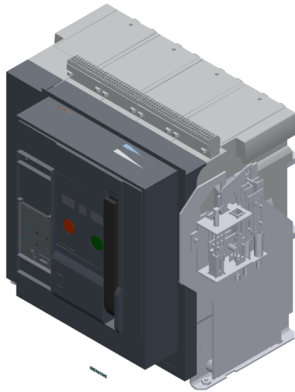


Siemens
EcoTech



Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 4-poles, N-pole left, $I_n=630\text{A}$ up to $690\text{V AC } 50/60\text{Hz}$, breaking capacity S $I_{cu}=66/50\text{kA}$ at $500/690\text{V}$, 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), rear connection horizontal, without Com & metering function 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, Shunt trip (ST) 100% OP 24-30 V DC, suitable for continuous duty, Option S55 = Mutual mechanical interlocking with 2 m bowden cable for circuit breakers in fixed-mounted design necessary once for each circuit breaker.

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	I
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	51.656 kg
Net Weight	38.656 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	30 W
Current	
continuous current / rated value / maximum	630 A
continuous current / rated value	630 A
operational current	
• at 40 °C / rated value	630 A
• at 45 °C / rated value	630 A
• at 50 °C / rated value	630 A
• at 55 °C / rated value	630 A
• at 60 °C / rated value	630 A
• at 65 °C / rated value	630 A
• at 70 °C / rated value	630 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>
<p>short-time withstand current (I_{cw}) / at 500 V AC</p> <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>45 kA</p> <p>35 kA</p>
<p>short-time withstand current (I_{cw}) / at 690 V AC</p> <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>45 kA</p> <p>35 kA</p>

Electronic release unit

<p>product feature</p> <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>
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Basic protection functions

<p>product feature / for L-tripping</p> <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>
<p>set values setting current (I_r) / for L-tripping / with I_{2t} characteristic</p>	<p>0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1.0</p>
<p>reference value setting current (I_r) / for L-tripping / with I_{2t} characteristic</p>	<p>x I_n</p>
<p>set values delay time (t_r) / for L-tripping / with I_{2t} characteristic</p>	<p>0.75;1;2;5;8;10;14;17;21;25</p>
<p>reference value delay time (t_r) / for L-tripping / with I_{2t} characteristic</p>	<p>s</p>
<p>L: Overload protection N-conductor</p>	
<p>product feature / with neutral conductor protection / can be switched on/off</p>	<p>No</p>
<p>setting values setting current (I_{nN}) / for N-tripping</p>	<p>1</p>
<p>reference value setting current (I_{nN}) / for N-tripping</p>	<p>x I_n</p>
<p>S: delayed short-circuit protection ST</p>	
<p>product feature / for S-tripping</p> <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>
<p>S: delayed short-circuit protection ST, settings values I_{0t}</p>	
<p>set values setting current (I_{sd}) / for S-tripping / with I_{0t} characteristic</p>	<p>1.5;2;2.5;3;4;5;6;8;10</p>
<p>reference value setting current (I_{sd}) / for S-tripping / with I_{0t} characteristic</p>	<p>x I_r</p>
<p>set values delay time (t_{sd}) / for S-tripping / with I_{0t} characteristic</p>	<p>0.08;0.15;0.22;0.3;0.4</p>
<p>reference value delay time (t_{sd}) / for S-tripping / with I_{0t} characteristic</p>	<p>s</p>
<p>S: delayed short-circuit protection ST, settings values I_{2t}</p>	
<p>set values setting current (I_{sd}) / for S-tripping / with I_{2t} characteristic</p>	<p>1.5;2;2.5;3;4;5;6;8;10</p>
<p>reference value setting current (I_{sd}) / for S-tripping / with I_{2t} characteristic</p>	<p>x I_r</p>
<p>set values delay time (t_{sd}) / for S-tripping / with I_{2t} characteristic</p>	<p>0.08;0.15;0.22;0.3;0.4</p>
<p>product feature / for I-tripping</p> <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>
<p>set values setting current (I_i) / for I-tripping</p>	<p>1.5;2;3;4;5;6;8;10;12;15</p>
<p>reference value setting current (I_i) / for I-tripping</p>	<p>x I_n</p>
<p>G: ground fault GF</p>	
<p>product feature / for G-tripping</p>	

<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 with support / typical 	15000 30000
electrical endurance (operating cycles) <ul style="list-style-type: none"> at 690 V / without support / typical at 690 V / with support / typical 	10000 30000
Dimensions	
height	437 mm
width	410 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 <ul style="list-style-type: none"> undervoltage release voltage trigger trip indicator motor drive 	No Yes Yes No
Environmental conditions	
protection class IP / on the front	IP20
ambient temperature / during operation <ul style="list-style-type: none"> minimum maximum 	-40 °C 70 °C
ambient temperature / during storage <ul style="list-style-type: none"> minimum maximum 	-40 °C 80 °C
Environmental footprint	
Siemens Eco Profile (SEP)	Siemens EcoTech
Certificates	
reference code <ul style="list-style-type: none"> according to IEC 81346-2 	Q
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=3WA1106-3AB12-0EA1-Z S55>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1106-3AB12-0EA1-Z S55>

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

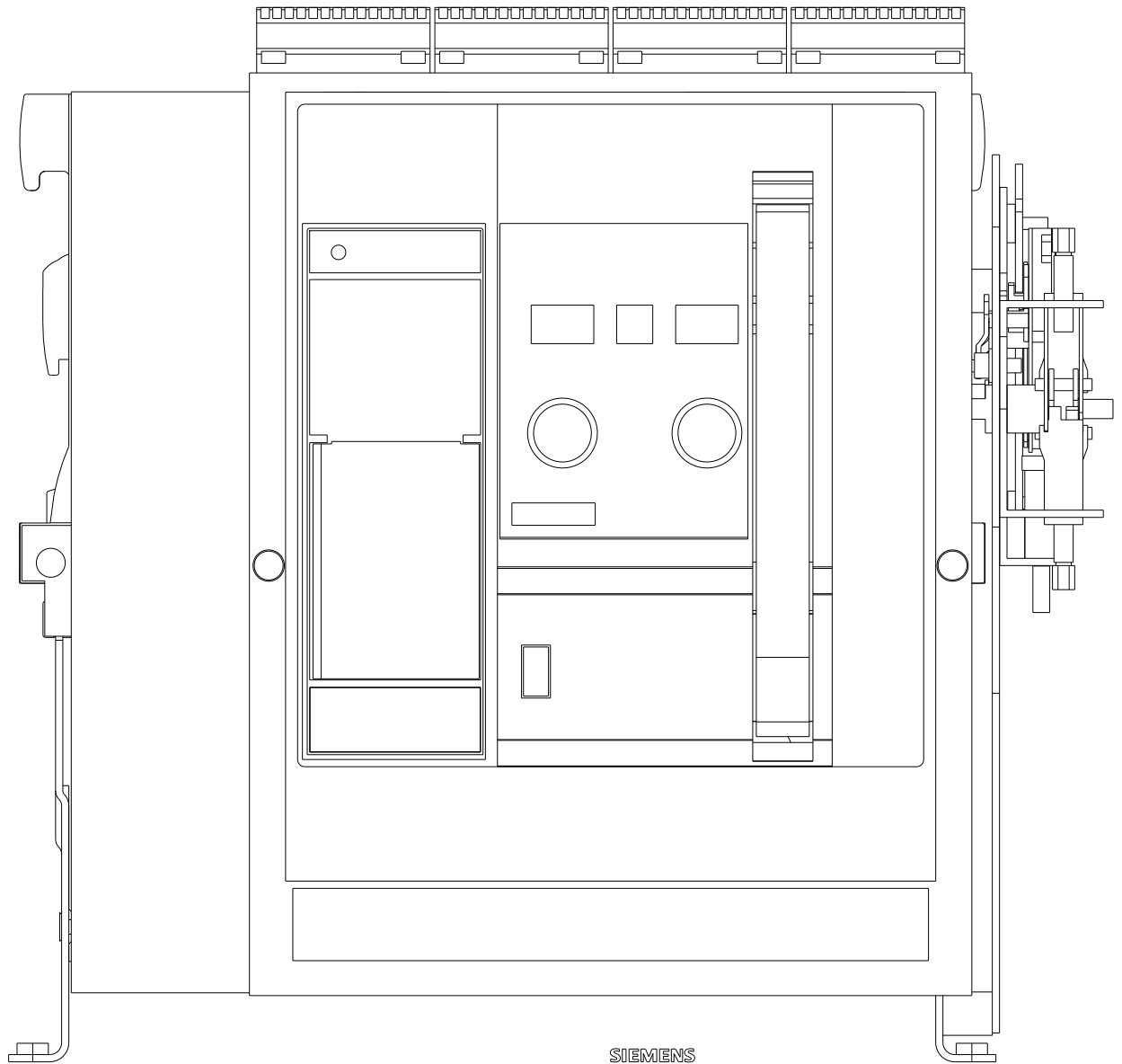
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1106-3AB12-0EA1-Z S55

CAX-Online-Generator

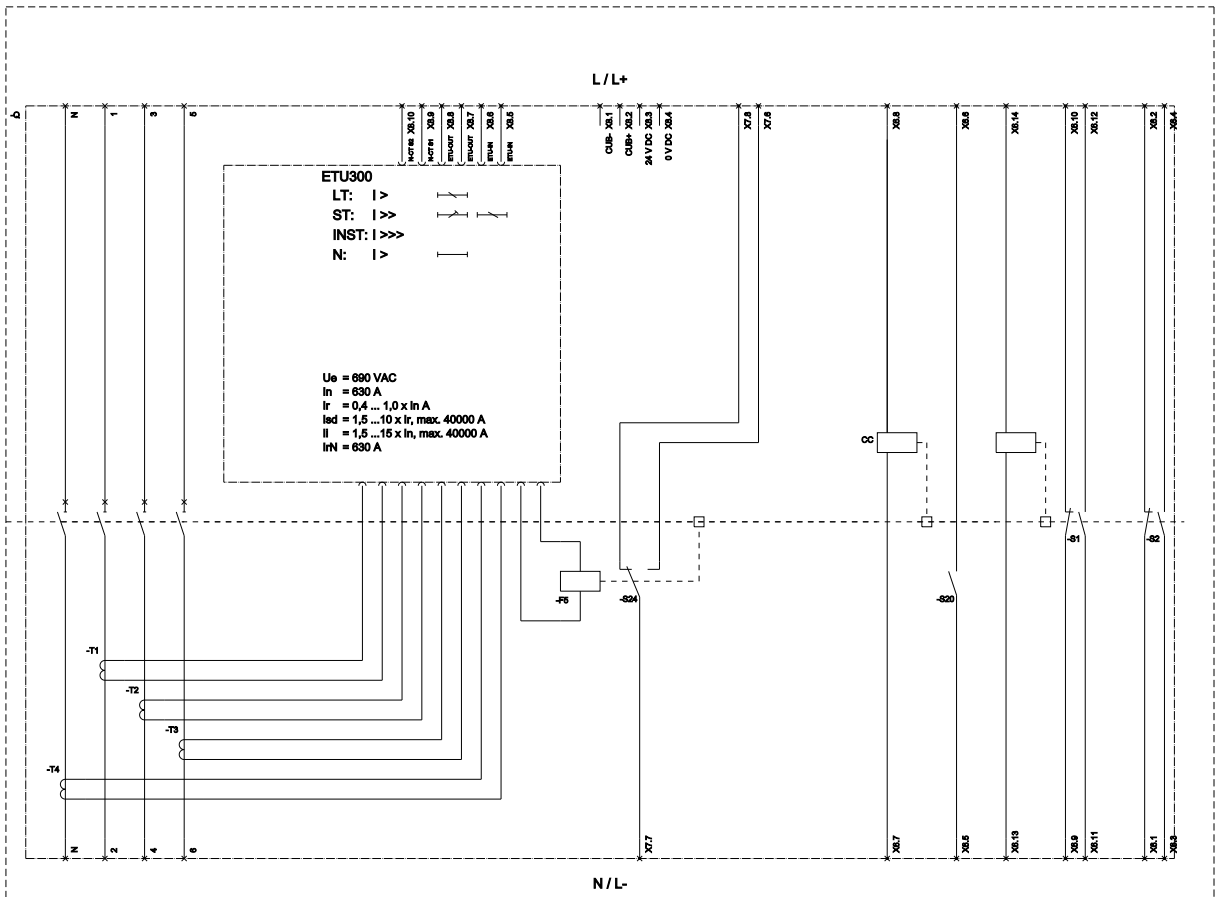
<http://www.siemens.com/cax>

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

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



SIEMENS



L1 (Long Time Delay / Durchschütze), ST (Short Time Delay / Kurzschütze), IZ (Interlocking / Sperre), N (Neutral Protection / Neutralüberwachung), GP (Ground Fault Protection / Erdlebensüberwachung), ST (Set auxiliary release / Bester Hilfskontakt),
 S14 (On-off switch for emergency stop coil / Abschaltaktor für Notstopgeräten Stromversorgung), PS (Signal for stop coil / Anlaufsignale), S24 (FAS: Set stop alarm switch (Reset Position) / Bester Anlaufschlüssel (Reset Position), CC (Coil coil / Spindelkontakt),
 S15 (On-off switch for emergency stop coil / Abschaltaktor für Notstopgeräten Stromversorgung), S25 (Ready to close signaling switch / Abschaltaktor für Notstopgeräten), S1-S5 (ATC: Auxiliary switch / Hilfskontakt),
 S20 (ZTC: Ready to close signaling switch / Abschaltaktor für Notstopgeräten)

last modified:

1/22/2025

