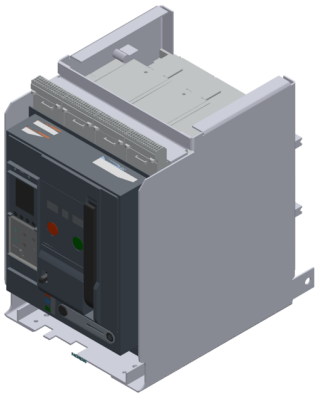
SIEMENS

Data sheet 3WA1116-3AE32-8EA4



Siemens EcoTech

Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 1, 3-poles, In=1600A up to 690V AC 50/60Hz, breaking capacity S Icu=66/50kA 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 horizontal, 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 signaling switches, Auxiliary switches 4NO+4NC, 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, Shunt trip (ST) 100% OP 208-240 V AC / 220-250 V DC, suitable for continuous 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 signaling switch
design of the electronic trip unit	ETU600 LSI
Weight	76.367 kg
Net Weight	61.367 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 (Icu)	
• at 500 V / rated value	66 kA
• at 690 V / rated value	50 kA
operating short-circuit current breaking capacity (Ics)	
• at 500 V / rated value	66 kA
• at 690 V / rated value	50 kA
short-circuit current making capacity (Icm)	

● at 500 V / rated value	145 kA
● at 690 V / rated value	105 kA
short-time withstand current (Icw) / 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 (Icw) / 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
● for 3 s / rated value	35 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
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	640 A
● maximum	1600 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
adjustable absolute value setting current (Ir) / for L-tripping / with I4t characteristic / for eSet	
● minimum	640 A
● maximum	1600 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	320 A
● maximum	3200 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	960 A
● at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	52.8 kA
● 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 (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	960 A
● at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	52.8 kA
● 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	
● 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	2400 A
● at 500 V / for I-tripping / for eSet / maximum	52.8 kA
● at 690 V / for I-tripping / for eSet / maximum	40 kA
G: ground fault GF	
product feature / for G-tripping	
● 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	468 mm
width	320 mm
depth	471 mm
Main connection	
arrangement of electrical connectors / for main current circuit	main connection on the rear, horizontal
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	
• undervoltage release	No
• voltage trigger	Yes
• 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
Environmental footprint	
Siemens Eco Profile (SEP)	Siemens EcoTech
Certificates	
reference code	
• according to IEC 81346-2	Q

General Product Approval

Confirmation

General Product Approval | **EMV** | **Radio Equipment Type Approval Certificate**

Miscellaneous | Miscellaneous | FCC

Test Certificates | **Marine / Shipping**

Special Test Certificate | Miscellaneous

Marine / Shipping | **other** | **Dangerous goods** | **Environment**

Manufacturer Declaration | Confirmation | Dangerous goods information | Transport Information

Environment

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875

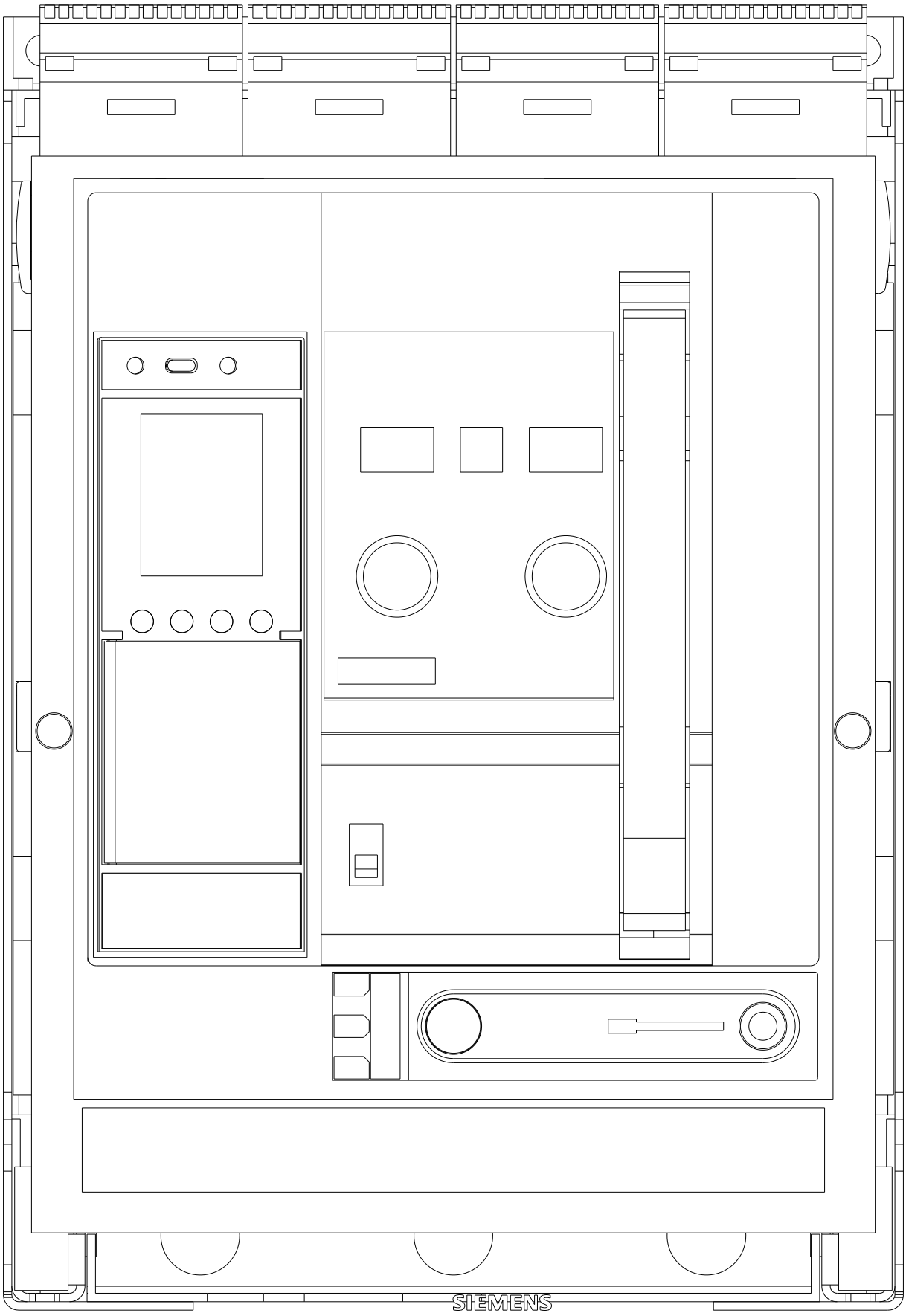
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1116-3AE32-8EA4

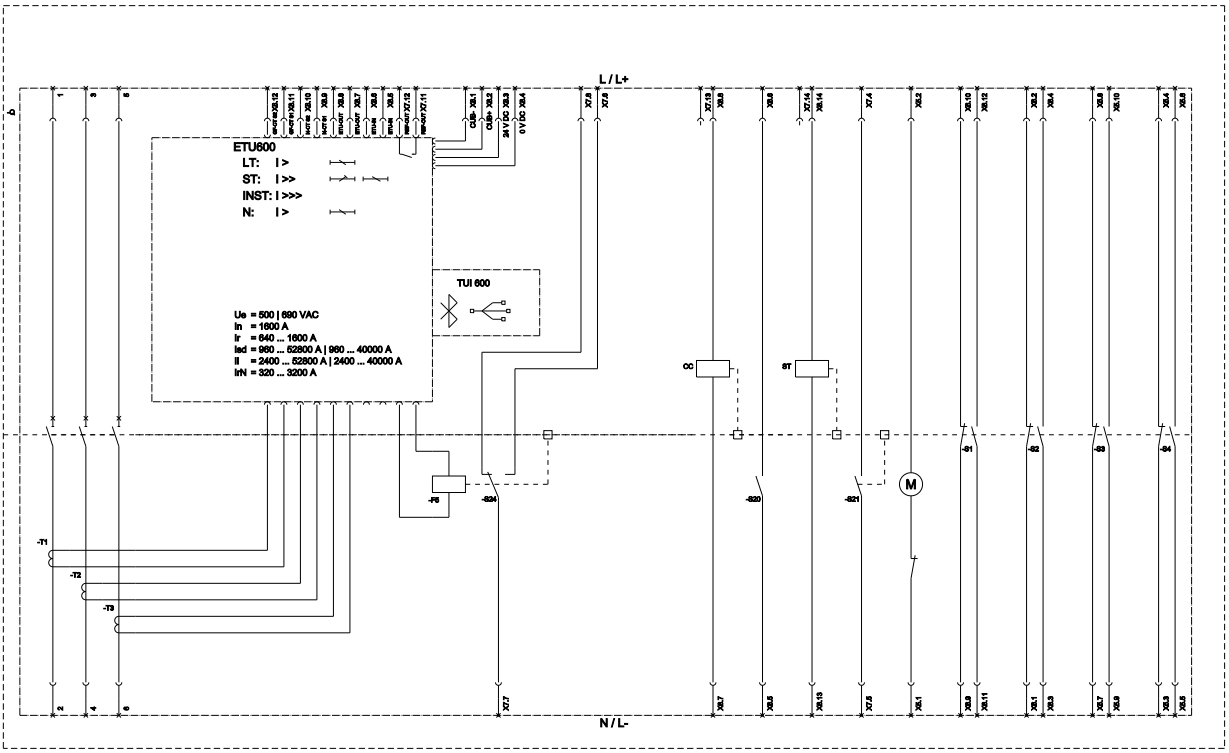
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3WA1116-3AE32-8EA4

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1116-3AE32-8EA4

CAx-Online-Generator
http://www.siemens.com/cax

Information- and Downloadcenter (catalogues, leaflets,...)
http://www.siemens.com/energy-automation





last modified: 6/19/2024