



Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 2, 3-poles,  $I_n=2500\text{A}$  up to 690V AC 50/60Hz, breaking capacity  $M I_{cu}=85/66\text{kA}$  at 500/690V, Trip unit ETU600 LSI upgrade ready, color display, 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 position signal. switch (3xW), 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), 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 LSI
Weight	98.084 kg
Net Weight	83.084 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 ( $I_{cm}$ )	
• 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"> <li>• for 0.5 s / rated value</li> </ul>	85 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	85 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	55 kA
short-time withstand current (I <sub>cw</sub> ) / at 690 V AC	
<ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>	66 kA
<ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>	55 kA

**Electronic release unit**

product feature	
<ul style="list-style-type: none"> <li>• upgradable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Bluetooth and USB interface</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder for basic protection functions</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• display and function keys</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SENTRON powerconfig configuration software</li> </ul>	Yes

**Basic protection functions**

product feature / for L-tripping	
<ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>	Yes
set values setting current (I <sub>r</sub> ) / 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 <sub>r</sub> ) / for L-tripping / with I2t characteristic	x I <sub>n</sub>
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 <sub>r</sub> ) / for L-tripping / with I2t characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I <sub>r</sub> ) / for L-tripping / with I2t characteristic / for eSet	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	1000 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2500 A
set values delay time (tr) / for L-tripping / with I2t characteristic / for eSet	0.5-30;0.001
set values setting current (I <sub>r</sub> ) / 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 <sub>r</sub> ) / for L-tripping / with I4t characteristic / for eSet	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	1000 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2500 A

**L: Overload protection N-conductor**

product feature / with neutral conductor protection / can be switched on/off	Yes
setting values setting current (I <sub>nN</sub> ) / for N-tripping	0.2-2;0.001
reference value setting current (I <sub>nN</sub> ) / for N-tripping	x I <sub>n</sub>
adjustable setting current (I <sub>nN</sub> ) / for N-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	500 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	5000 A

**S: delayed short-circuit protection ST**

product feature / for S-tripping	
<ul style="list-style-type: none"> <li>• independent of direction / can be switched on/off</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• independent of direction / selectable characteristic function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>	Yes

**S: delayed short-circuit protection ST, settings values I0t**

set values setting current (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic	x I <sub>r</sub>

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"> <li>for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum</li> <li>at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> <li>at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> </ul>	1500 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
<b>S: delayed short-circuit protection ST, settings values I2t</b>	
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"> <li>for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum</li> <li>at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> <li>at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> </ul>	1500 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"> <li>can be switched on/off</li> <li>decoder and infinite adjustability are selectable (with eSet)</li> </ul>	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"> <li>for I-tripping / for eSet / minimum</li> <li>at 500 V / for I-tripping / for eSet / maximum</li> <li>at 690 V / for I-tripping / for eSet / maximum</li> </ul>	3750 A 68 kA 52.8 kA
<b>G: ground fault GF</b>	
product feature / for G-tripping <ul style="list-style-type: none"> <li>can be switched on/off</li> <li>selectable characteristic function</li> </ul>	No No
<b>Further protective functions</b>	
protection function <ul style="list-style-type: none"> <li>maintenance mode DAS+</li> </ul>	Yes
<b>Measuring functions</b>	
measurement function <ul style="list-style-type: none"> <li>current measurement</li> </ul>	Yes
<b>Communication</b>	
communication function	No
<b>Service Life</b>	
mechanical service life (operating cycles) <ul style="list-style-type: none"> <li>without support / typical</li> <li>with support / typical</li> </ul>	10000 20000
electrical endurance (operating cycles) <ul style="list-style-type: none"> <li>at 690 V / without support / typical</li> <li>at 690 V / with support / typical</li> </ul>	7500 20000
<b>Dimensions</b>	
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	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

### Certificates

reference code	
• according to IEC 81346-2	Q

### General Product Approval

EMV



Radio Equipment Type Approval Certificate	Test Certificates	Maritime application
---	-------------------	----------------------

[Miscellaneous](#)

[Miscellaneous](#)

[Special Test Certificate](#)



Maritime application	other	Dangerous goods
----------------------	-------	-----------------



[Manufacturer Declaration](#)

[Confirmation](#)

[Dangerous goods information](#)

Dangerous goods	Environment
-----------------	-------------

[Transport Information](#)



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=3WA1225-4AE62-8EE4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1225-4AE62-8EE4>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1225-4AE62-8EE4](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1225-4AE62-8EE4)

CAX-Online-Generator

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

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

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





