

Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 3, 3-poles, $I_n=5000\text{A}$ up to 690V AC 50/60Hz, breaking capacity H $I_{cu}=100/85\text{kA}$ at 500/690V, Trip unit ETU300 LSIG optimized for standard applications, without display Protection LT, ST, INST, GF, N-protection required an external N-sensor, 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	III
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 LSIG
Weight	189.6 kg
Net Weight	172.6 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	1050 W
Current	
continuous current / rated value / maximum	5000 A
continuous current / rated value	5000 A
operational current	
• at 40 °C / rated value	5000 A
• at 45 °C / rated value	5000 A
• at 50 °C / rated value	5000 A
• at 55 °C / rated value	5000 A
• at 60 °C / rated value	5000 A
• at 65 °C / rated value	5000 A
• at 70 °C / rated value	5000 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
short-circuit current making capacity (I_{cm})	
• at 500 V / rated value	220 kA
• at 690 V / rated value	187 kA
short-time withstand current (I_{cw}) / at 500 V AC	

<ul style="list-style-type: none"> • for 0.5 s / rated value 	100 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	100 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	100 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	100 kA
short-time withstand current (I _{cw}) / at 690 V AC	
<ul style="list-style-type: none"> • 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 	85 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 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 	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
set values setting current (I _g) / for G-tripping / with I _{0t}	0,2

characteristic	
reference value setting current (I _g) / for G-tripping / with I0t characteristic	x I _n
set values delay time (t _g) / for G-tripping / with I0t characteristic	0.2
reference value delay time (t _g) / for G-tripping / with I0t characteristic	s
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	7500
• with support / typical	15000
electrical endurance (operating cycles)	
• at 690 V / without support / typical	2000
• at 690 V / with support / typical	15000
Dimensions	
height	468 mm
width	704 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	

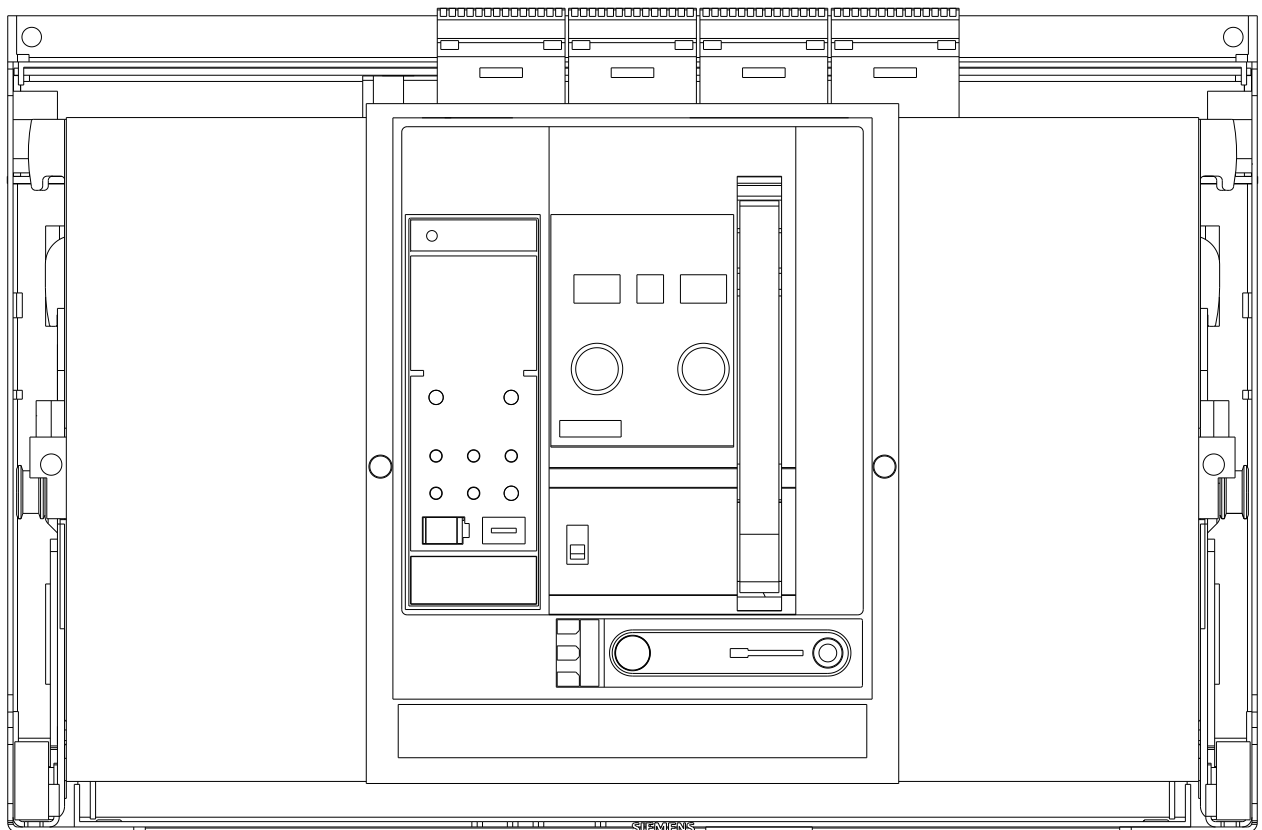


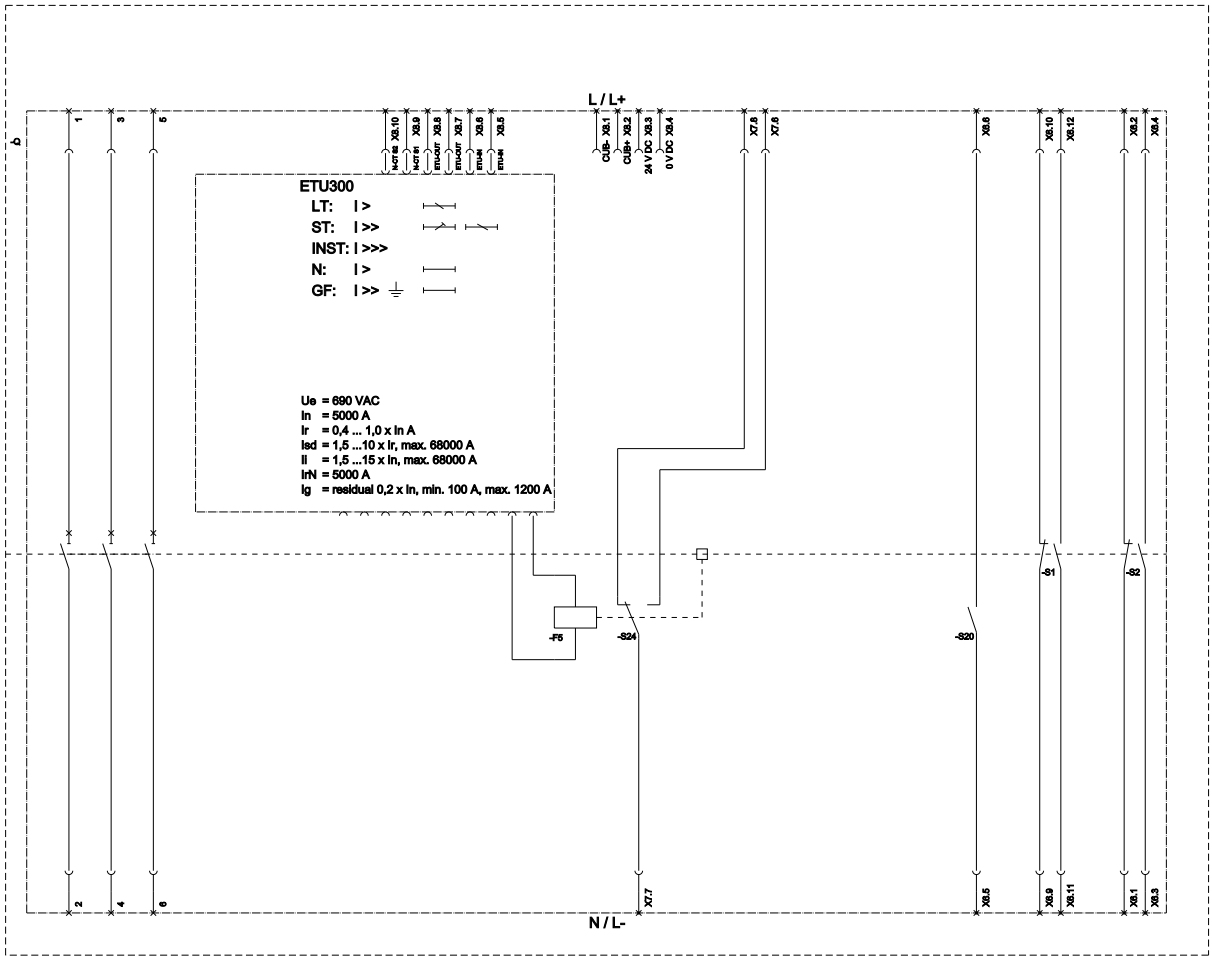
[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Maritime application	other	Environment
--------------------------	----------------------	-------	-------------

Environment[Environmental Con-
firmations](#)**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=3WA1350-5AC31-0AA0>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3WA1350-5AC31-0AA0>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1350-5AC31-0AA0**CAX-Online-Generator**<http://www.siemens.com/cax>**Information- and Downloadcenter (catalogues, leaflets,...)**<http://www.siemens.com/energy-automation>



O (Ground Fault Protection / Erdschlussschutz), LT (Long Time Delay / Dichtzeitstufe), ST (Short Time Delay / Kurzzeitstufe, kurzzeitverriegelt), INST (Instantaneous / Kurzzeitstufe, unverriegelt), N (Neutral Protection / Neutralleiterchutz),
 GF (Ground Fault Protection / Erdschlussschutz), F5 (Fuse/Fuse for trip unit / Auslöseorgan), S24 (TAS: last trip status switch (Reset Position) / Status Anzeigekontaktgeber (Reset Position)), S1-S8 (AUX: Auxiliary switch / Hilfskontakt),
 S20 (RTCC: Ready to close signaling switch / Bereitschaftsschließkontakt), T25: position signaling switch module / Positionsmelderschaltwerk

last modified:

2/18/2024

