



Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 3-poles, $I_n=1000A$ up to 690V AC 50/60Hz, breaking capacity $N I_{cu}=55/42kA$ at 500/690V, Trip unit ETU600 LSI upgrade ready, color display, bluetooth and USB interface, 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	ETU600 LSI
Weight	53.653 kg
Net Weight	38.653 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	70 W
Current	
continuous current / rated value / maximum	1000 A
continuous current / rated value	1000 A
operational current	
• at 40 °C / rated value	1000 A
• at 45 °C / rated value	1000 A
• at 50 °C / rated value	1000 A
• at 55 °C / rated value	1000 A
• at 60 °C / rated value	1000 A
• at 65 °C / rated value	1000 A
• at 70 °C / rated value	1000 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 35 kA 30 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 35 kA 30 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 	Yes Yes Yes Yes Yes
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 	Yes Yes Yes
set values setting current (I _r) / for L-tripping / with I2t characteristic	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 I2t characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I2t characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I2t characteristic	s
set values setting current (I _r) / for L-tripping / with I2t characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I _r) / for L-tripping / with I2t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum • maximum 	400 A 1000 A
set values delay time (t _r) / for L-tripping / with I2t characteristic / for eSet	0.5-30;0.001
set values setting current (I _r) / for L-tripping / with I4t characteristic / for eSet	0.4-1;0.001
set values delay time (t _r) / for L-tripping / with I4t characteristic / for eSet	0.5-5;0.001
reference value delay time (t _r) / for L-tripping / with I4t characteristic	s
adjustable absolute value setting current (I _r) / for L-tripping / with I4t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum • maximum 	400 A 1000 A
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	Yes
setting values setting current (I _{nN}) / for N-tripping	0.2-2;0.001
reference value setting current (I _{nN}) / for N-tripping	x I _n
adjustable setting current (I _{nN}) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	200 A 2000 A
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 Yes
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 (tsd) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (tsd) / for S-tripping / with I0t characteristic	s
set values setting current (I _{sd}) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I _{sd})	
• for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum	600 A
• at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	40 kA
• at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	33.6 kA
set values delay time (tsd) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.02-0.4;0.001
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 (tsd) / for S-tripping / with I2t characteristic	0.1;0.2;0.3;0.4
set values setting current (I _{sd}) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I _{sd})	
• for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum	600 A
• at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	40 kA
• at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	33.6 kA
set values delay time (tsd) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.02-0.4;0.001
product feature / for I-tripping	
• can be switched on/off	Yes
• decoder and infinite adjustability are selectable (with eSet)	Yes
set values setting current (I _i) / for I-tripping	1.5;2;3;4;6;8;10;12;15
reference value setting current (I _i) / for I-tripping	x I _n
tripping factor setting current (I _{imax}) / for I-tripping	0.8
reference value setting current (I _{imax}) / for I-tripping	x I _{cs}
set values setting current (I _i) / for I-tripping / for eSet	1.5-15;0.001
adjustable absolute value setting current (I _i)	
• for I-tripping / for eSet / minimum	1500 A
• at 500 V / for I-tripping / for eSet / maximum	44 kA
• at 690 V / for I-tripping / for eSet / maximum	33.6 kA
G: ground fault GF	
product feature / for G-tripping	
• can be switched on/off	No
• 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	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	
<ul style="list-style-type: none"> • undervoltage release 	Yes
<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 	Yes

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	
<ul style="list-style-type: none"> • according to IEC 81346-2 	Q

General Product Approval	EMV
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Radio Equipment Type Approval Certificate	Test Certificates
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[Miscellaneous](#)



[Miscellaneous](#)

[FCC](#)

[Miscellaneous](#)

[Special Test Certificate](#)

Maritime application	other
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other	Dangerous goods	Environment
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[Confirmation](#)

[Manufacturer Declaration](#)

[Transport Information](#)

[Dangerous goods information](#)



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=3WA1110-2AE03-4EQ0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1110-2AE03-4EQ0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1110-2AE03-4EQ0

CAX-Online-Generator

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

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

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



