

Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 1, 3-poles, $I_n=1250\text{A}$ up to 690V AC 50/60Hz, breaking capacity M $I_{cu}=85/66\text{kA}$ 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 top vertical bottom, guide frame with shutter and w/o position signalling switch, without Com & metering function with manual and motorized operating mechanism (M) 110-127 V AC / 110-125 V DC, Storage status and ready-to-close signaling switches, Auxiliary switches 4NO+4NC, Closing coil (CC) 100% OP 110-127 V AC / 110-125 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), 24 V DC, Shunt trip (ST) 100% OP 24-30 V DC, suitable for continuous duty, Option F40 = Sealing cover for ETU

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
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	80.535 kg
Net Weight	65.535 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	205 W
Current	
continuous current / rated value / maximum	1250 A
continuous current / rated value	1250 A
operational current	
• at 40 °C / rated value	1250 A
• at 45 °C / rated value	1250 A
• at 50 °C / rated value	1250 A
• at 55 °C / rated value	1250 A
• at 60 °C / rated value	1250 A
• at 70 °C / rated value	1210 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})	
• at 500 V / rated value	187 kA
• 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 	70 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	60 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 	60 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 I2t 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 I2t characteristic	x I _n
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 (I _r) / for L-tripping / with I2t characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I _r) / for L-tripping / with I2t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	500 A
<ul style="list-style-type: none"> • maximum 	1250 A
set values delay time (tr) / for L-tripping / with I2t characteristic / for eSet	0.5-30;0.001
set values setting current (I _r) / 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 (I _r) / for L-tripping / with I4t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	500 A
<ul style="list-style-type: none"> • maximum 	1250 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 	250 A
<ul style="list-style-type: none"> • maximum 	2500 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 I0t

set values setting current (I _{sd}) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I0t characteristic	x I _r

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) <ul style="list-style-type: none"> for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum 	750 A 68 kA 52.8 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) <ul style="list-style-type: none"> for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	750 A 68 kA 52.8 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 decoder and infinite adjustability are selectable (with eSet) 	Yes 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) <ul style="list-style-type: none"> for I-tripping / for eSet / minimum at 500 V / for I-tripping / for eSet / maximum at 690 V / for I-tripping / for eSet / maximum 	1875 A 68 kA 52.8 kA
G: ground fault GF	
product feature / for G-tripping <ul style="list-style-type: none"> can be switched on/off selectable characteristic function 	Yes Yes
set values setting current (Ilg) / for G-tripping / with I0t characteristic	0.08-1.6;0.001
reference value setting current (Ilg) / for G-tripping / with I0t characteristic	x In
set values delay time (tgg) / for G-tripping / with I0t characteristic	0.02-30;0.001
reference value delay time (tgg) / for G-tripping / with I0t characteristic	s
set values setting current (Ilg) / for G-tripping / with I2t characteristic	0.08-1.6;0.001
reference value setting current (Ilg) / for G-tripping / with I2t characteristic	x In
set values delay time (tgg) / for G-tripping / with I2t characteristic	0.02-5;0.001
reference value delay time (tgg) / for G-tripping / with I2t characteristic	s
Further protective functions	
protection function <ul style="list-style-type: none"> 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	15000				
electrical endurance (operating cycles)					
• at 690 V / without support / typical	7500				
• at 690 V / with support / typical	15000				
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 on top / vertical 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	Yes				
• 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				
Certificates					
reference code					
• according to IEC 81346-2	Q				
General Product Approval	EMV				
					
Radio Equipment Type Approval Certificate			Test Certificates		
Miscellaneous		Miscellaneous	FCC	Special Test Certificate	Miscellaneous
Maritime application			other		
					
other	Dangerous goods	Environment			

[Confirmation](#)

[Manufacturer Declaration](#)

[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=3WA1112-4AF36-7DL1-Z F40>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1112-4AF36-7DL1-Z F40>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1112-4AF36-7DL1-Z F40

CAX-Online-Generator

<http://www.siemens.com/cax>

Information- and Downloadcenter (catalogues, leaflets,...)

<http://www.siemens.com/energy-automation>

