



Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 1, 3-poles, $I_n=2000A$, breaking capacity E, up to 1000V AC 50/60Hz, $I_{cu}=85/50kA$ at 690/1000V, 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	1
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	79.172 kg
Net Weight	66.172 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	1000 V
power loss [W] / maximum	440 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	1930 A
• at 70 °C / rated value	1780 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	85 kA
• at 1000 V / rated value	50 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	85 kA

<ul style="list-style-type: none"> • at 1000 V / rated value 	50 kA
short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • at 690 V / rated value 	187 kA
<ul style="list-style-type: none"> • at 1000 V / rated value 	105 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 	70 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	60 kA
short-time withstand current (I _{cw}) / at 1000 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	50 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
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 (Ii) / for I-tripping	1.5;2;3;4;5;6;8;10;12;15
reference value setting current (Ii) / for I-tripping	x In
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
<ul style="list-style-type: none"> at 1000 V / without support / typical 	1000
Dimensions	
height	518 mm
width	320 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



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[Confirmation](#)



General Product Approval

EMV

Radio Equipment
Type Approval Certificate

Test Certificates



EG-Konf.



RCM

[Miscellaneous](#)

[Special Test Certificate](#)

[Miscellaneous](#)

Maritime application

other



ABS



BUREAU
VERITAS



LRS

[Confirmation](#)



[Manufacturer Declaration](#)

Dangerous goods

[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=3WA1120-8AB32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1120-8AB32-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1120-8AB32-0AA0

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=)



