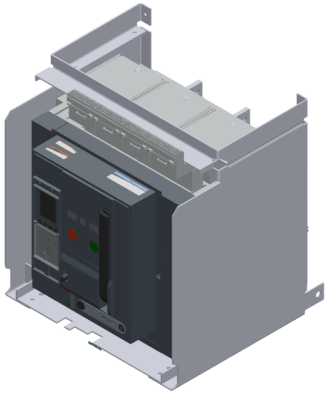
SIEMENS

Data sheet 3WA1220-8WF65-8EE4



Siemens EcoTech

Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 2, 3-poles, In=2000A, breaking capacity E, without internal voltage tap up to 1150V AC 50/60Hz, Icu=85/50kA at 1000/1150V, Trip unit ETU600 LSIG upgrade ready , colordisplay, bluetooth and USB interface, Protection LT, ST, INST, GFx, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection, vertical top horizontal bottom, guide frame with shutter and position signall. switch (3xW), with internal voltage tap on upper stab of circuit breaker and voltage tap module VTM640, Ue max. 1000 V, AC 50/60Hz, able to communication, integrated metering type PMF-3 Advanced Power Monitor., Voltage, Energy, Power, Power factor, Frequency, Unbalance, Temperature, Power quality, 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), Shunt trip (ST2) 100% OP 208-240 V AC / 220-250 V DC, suitable for continuous duty, 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	II
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 LSIG
Weight	96.598 kg
Net Weight	81.598 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	1000 V
power loss [W] / maximum	320 W
Current	
continuous current / rated value / maximum	2000 A
continuous current / rated value	2000 A
operational current	
• at 40 °C / rated value	2000 A
• at 45 °C / rated value	2000 A
• at 50 °C / rated value	2000 A
• at 55 °C / rated value	2000 A
• at 60 °C / rated value	2000 A
• at 65 °C / rated value	2000 A
• at 70 °C / rated value	2000 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (Icu)	
• at 500 V / rated value	85 kA
• at 690 V / rated value	85 kA
• at 1000 V / rated value	85 kA
• at 1150 V / rated value	50 kA
operating short-circuit current breaking capacity (Ics)	

● at 500 V / rated value	85 kA
● at 690 V / rated value	85 kA
● at 1000 V / rated value	85 kA
● at 1150 V / rated value	50 kA
short-circuit current making capacity (Icm)	
● at 690 V / rated value	187 kA
● at 1000 V / rated value	187 kA
● at 1150 V / rated value	105 kA
short-time withstand current (Icw) / at 690 V AC	
● for 0.5 s / rated value	85 kA
● for 1 s / rated value	85 kA
● for 2 s / rated value	66 kA
● for 3 s / rated value	55 kA
short-time withstand current (Icw) / at 1000 V AC	
● for 0.5 s / rated value	85 kA
● for 1 s / rated value	85 kA
● for 2 s / rated value	66 kA
● for 3 s / rated value	55 kA
short-time withstand current (Icw) / at 1150 V AC	
● for 0.5 s / rated value	50 kA
● for 1 s / rated value	50 kA
● for 2 s / rated value	50 kA
● for 3 s / rated value	50 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
position / for voltage tap	top
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	800 A
● maximum	2000 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	800 A
● maximum	2000 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	400 A
● maximum	4000 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)	
● at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	68 kA
● at 1000 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	68 kA
● at 1150 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)	
● at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	68 kA
● at 1000 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	68 kA
● at 1150 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)	
● at 690 V / for I-tripping / for eSet / maximum	68 kA
● at 1000 V / for I-tripping / for eSet / maximum	68 kA
● at 1150 V / for I-tripping / for eSet / maximum	40 kA
G: ground fault GF	
product feature / for G-tripping	
● can be switched on/off	Yes
● selectable characteristic function	Yes
set values setting current (Ig) / for G-tripping / with I0t characteristic	0.05-1.0;0.001
reference value setting current (Ig) / for G-tripping / with I0t characteristic	x In

set values delay time (tg) / for G-tripping / with I0t characteristic	0.02-30;0.001
reference value delay time (tg) / for G-tripping / with I0t characteristic	s
set values setting current (Ig) / for G-tripping / with I2t characteristic	0.05-1.0;0.001
reference value setting current (Ig) / for G-tripping / with I2t characteristic	x In
set values delay time (tg) / for G-tripping / with I2t characteristic	0.02-30; 0.001
reference value delay time (tg) / for G-tripping / with I2t characteristic	s
Further protective functions	
protection function	
● maintenance mode DAS+	Yes
● second protection parameter set	Yes
● directional short-circuit protection dST	Yes
● reverse power protection RP	Yes
● expanded protection function EPF	Yes
Measuring functions	
type of measurement function	PMF-III
measurement function	
● type according to IEC 61557-12	Yes
● current measurement	Yes
● measurement of voltage and active energy	Yes
● measurement of energy, performance, power factor, frequency	Yes
● measurement of total harmonic distortion THD-U, THD-I	Yes
Communication	
communication function / prepared for communication (Ready4COM)	Yes
communication function	Yes
Service Life	
mechanical service life (operating cycles)	
● without support / typical	10000
● with support / typical	20000
electrical endurance (operating cycles)	
● at 690 V / without support / typical	7500
● at 690 V / with support / typical	20000
● at 1000 V / without support / typical	1000
● at 1150 V / without support / typical	500
● at 1150 V / with support / typical	20000
Dimensions	
height	518 mm
width	460 mm
depth	471 mm
Main connection	
arrangement of electrical connectors / for main current circuit	main connection on the rear, vertical on top / horizontal at the bottom
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

CCC, EG-Konf., UKCA, VDE, EAC

EMV

RCM

Radio Equipment Type Approval Certificate

Miscellaneous, UL, Miscellaneous, FCC

Test Certificates

Special Test Certificate, Miscellaneous

Maritime application

ABS, Bureau Veritas, DNV, LRS, PRS

other

产品合格 QC PASS

other

Manufacturer Declaration, Confirmation

Dangerous goods

Transport Information, Dangerous goods information

Environment

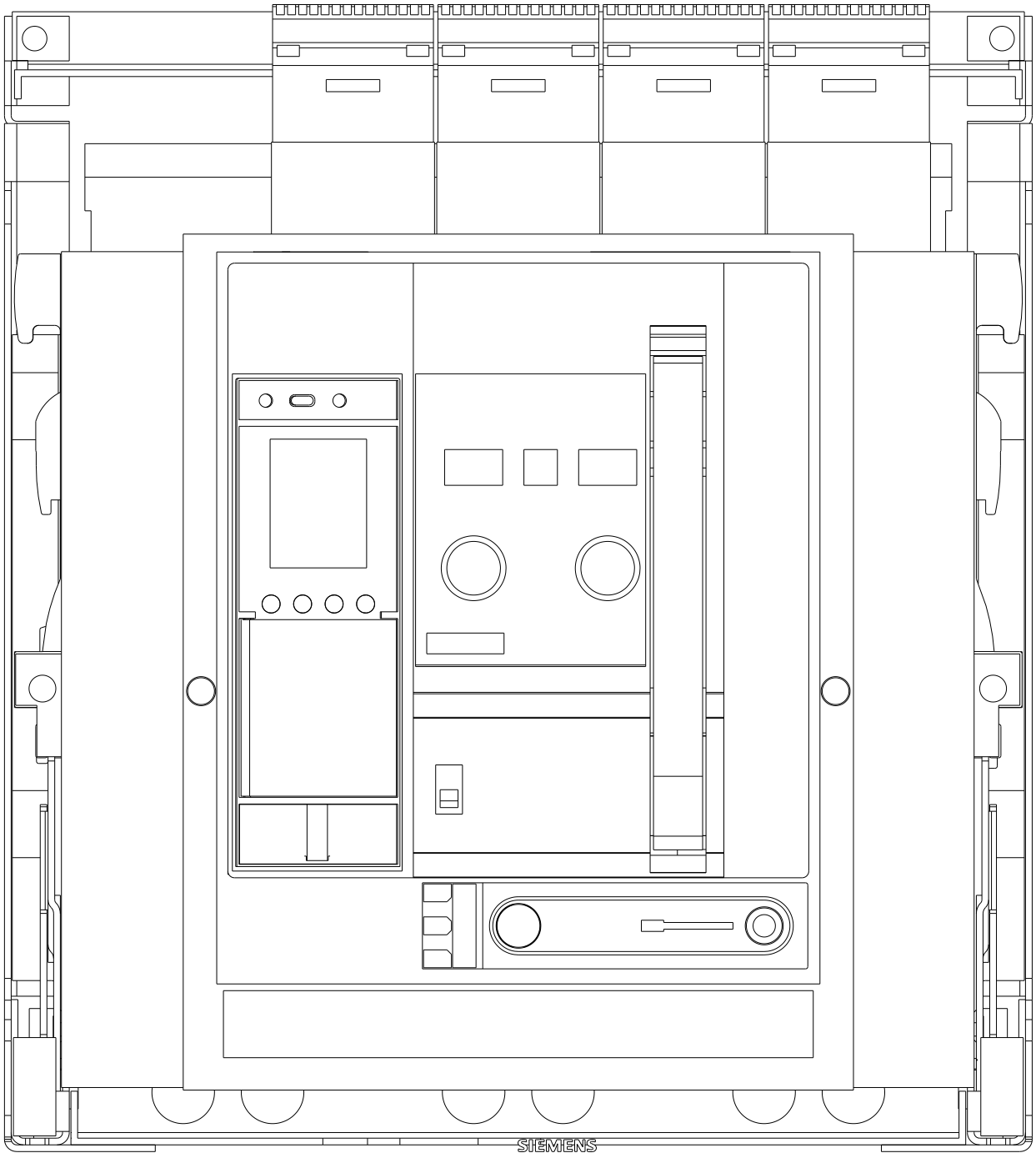
EPD, EPD

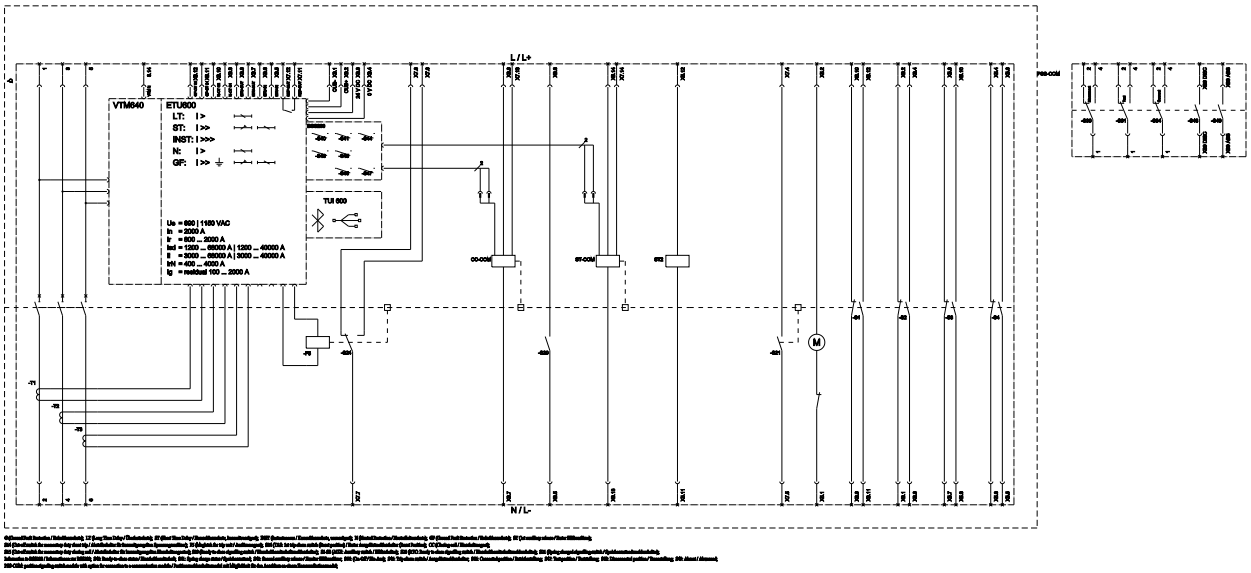
Environment

Siemens EcoTech

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=3WA1220-8WF65-8EE4
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3WA1220-8WF65-8EE4
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1220-8WF65-8EE4
CAx-Online-Generator
http://www.siemens.com/cax
Information- and Downloadcenter (catalogues, leaflets,...)
http://www.siemens.com/energy-automation





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