









Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 2, 3-poles, $I_n=2000\text{A}$ 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, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection horizontal, guide frame with shutter and w/o position signalling switch, 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	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	ETU300 LSI
Weight	93.702 kg
Net Weight	80.702 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	320 W
Current	
continuous current / rated value / maximum	2000 A
continuous current / rated value	2000 A
operational current	
• at 40 °C / rated value	2000 A
• at 45 °C / rated value	2000 A
• at 50 °C / rated value	2000 A
• at 55 °C / rated value	2000 A
• at 60 °C / rated value	2000 A
• at 65 °C / rated value	2000 A
• at 70 °C / rated value	2000 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})	
<ul style="list-style-type: none"> • at 500 V / rated value • at 690 V / rated value 	<p>145 kA</p> <p>105 kA</p>
short-time withstand current (I _{cw}) / at 500 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 	<p>66 kA</p> <p>66 kA</p> <p>66 kA</p> <p>55 kA</p>
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 	<p>50 kA</p> <p>50 kA</p> <p>50 kA</p> <p>50 kA</p>
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 	<p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>No</p>
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 	<p>No</p> <p>No</p> <p>No</p>
set values setting current (I _r) / for L-tripping / with I _{2t} 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 _r) / for L-tripping / with I _{2t} characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I _{2t} characteristic	0.75;1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I _{2t} characteristic	s
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	No
setting values setting current (I _{nN}) / for N-tripping	1
reference value setting current (I _{nN}) / for N-tripping	x I _n
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 	<p>Yes</p> <p>Yes</p> <p>No</p>
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
set values delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	s
S: delayed short-circuit protection ST, settings values I_{2t}	
set values setting current (I _{sd}) / for S-tripping / with I _{2t} characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I _{2t} characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic	0.08;0.15;0.22;0.3;0.4
product feature / for I-tripping	
<ul style="list-style-type: none"> • can be switched on/off • decoder and infinite adjustability are selectable (with eSet) 	<p>No</p> <p>No</p>
set values setting current (I _i) / for I-tripping	1.5;2;3;4;5;6;8;10;12;15

reference value setting current (I _i) / for I-tripping	x I _n		
G: ground fault GF			
product feature / for G-tripping			
<ul style="list-style-type: none"> selectable characteristic function 	No		
Further protective functions			
protection function			
<ul style="list-style-type: none"> maintenance mode DAS+ 	Yes		
Measuring functions			
measurement function			
<ul style="list-style-type: none"> current measurement 	Yes		
Communication			
communication function	No		
Service Life			
mechanical service life (operating cycles)			
<ul style="list-style-type: none"> without support / typical 	10000		
<ul style="list-style-type: none"> with support / typical 	20000		
electrical endurance (operating cycles)			
<ul style="list-style-type: none"> at 690 V / without support / typical 	7500		
<ul style="list-style-type: none"> at 690 V / with support / typical 	20000		
Dimensions			
height	468 mm		
width	460 mm		
depth	471 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			
<ul style="list-style-type: none"> undervoltage release 	No		
<ul style="list-style-type: none"> voltage trigger 	No		
<ul style="list-style-type: none"> trip indicator 	Yes		
<ul style="list-style-type: none"> motor drive 	No		
Environmental conditions			
protection class IP / on the front	IP20		
ambient temperature / during operation			
<ul style="list-style-type: none"> minimum 	-40 °C		
<ul style="list-style-type: none"> maximum 	70 °C		
ambient temperature / during storage			
<ul style="list-style-type: none"> minimum 	-40 °C		
<ul style="list-style-type: none"> maximum 	80 °C		
Certificates			
reference code / according to IEC 81346-2	Q		
Approvals / Certificates			
Environment	General Product Approval		
     	Confirmation		
General Product Approval	EMV	Radio Equipment Type Approval Certificate	Test Certificates



[Miscellaneous](#)

[Special Test Certificate](#)

[Miscellaneous](#)

Maritime application

other



[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

[Miscellaneous](#)

other

Dangerous goods

[Manufacturer Declaration](#)



[Confirmation](#)

[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=3WA1220-3AB32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1220-3AB32-0AA0>

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

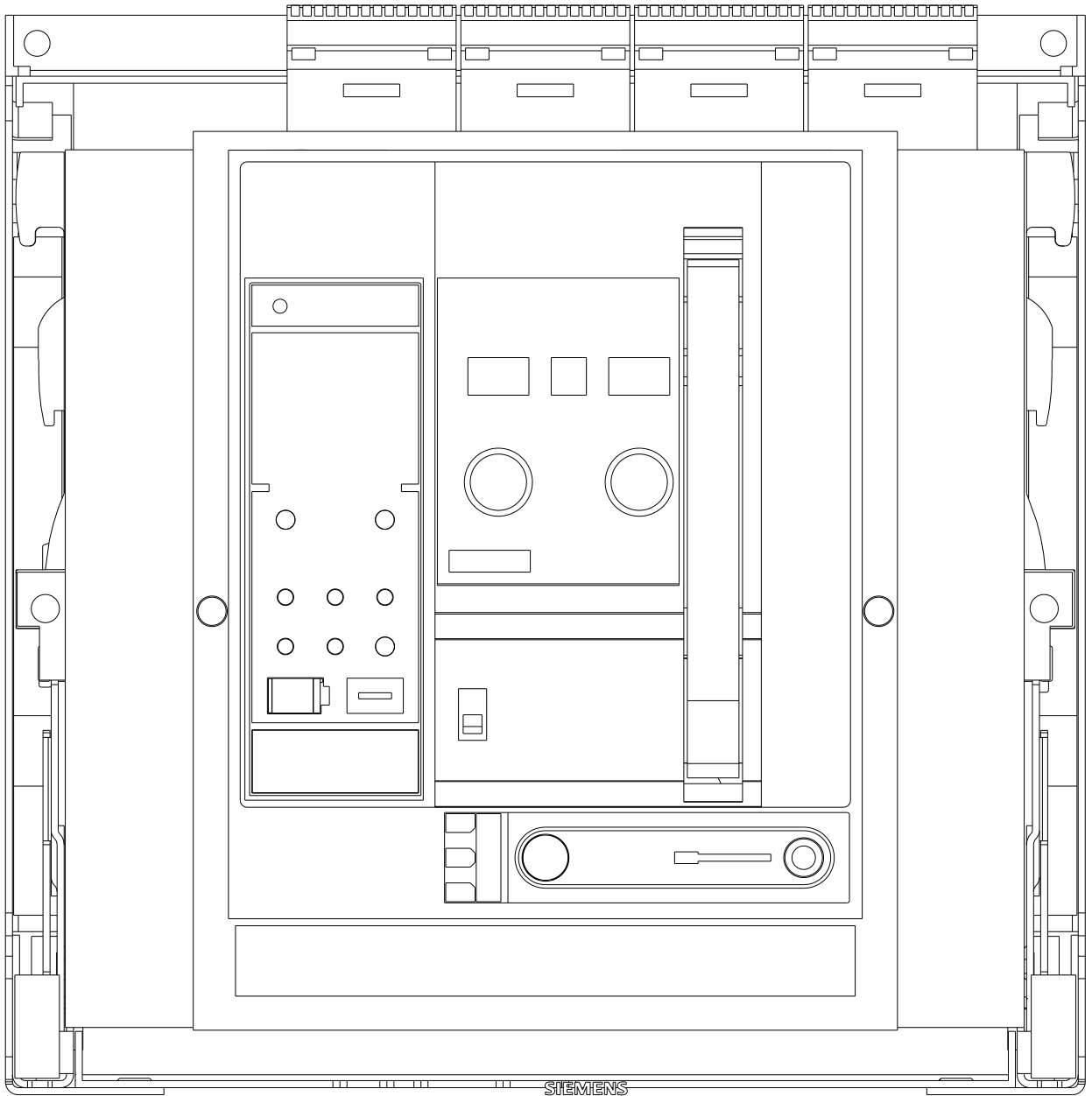
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1220-3AB32-0AA0

CAX-Online-Generator

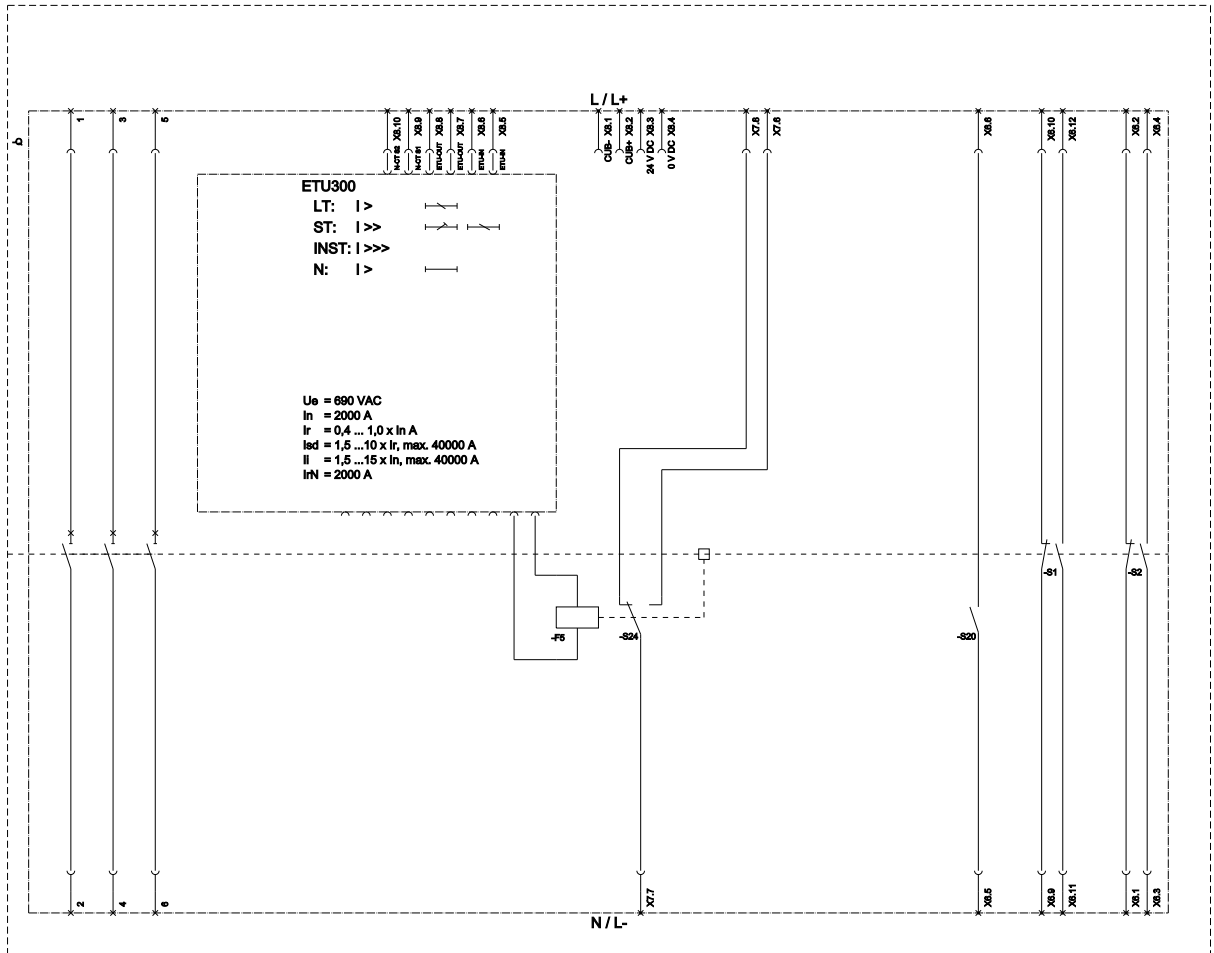
<https://www.siemens.com/cax>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



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LT (Long Time Delay / Überstromschutz), ST (Short Time Delay / Kurzschlusschutz, Inzermittelwert), ISST (Instantaneous / Kurzschlusschutz, unverzögert), N (Neutral Protection / Neutralleiterenschutz), CP (Circuit Breaker Protection / Erdschlusschutz),
 F5 (fuse for the trip unit / Anstößesicherung), S24 (TAS: 1st trip alarm switch (Reset position) / Erste Anstößesicherheitschalter (Reset Position)), S1-S8 (AUX: Auxiliary switch(es) / Hilfschalter(e)), S20 (RTC: Ready to close signalling switch / Bereitschaftsschaltkontakt),
 F20: position signalling switch module / Positionsschaltkontaktmodul.

last modified:

11/24/2025

