

Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 2, 4-poles, N-pole left, $I_n=4000\text{A}$ 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 vertical, 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	4
position / of neutral conductor	neutral left
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	150.8 kg
Net Weight	137.8 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	1040 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	3910 A
• at 70 °C / rated value	3645 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	85 kA

<ul style="list-style-type: none"> • for 1 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	75 kA
short-time withstand current (I _{cw}) / at 690 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	66 kA
Electronic release unit	
product feature	
<ul style="list-style-type: none"> • upgradable 	No
<ul style="list-style-type: none"> • Bluetooth and USB interface 	No
<ul style="list-style-type: none"> • decoder for basic protection functions 	Yes
<ul style="list-style-type: none"> • display and function keys 	No
<ul style="list-style-type: none"> • SENTRON powerconfig configuration software 	No
Basic protection functions	
product feature / for L-tripping	
<ul style="list-style-type: none"> • can be switched on/off 	No
<ul style="list-style-type: none"> • selectable characteristic function 	No
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable with eSet 	No
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;1.0
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 	Yes
<ul style="list-style-type: none"> • independent of direction / selectable characteristic function 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable with eSet 	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	
<ul style="list-style-type: none"> • can be switched on/off 	No
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable (with eSet) 	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	
<ul style="list-style-type: none"> • can be switched on/off 	No
<ul style="list-style-type: none"> • selectable characteristic function 	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	20000	
electrical endurance (operating cycles)		
• at 690 V / without support / typical	2000	
• at 690 V / with support / typical	20000	
Dimensions		
height	468 mm	
width	590 mm	
depth	471 mm	
Main connection		
arrangement of electrical connectors / for main current circuit	main connection on the rear, vertical	
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	Test Certificates



[Miscellaneous](#)

[Miscellaneous](#)

Test Certificates	Marine / Shipping	other
--------------------------	--------------------------	--------------

[Special Test Certificate](#)



[Confirmation](#)

[Manufacturer Declaration](#)

Dangerous goods	Environment
------------------------	--------------------



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=3WA1240-4AB41-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1240-4AB41-0AA0>

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

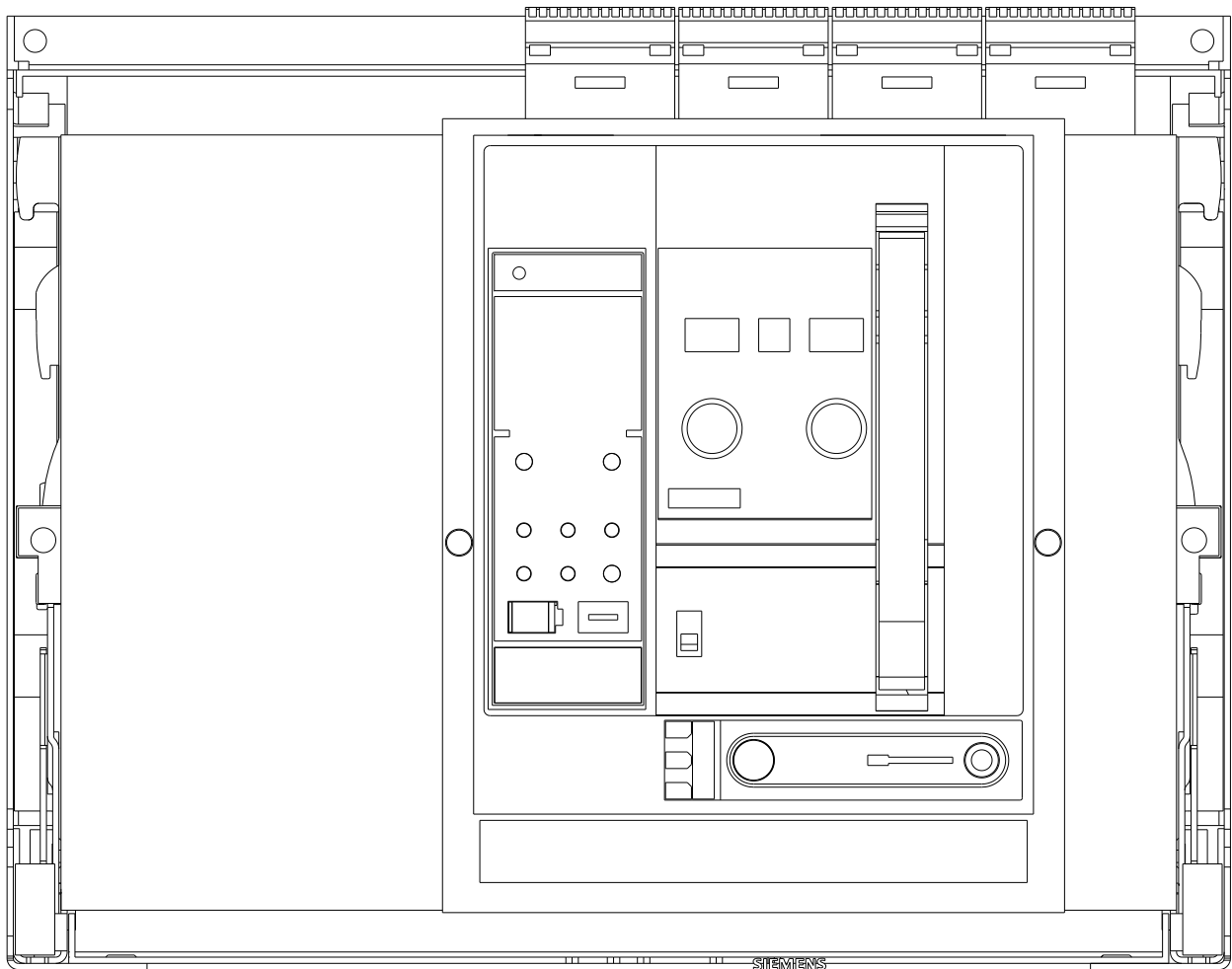
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1240-4AB41-0AA0

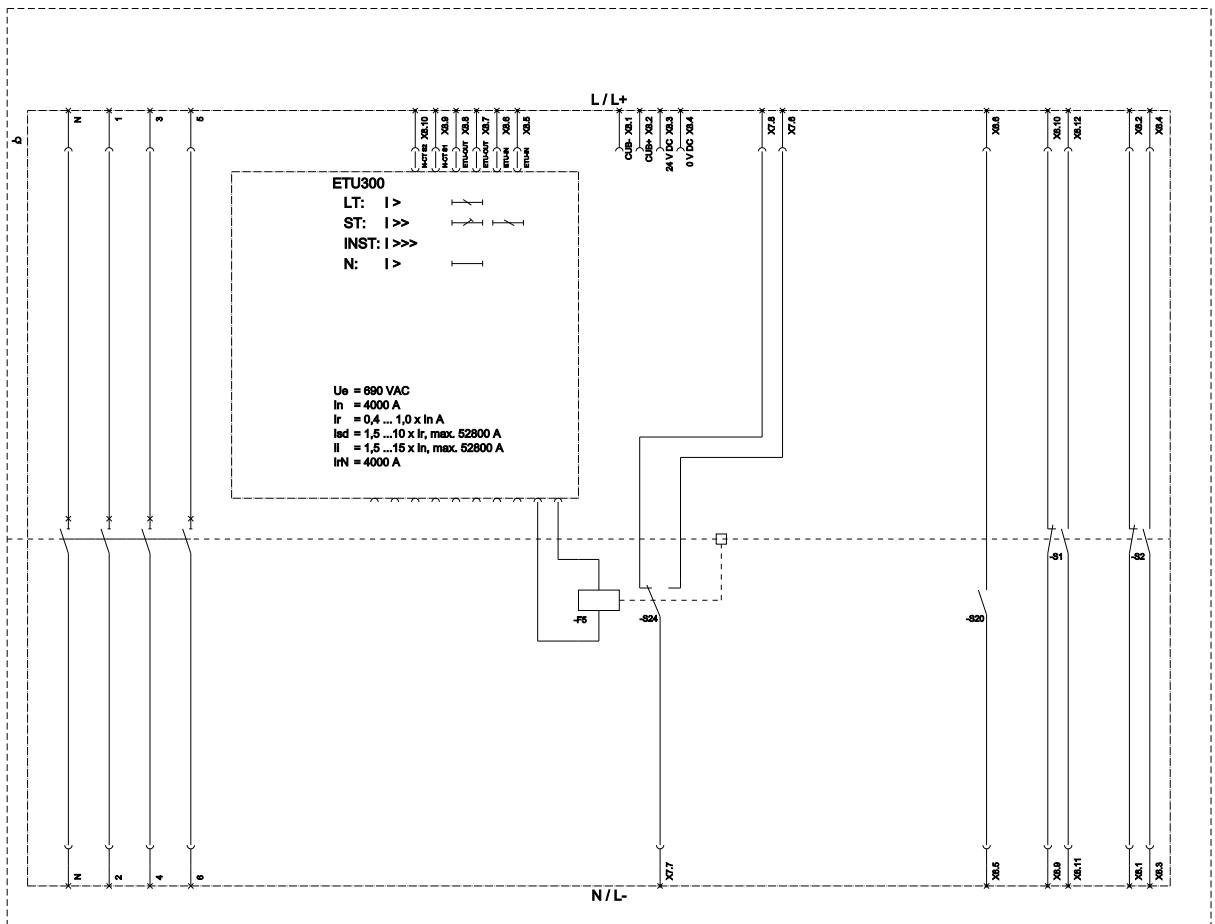
CAX-Online-Generator

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

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

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





LT (Long Time Delay / Übersetzschutz); ST (Short Time Delay / Kurzschlussschutz, Inanzenverzögerung); INST (Instantaneous / Kurzschlussschutz, unverzögert); N (Neutral Protection / Neutralfehlschutz); GF (Ground Fault Protection / Erdfehlschutz);
 F5 (Breaker for trip unit / Auslöseeinheit); S04 (TAS: In trip alarm switch (Alarm position) / Fehler Anzeigebestätigungsschalter (Alarm Position); S1-S3 (AUX: Auxiliary switch / Hilfskontakt); S20 (RTCC: Ready to close signaling switch / Abschaltbereitschaftsschalter);
 F25: position signaling switch module / Positionsschaltstellungsmodul;

last modified:

12/13/2023

