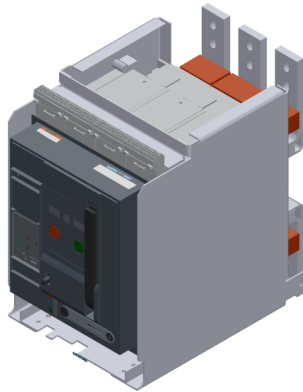


Siemens
EcoTech



Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 1, 3-poles, $I_n=1600\text{A}$ up to 690V AC 50/60Hz, breaking capacity S $I_{cu}=66/50\text{kA}$ at 500/690V, 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), front connection double hole, guide frame with shutter and w/o position signalling switch, without Com & metering function with manual and motorized operating mechanism (M) 208-240 V AC / 220-250 V DC, Storage status and ready-to-close signalling switches, Auxiliary switches 4NO+4NC, Closing coil (CC) 5% OP 208-240 V AC / 220-250 V DC, for momentary duty, without Remote trip alarm reset coil (RR), without 2nd shunt trip, Shunt trip (ST) 5% OP 208-240 V AC / 220-250 V DC, for momentary duty,

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	I
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/spring charging motor with spring charge signalling switch
design of the electronic trip unit	ETU300 LSI
Weight	86.5 kg
Net Weight	73.5 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	310 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 70 °C / rated value	1490 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 I2t 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 I2t characteristic</p>	<p>x I_n</p>
<p>set values delay time (t_r) / for L-tripping / with I2t 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 I2t 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 I0t</p>	
<p>set values setting current (I_{sd}) / for S-tripping / with I0t 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 I0t characteristic</p>	<p>x I_r</p>
<p>set values delay time (t_{sd}) / for S-tripping / with I0t 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 I0t characteristic</p>	<p>s</p>
<p>S: delayed short-circuit protection ST, settings values I2t</p>	
<p>set values setting current (I_{sd}) / for S-tripping / with I2t 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 I2t characteristic</p>	<p>x I_r</p>
<p>set values delay time (t_{sd}) / for S-tripping / with I2t 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	468 mm
width	320 mm
depth	471 mm
Main connection	
arrangement of electrical connectors / for main current circuit	front main circuit connection, double hole
Auxiliary circuit	
design of the auxiliary switch	4 NO + 4 NC
number of NC contacts / for auxiliary contacts	4
number of NO contacts / for auxiliary contacts	4
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 Yes
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
General Product Approval	EMV



[Confirmation](#)



Radio Equipment Type Approval Certificate	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Special Test Certificate](#)

[Miscellaneous](#)



other

Dangerous goods

Environment

[Confirmation](#)

[Manufacturer Declaration](#)

[Transport Information](#)



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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=3WA1116-3AB33-8NA8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1116-3AB33-8NA8>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1116-3AB33-8NA8

CAX-Online-Generator

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

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

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

