

Siemens
EcoTech



Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 2, 3-poles, $I_n=2500A$ up to 690V AC 50/60Hz, breaking capacity M $I_{cu}=85/66kA$ at 500/690V, Trip unit ETU600 LSIG upgrade ready, color display, bluetooth and USB interface, Protection LT, ST, INST, GFx, 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 signalling 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), 380-415 V AC, without 1st Shunt trip Option K06 = 2nd Trip alarm switch 1 NO contact (S25) Option R10 = Arc chute cover; for withdrawable breakers Not possible with breaking capacity C, E and D and frame size 2 4000A AC.

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 signalling switch
design of the electronic trip unit	ETU600 LSIG
Weight	98 kg
Net Weight	83 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	520 W
Current	
continuous current / rated value / maximum	2500 A
continuous current / rated value	2500 A
operational current	
• at 40 °C / rated value	2500 A
• at 45 °C / rated value	2500 A
• at 50 °C / rated value	2500 A
• at 55 °C / rated value	2500 A
• at 60 °C / rated value	2500 A
• at 70 °C / rated value	2280 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	66 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	66 kA
short-circuit current making capacity (I_{cm})	

<ul style="list-style-type: none"> • at 500 V / rated value 	187 kA
<ul style="list-style-type: none"> • at 690 V / rated value 	145 kA
short-time withstand current (I _{cw}) / at 500 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	55 kA
short-time withstand current (I _{cw}) / at 690 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	66 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	55 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
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 	1000 A
<ul style="list-style-type: none"> • maximum 	2500 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
adjustable absolute value setting current (I _r) / for L-tripping / with I _{4t} characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	1000 A
<ul style="list-style-type: none"> • maximum 	2500 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 	500 A
<ul style="list-style-type: none"> • maximum 	5000 A

S: delayed short-circuit protection ST

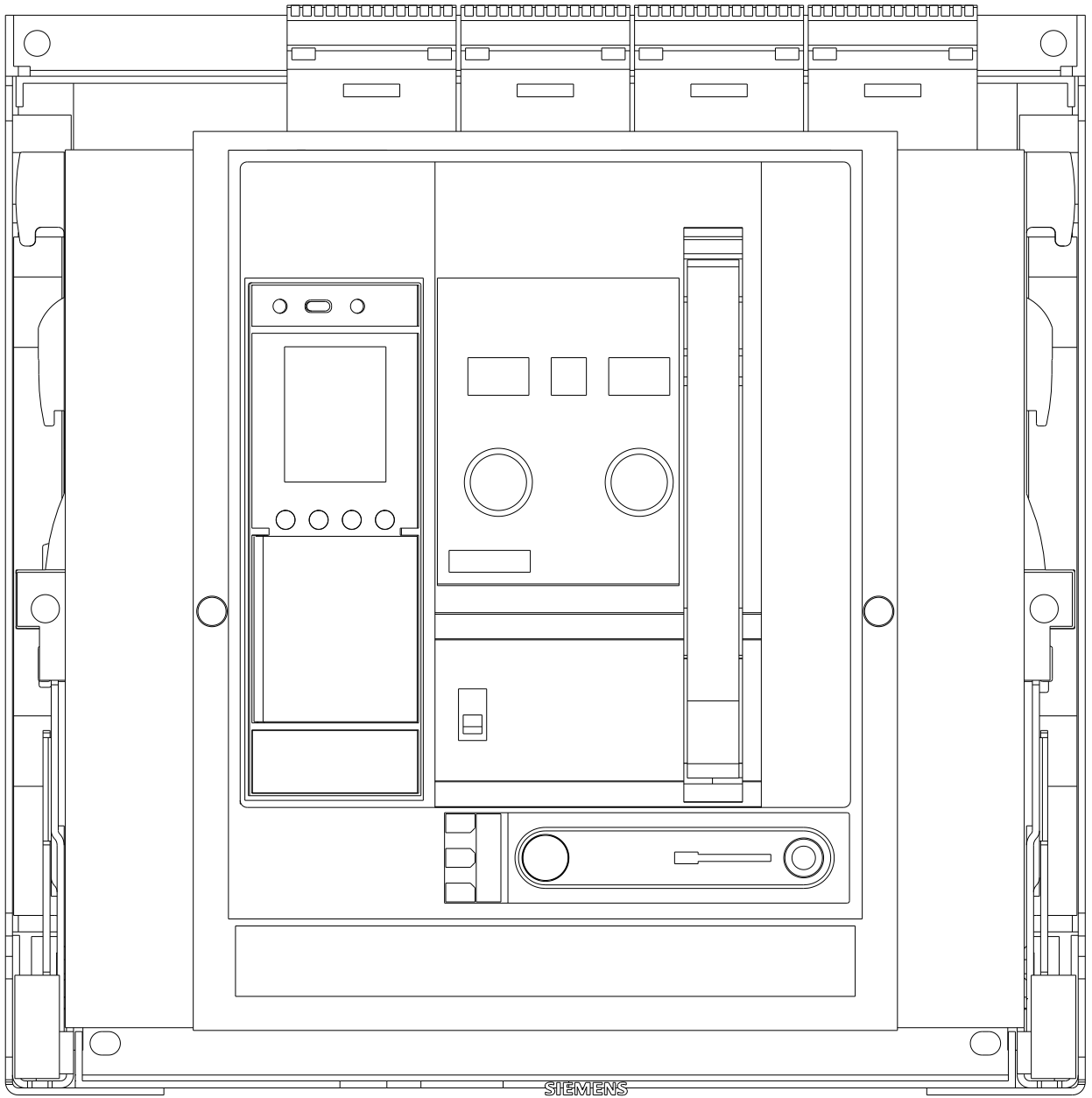
product feature / for S-tripping	
<ul style="list-style-type: none"> • independent of direction / can be switched on/off 	Yes
<ul style="list-style-type: none"> • independent of direction / selectable characteristic function 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability 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
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reference value setting current (I _{sd}) / for S-tripping / with I0t characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (t _{sd}) / 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	1500 A
• at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	68 kA
• at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum	52.8 kA
set values delay time (t _{sd}) / 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 (t _{sd}) / 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	1500 A
• at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	68 kA
• at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum	52.8 kA
set values delay time (t _{sd}) / 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	3750 A
• at 500 V / for I-tripping / for eSet / maximum	68 kA
• at 690 V / for I-tripping / for eSet / maximum	52.8 kA
G: ground fault GF	
product feature / for G-tripping	
• can be switched on/off	Yes
• selectable characteristic function	Yes
set values setting current (I _g) / for G-tripping / with I0t characteristic	0.04-0.8;0.001
reference value setting current (I _g) / for G-tripping / with I0t characteristic	x I _n
set values delay time (t _g) / for G-tripping / with I0t characteristic	0.02-30;0.001
reference value delay time (t _g) / for G-tripping / with I0t characteristic	s
set values setting current (I _g) / for G-tripping / with I2t characteristic	0.04-0.8;0.001
reference value setting current (I _g) / for G-tripping / with I2t characteristic	x I _n
set values delay time (t _g) / for G-tripping / with I2t characteristic	0.02-30; 0.001
reference value delay time (t _g) / for G-tripping / with I2t characteristic	s
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	10000
• with support / typical	20000
electrical endurance (operating cycles)	
• at 690 V / without support / typical	7500
• at 690 V / with support / typical	20000
Dimensions	
height	468 mm
width	460 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	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	Yes
• 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
Environmental footprint	
Siemens Eco Profile (SEP)	Siemens EcoTech
Certificates	
reference code	
• according to IEC 81346-2	Q
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=3WA1225-4AF32-4ER0-Z K06+R10	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
https://support.industry.siemens.com/cs/ww/en/ps/3WA1225-4AF32-4ER0-Z K06+R10	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)	
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1225-4AF32-4ER0-Z K06+R10	
CAX-Online-Generator	
http://www.siemens.com/cax	
Information- and Downloadcenter (catalogues, leaflets,...)	
http://www.siemens.com/energy-automation	



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