



Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 4-poles, N-pole left, $I_n=1600\text{A}$ up to 690V AC 50/60Hz, breaking capacity M $I_{cu}=85/66\text{kA}$ 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), 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, 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	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	53.5 kg
Net Weight	40.5 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	135 W
Current	
continuous current / rated value / maximum	1600 A
continuous current / rated value	1600 A
operational current	
• at 40 °C / rated value	1600 A
• at 45 °C / rated value	1600 A
• at 50 °C / rated value	1600 A
• at 55 °C / rated value	1600 A
• at 60 °C / rated value	1600 A
• at 65 °C / rated value	1600 A
• at 70 °C / rated value	1600 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
• at 690 V / rated value	145 kA
short-time withstand current (I_{cw}) / at 500 V AC	

• for 0.5 s / rated value • for 1 s / rated value • for 2 s / rated value • for 3 s / rated value	85 kA 85 kA 70 kA 60 kA
short-time withstand current (I _{cw}) / at 690 V AC • for 0.5 s / rated value • for 1 s / rated value • for 2 s / rated value • for 3 s / rated value	66 kA 66 kA 66 kA 60 kA
Electronic release unit	
product feature • upgradable • Bluetooth and USB interface • decoder for basic protection functions • display and function keys • SENTRON powerconfig configuration software	No No Yes No No
Basic protection functions	
product feature / for L-tripping • can be switched on/off • selectable characteristic function • decoder and infinite adjustability are selectable with eSet	No No No
set values setting current (I _r) / 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 _r) / for L-tripping / with I2t characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I2t characteristic	0.75;1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I2t 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 • independent of direction / can be switched on/off • independent of direction / selectable characteristic function • decoder and infinite adjustability are selectable with eSet	Yes Yes No
S: delayed short-circuit protection ST, settings values I0t	
set values setting current (I _{sd}) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I0t characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (t _{sd}) / for S-tripping / with I0t characteristic	s
S: delayed short-circuit protection ST, settings values I2t	
set values setting current (I _{sd}) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I2t characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I2t characteristic	0.08;0.15;0.22;0.3;0.4
product feature / for I-tripping • can be switched on/off • decoder and infinite adjustability are selectable (with eSet)	No No
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 • can be switched on/off • selectable characteristic function	No No
Further protective functions	

protection function		
● maintenance mode DAS+	Yes	
Measuring functions		
measurement function		
● current measurement	Yes	
Communication		
communication function	No	
Service Life		
mechanical service life (operating cycles)		
● without support / typical	10000	
● with support / typical	15000	
electrical endurance (operating cycles)		
● at 690 V / without support / typical	10000	
● at 690 V / with support / typical	15000	
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		
● undervoltage release	No	
● voltage trigger	No	
● trip indicator	Yes	
● motor drive	No	
Environmental conditions		
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	
Certificates		
reference code		
● according to IEC 81346-2	Q	
General Product Approval		Radio Equipment Type Approval Certificate



[Confirmation](#)



EG-Konf.



[Miscellaneous](#)

Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)



ABS



BUREAU
VERITAS



LRS

[Confirmation](#)

[Manufacturer Declaration](#)

Dangerous goods	Environment
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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=3WA1116-4AB12-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1116-4AB12-0AA0>

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

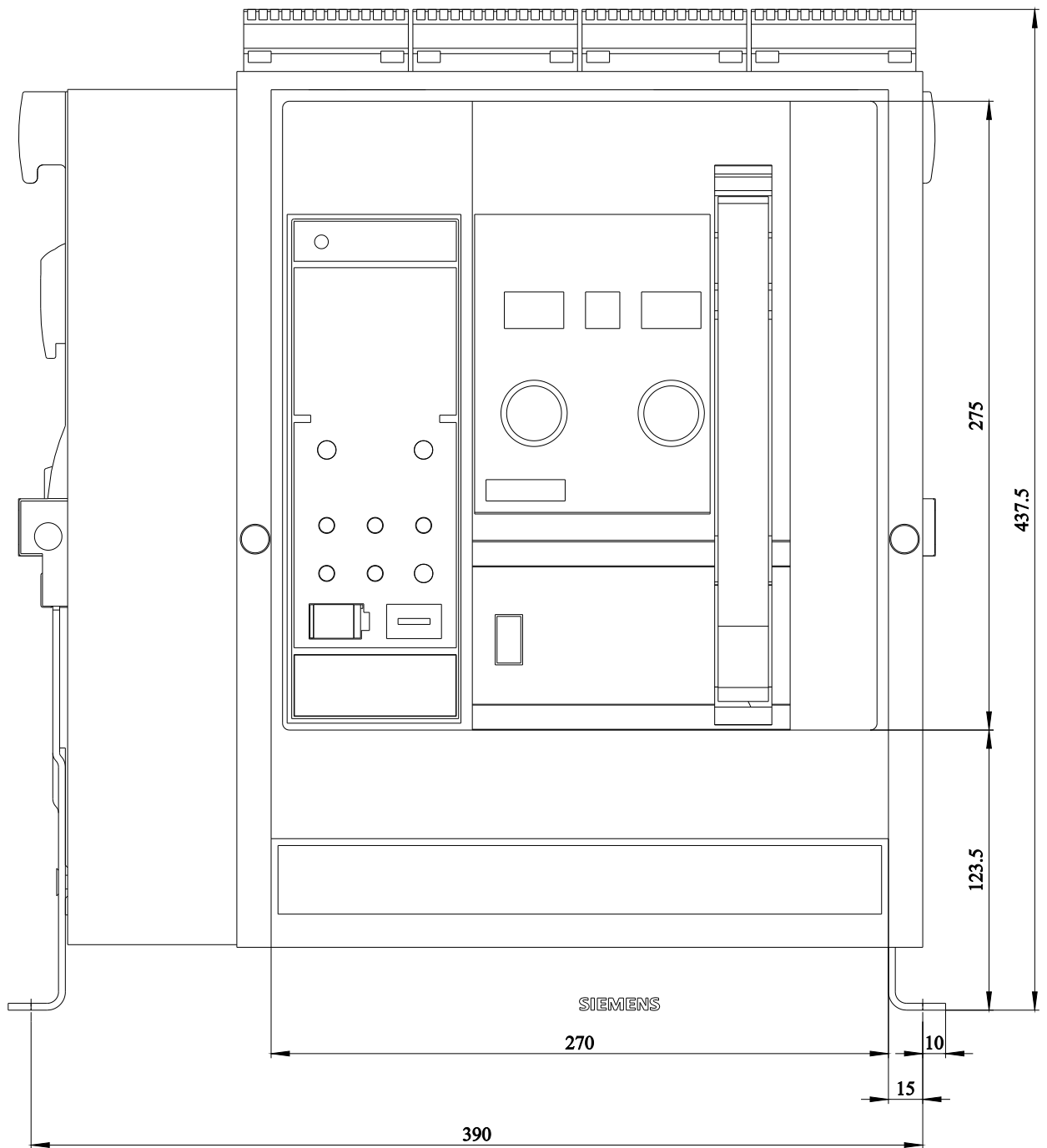
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1116-4AB12-0AA0

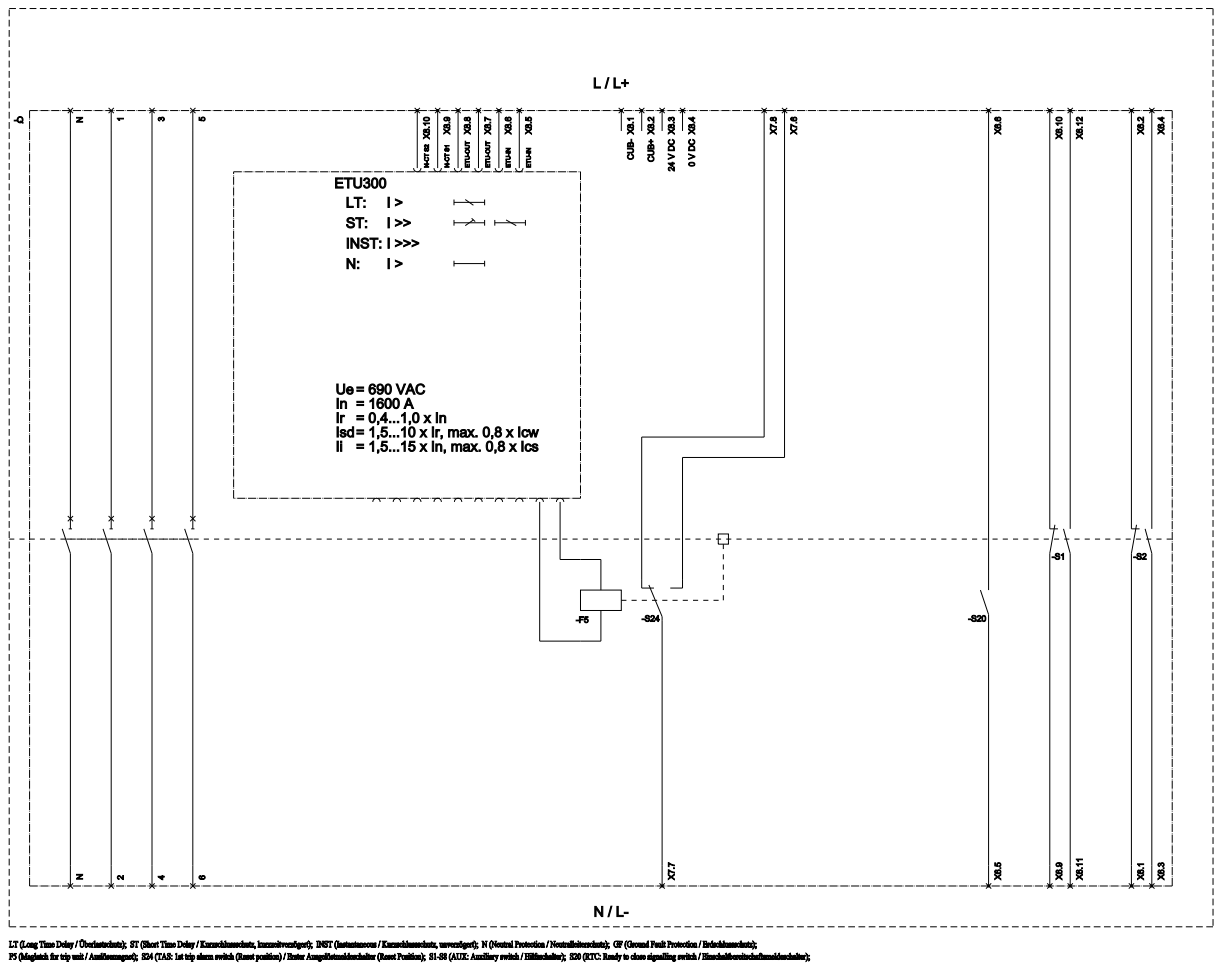
CAX-Online-Generator

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

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

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





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