



Withdrawable circuit breaker without guide frame, IEC 60947-2, frame size 1, 3-poles, $I_n=1000\text{A}$ up to 690V AC 50/60Hz, breaking capacity S $I_{cu}=66/50\text{kA}$ 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), 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), without 2nd shunt trip, 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	withdrawable circuit breaker without guide frame
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	50.427 kg
Net Weight	35.427 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	690 V
Current	
continuous current / rated value / maximum	1000 A
continuous current / rated value	1000 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})	
• at 500 V / rated value	145 kA
• at 690 V / rated value	105 kA
short-time withstand current (I_{cw}) / at 500 V AC	
• for 0.5 s / rated value	66 kA
• for 1 s / rated value	66 kA
• for 2 s / rated value	45 kA
• for 3 s / rated value	35 kA
short-time withstand current (I_{cw}) / at 690 V AC	
• for 0.5 s / rated value	50 kA
• for 1 s / rated value	50 kA
• for 2 s / rated value	45 kA

<ul style="list-style-type: none"> • for 3 s / rated value 	35 kA
Electronic release unit	
product feature	
<ul style="list-style-type: none"> • upgradable 	Yes
<ul style="list-style-type: none"> • Bluetooth and USB interface 	Yes
<ul style="list-style-type: none"> • decoder for basic protection functions 	Yes
<ul style="list-style-type: none"> • display and function keys 	Yes
<ul style="list-style-type: none"> • SENTRON powerconfig configuration software 	Yes
Basic protection functions	
product feature / for L-tripping	
<ul style="list-style-type: none"> • can be switched on/off 	Yes
<ul style="list-style-type: none"> • selectable characteristic function 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable with eSet 	Yes
set values setting current (I _r) / for L-tripping / with I _{2t} 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 I _{2t} characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I _{2t} characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I _{2t} characteristic	s
set values setting current (I _r) / for L-tripping / with I _{2t} characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I _r) / for L-tripping / with I _{2t} characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	400 A
<ul style="list-style-type: none"> • maximum 	1000 A
set values delay time (t _r) / for L-tripping / with I _{2t} characteristic / for eSet	0.5-30;0.001
set values setting current (I _r) / for L-tripping / with I _{4t} characteristic / for eSet	0.4-1;0.001
set values delay time (t _r) / for L-tripping / with I _{4t} characteristic / for eSet	0.5-5;0.001
reference value delay time (t _r) / for L-tripping / with I _{4t} characteristic	s
adjustable absolute value setting current (I _r) / for L-tripping / with I _{4t} characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	400 A
<ul style="list-style-type: none"> • maximum 	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 	200 A
<ul style="list-style-type: none"> • maximum 	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 	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 	Yes
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
set values setting current (I _{sd}) / for S-tripping / with I _{0t} characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I _{sd})	
<ul style="list-style-type: none"> • for S-tripping / with I_{0t} characteristic / for eSet / independent of direction / minimum 	600 A
<ul style="list-style-type: none"> • at 500 V / for S-tripping / with I_{0t} characteristic / for eSet / 	52.8 kA

independent of direction / maximum	
<ul style="list-style-type: none"> at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum 	40 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})	
<ul style="list-style-type: none"> for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum 	600 A
<ul style="list-style-type: none"> at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	52.8 kA
<ul style="list-style-type: none"> at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	40 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	
<ul style="list-style-type: none"> can be switched on/off 	Yes
<ul style="list-style-type: none"> 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)	
<ul style="list-style-type: none"> for I-tripping / for eSet / minimum 	1500 A
<ul style="list-style-type: none"> at 500 V / for I-tripping / for eSet / maximum 	52.8 kA
<ul style="list-style-type: none"> at 690 V / for I-tripping / for eSet / maximum 	40 kA
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
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 	15000
<ul style="list-style-type: none"> with support / typical 	30000
electrical endurance (operating cycles)	
<ul style="list-style-type: none"> at 690 V / without support / typical 	10000
<ul style="list-style-type: none"> at 690 V / with support / typical 	30000
Dimensions	
height	468 mm
width	320 mm
depth	471 mm
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	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



Radio Equipment Type Approval Certificate Test Certificates

[Miscellaneous](#)



[Miscellaneous](#)

[FCC](#)

[Miscellaneous](#)

[Special Test Certificate](#)

Maritime application other



[Manufacturer Declaration](#)

other Dangerous goods Environment



[Confirmation](#)

[Transport Information](#)

[Dangerous goods information](#)

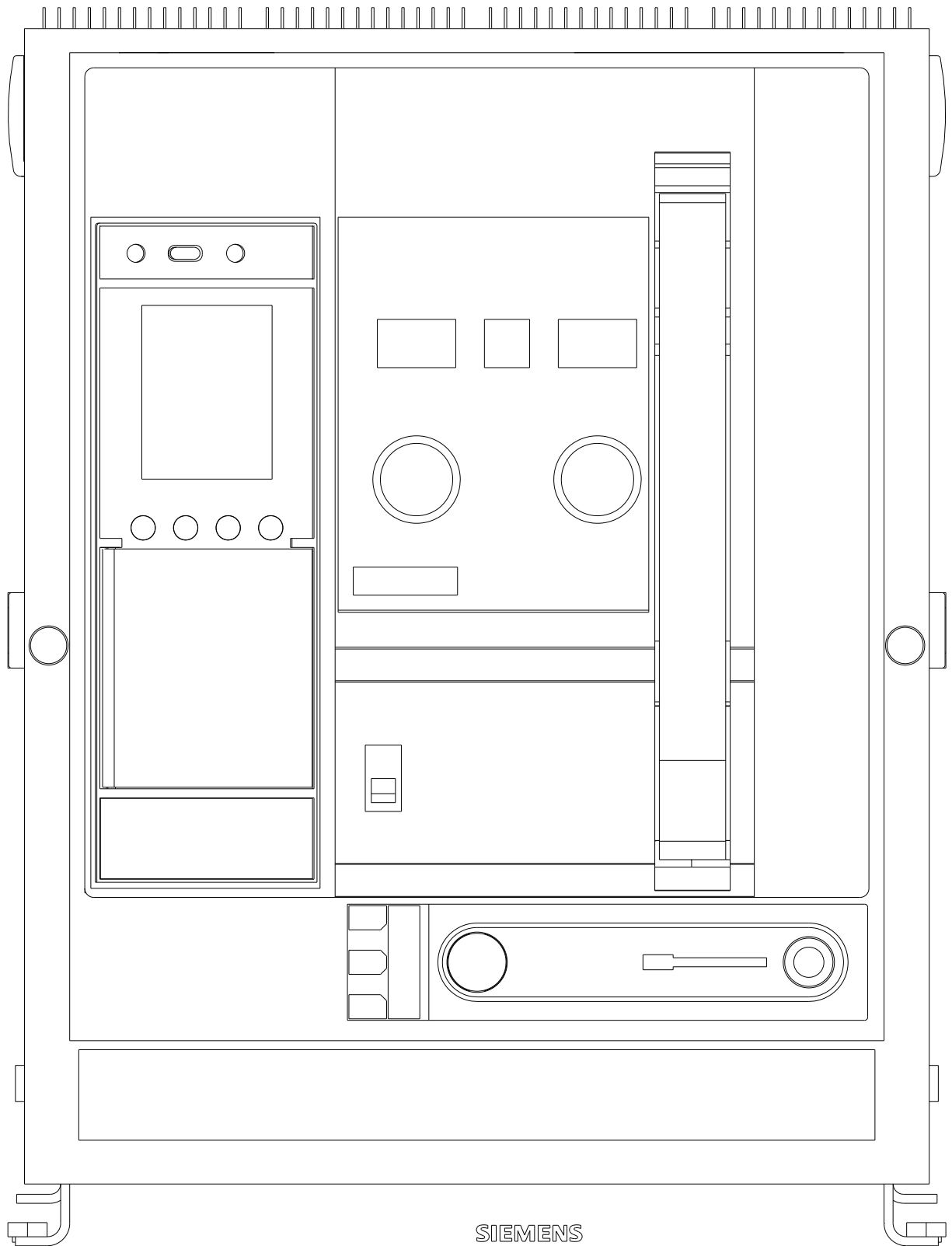


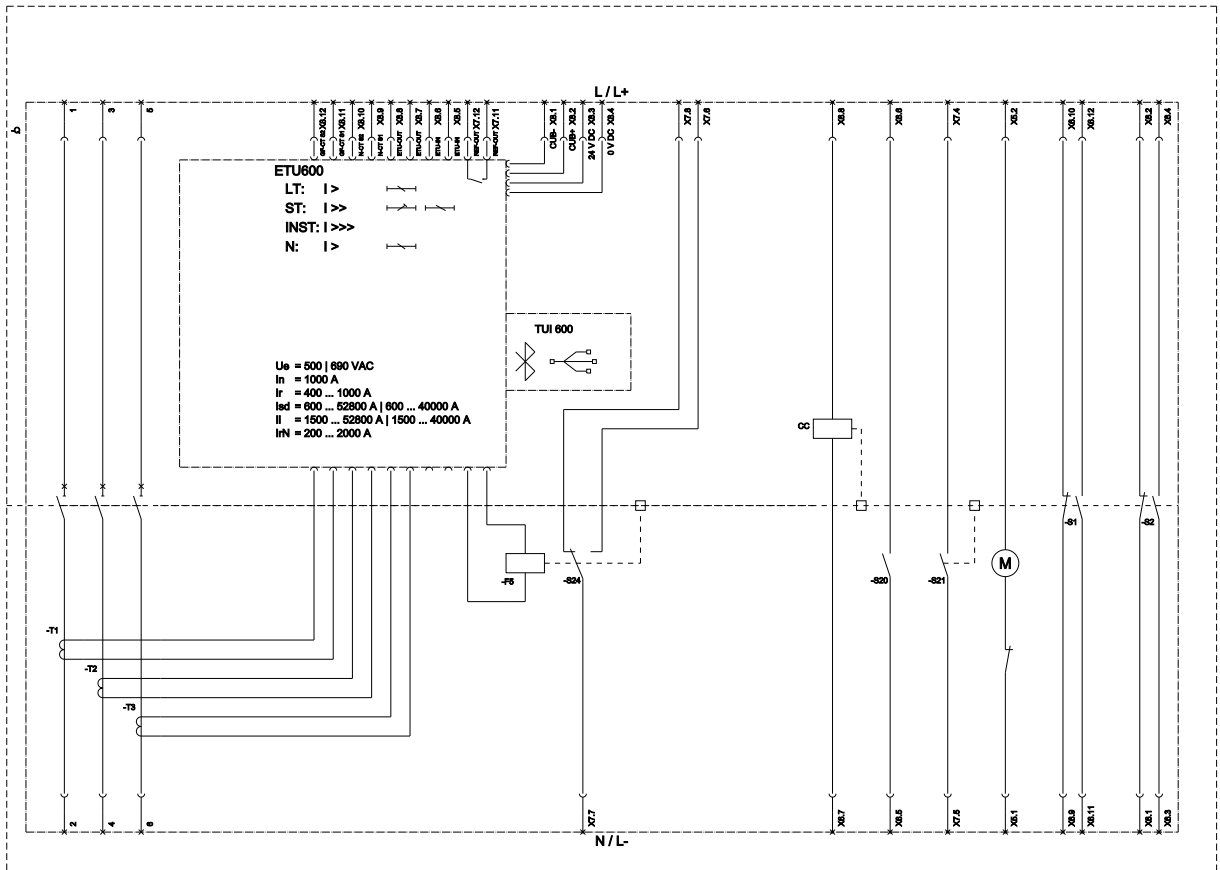
Environment



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=3WA1110-3AE30-4EA0>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3WA1110-3AE30-4EA0>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1110-3AE30-4EA0
- CAX-Online-Generator





LT (Long Time Delay / Dauerschleife), ST (Short Time Delay / Kurzschleife), I_{scd} (Short-Circuit Current / Kurzschlussstrom), I_{ll} (Normal Protection / Normalschutz), N (Normal Protection / Normalschutz), GF (Ground Fault Protection / Schutzschleife), F5 (Signal for trip unit / Auslösesignal), S24 (RAB: 1st trip class switch / Erste Auslösekategorie / Erste Position), CC (Closing coil / Einschlagspanne), S25 (Close-off switch for emergency stop closing coil / Abschaltrelais für Notstopspanne / Notstopspanne), S20 (Ready to close signaling switch / Bereitschaft zum Einschalten / Bereitschaft), S1-S2 (ALTC: Auxiliary switch / Hilfskontakt), S21 (Ready to close signaling switch / Bereitschaft zum Einschalten / Bereitschaft), S22 (Spring changed signaling switch / Federwechsel-Schaltkontakt), S23 (Position signaling switch module / Positionsschaltkontakt)

last modified:

4/26/2022

