Überlastschutz); ST (Short Time Delay / Kurzschlusschutz, kurzzeitverzögerter); INST (Instantaneous / Kurzschlusschutz, unverzögerter); N (Neutral Protection / Neutralfehlschutz); GF (Ground Fault Protection / Erdfehlschutz);  
 F5 (Interlock for trip unit / Anlaufverweigerung); S24 (TAS: In trip alarm switch / Fehler Anzeigebestätigungsschalter (Alarm Position)); S1-S3 (AUX: Auxiliary switch / Hilfskontakt); S20 (RTCC: Ready to close signaling switch / Abschaltbereitschaftsschalter);  
 F20: position signaling switch module / Positionsschaltmodule.

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11/24/2025

