



Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 3-poles, $I_n=1600A$ up to 690V AC 50/60Hz, breaking capacity $N I_{cu}=55/42kA$ 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, 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 signaling switches, Auxiliary switches 2NO+2NC, Closing coil (CC) 100% OP 208-240 V AC / 220-250 V DC, applicable for continuous duty, without Remote trip alarm reset coil (RR), Undervoltage release (UVR) instantaneous (0,08 s) and short-delay (0,2 s), 208-240 V AC / 220-250 V DC, without 1st Shunt trip

Model	
product brand name	SENTRON
product designation	3WA 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	fixed-mounted circuit breakers
design of the product	AC application
type of the driving mechanism	manual operating mechanism/spring charging motor with spring charge signaling switch
design of the electronic trip unit	ETU300 LSI
Weight	57 kg
Net Weight	44 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	N
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	55 kA
• at 690 V / rated value	42 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	55 kA
• at 690 V / rated value	42 kA
short-circuit current making capacity (I_{cm})	
• at 500 V / rated value	121 kA
• at 690 V / rated value	88 kA

short-time withstand current (I _{cw}) / at 500 V AC	
<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 	55 kA 50 kA 45 kA 35 kA
short-time withstand current (I _{cw}) / at 690 V AC	
<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 	42 kA 42 kA 42 kA 35 kA
Electronic release unit	
product feature	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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 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 • 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 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 • 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	
<ul style="list-style-type: none"> • 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	15000	
• with support / typical	30000	
electrical endurance (operating cycles)		
• at 690 V / without support / typical	10000	
• at 690 V / with support / typical	30000	
Dimensions		
height	437 mm	
width	320 mm	
depth	357 mm	
Main connection		
arrangement of electrical connectors / for main current circuit	front main circuit connection, double hole	
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	Yes	
• voltage trigger	No	
• trip indicator	Yes	
• motor drive	Yes	
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	EMV	Environment



[Miscellaneous](#)

[KC](#)



Environment

[Confirmation](#)

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=3WA1116-2AB03-4EQ0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1116-2AB03-4EQ0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1116-2AB03-4EQ0

CAX-Online-Generator

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

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

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



