SIEMENS

Data sheet 3WA1106-2AE01-0AA0

Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 3-poles, In=630A up to 690V AC 50/60Hz, breaking capacity N Icu=55/42kA at 500/690V, Trip unit ETU600 LSI upgrade ready , colordisplay, bluetooth and USB interface, Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection vertical, 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	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 with mechanical or electrical closing
design of the electronic trip unit	ETU600 LSI
Weight	48.855 kg
Net Weight	33.855 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	30 W
Current	
continuous current / rated value / maximum	630 A
continuous current / rated value	630 A
operational current	
● at 40 °C / rated value	630 A
● at 45 °C / rated value	630 A
● at 50 °C / rated value	630 A
● at 55 °C / rated value	630 A
● at 60 °C / rated value	630 A
● at 65 °C / rated value	630 A
● at 70 °C / rated value	630 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 (Icu)	
● at 500 V / rated value	55 kA
● at 690 V / rated value	42 kA
operating short-circuit current breaking capacity (Ics)	
● at 500 V / rated value	55 kA
● at 690 V / rated value	42 kA
short-circuit current making capacity (Icm)	
● at 500 V / rated value	121 kA
● at 690 V / rated value	88 kA
short-time withstand current (Icw) / at 500 V AC	

● for 0.5 s / rated value	55 kA
● for 1 s / rated value	50 kA
● for 2 s / rated value	35 kA
● for 3 s / rated value	30 kA
short-time withstand current (Icw) / at 690 V AC	
● for 0.5 s / rated value	42 kA
● for 1 s / rated value	42 kA
● for 2 s / rated value	35 kA
● for 3 s / rated value	30 kA
Electronic release unit	
product feature	
● upgradable	Yes
● Bluetooth and USB interface	Yes
● decoder for basic protection functions	Yes
● display and function keys	Yes
● SENTRON powerconfig configuration software	Yes
Basic protection functions	
product feature / for L-tripping	
● can be switched on/off	Yes
● selectable characteristic function	Yes
● decoder and infinite adjustability are selectable with eSet	Yes
set values setting current (Ir) / 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 (Ir) / for L-tripping / with I2t characteristic	x In
set values delay time (tr) / for L-tripping / with I2t characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (tr) / for L-tripping / with I2t characteristic	s
set values setting current (Ir) / for L-tripping / with I2t characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (Ir) / for L-tripping / with I2t characteristic / for eSet	
● minimum	252 A
● maximum	630 A
set values delay time (tr) / for L-tripping / with I2t characteristic / for eSet	0.5-30;0.001
set values setting current (Ir) / for L-tripping / with I4t characteristic / for eSet	0.4-1;0.001
set values delay time (tr) / for L-tripping / with I4t characteristic / for eSet	0.5-5;0.001
reference value delay time (tr) / for L-tripping / with I4t characteristic	s
adjustable absolute value setting current (Ir) / for L-tripping / with I4t characteristic / for eSet	
● minimum	252 A
● maximum	630 A
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	Yes
setting values setting current (InN) / for N-tripping	0.2-2;0.001
reference value setting current (InN) / for N-tripping	x In
adjustable setting current (InN) / for N-tripping	
● minimum	126 A
● maximum	1260 A
S: delayed short-circuit protection ST	
product feature / for S-tripping	
● independent of direction / can be switched on/off	Yes
● independent of direction / selectable characteristic function	Yes
● decoder and infinite adjustability are selectable with eSet	Yes
S: delayed short-circuit protection ST, settings values I0t	
set values setting current (Isd) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (Isd) / for S-tripping / with I0t characteristic	x Ir

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 (Isd) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (Isd)	
● for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum	378 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 (Isd) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (Isd) / for S-tripping / with I2t characteristic	x Ir
set values delay time (tsd) / for S-tripping / with I2t characteristic	0.1;0.2;0.3;0.4
set values setting current (Isd) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (Isd)	
● for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum	378 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 (Ii) / for I-tripping	1.5;2;3;4;6;8;10;12;15
reference value setting current (Ii) / for I-tripping	x In
tripping factor setting current (Iimax) / for I-tripping	0.8
reference value setting current (Iimax) / for I-tripping	x Ics
set values setting current (Ii) / for I-tripping / for eSet	1.5-15;0.001
adjustable absolute value setting current (Ii)	
● for I-tripping / for eSet / minimum	945 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

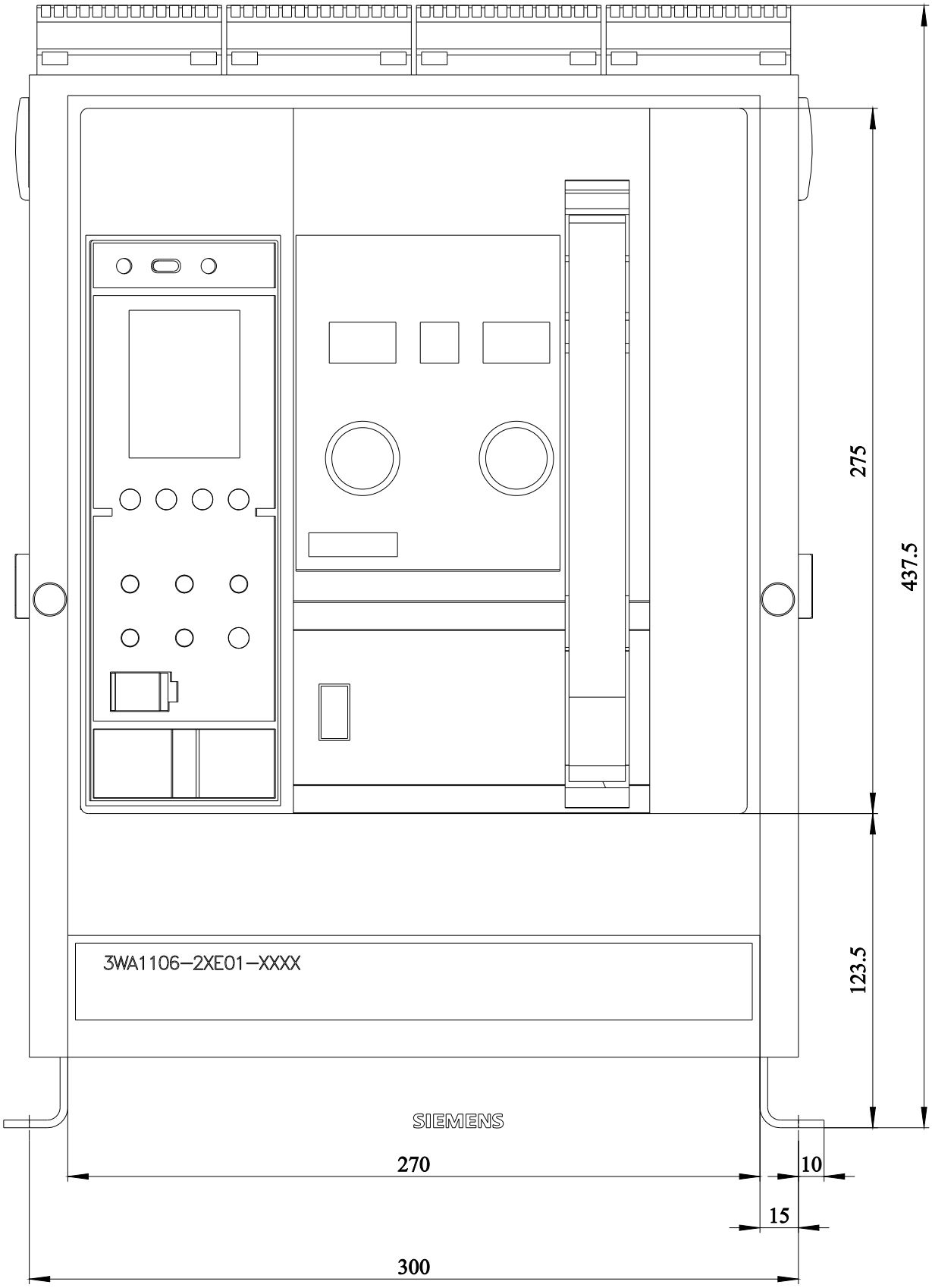
width	320 mm
depth	357 mm
Main connection	
arrangement of electrical connectors / for main current circuit	main connection on the rear, vertical
Auxiliary circuit	
design of the auxiliary switch	2 NO + 2 NC
number of NC contacts / for auxiliary contacts	2
number of NO contacts / for auxiliary contacts	2
number of CO contacts / for auxiliary contacts	0
Internal accessories	
product component	
● undervoltage release	No
● voltage trigger	No
● trip indicator	Yes
● motor drive	No
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

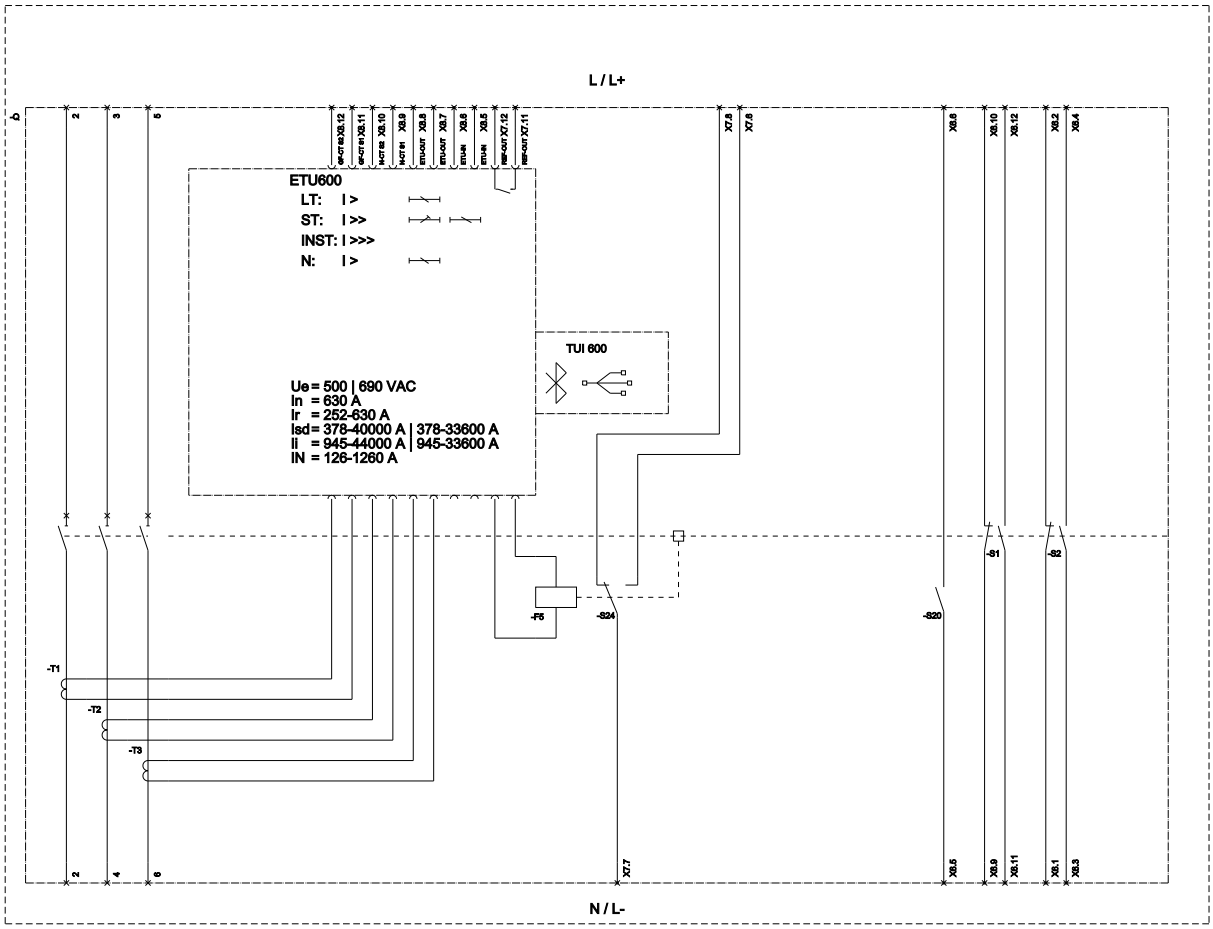
General Product Approval				EMV	Test Certificates
CE EG-Konf.	UKCA	Miscellaneous	EAC	RCM	Type Test Certificates/Test Report

Maritime application	other		Dangerous goods	Environment	
Lloyd's Register LRS	Confirmation	Miscellaneous	Transport Information	Environmental Confirmations	Environmental Confirmations

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=3WA1106-2AE01-0AA0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3WA1106-2AE01-0AA0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1106-2AE01-0AA0
CAx-Online-Generator
http://www.siemens.com/cax
Information- and Downloadcenter (catalogues, leaflets,...)
http://www.siemens.com/energy-automation





LT (Long Time Delay / Überlastschutz); ST (Short Time Delay / Kurzschlussschutz, kurzzeitverzögert); INST (Instantaneous / Kurzschlussschutz, unverzögert); N (Neutral Protection / Neutralleiterschutz); GF (Ground Fault Protection / Erdschlussschutz);
F5 (Meldestck for trip unit / Auslösemeldung); S24 (TAR: 1st trip alarm switch (Reset position) / Erster Auslösemeldeschalter (Reset Position); S1-S8 (AUX: Auxiliary switch / Hilfsschalter); S20 (RTC: Ready to close signalling switch / Einschaltbereitschaftsmeldeschalter);

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