










Withdrawable circuit breaker with guide frame, IEC 60947-2, frame size 3, 3-poles,  $I_n=6300A$  up to 690V AC 50/60Hz, breaking capacity  $H I_{cu}=100/85kA$  at 500/690V, Trip unit ETU600 LSIG upgrade ready , colorisdisplay, bluetooth and USB interface, Protection LT, ST, INST, GFx, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection vertical, 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 2NO+2NC, Closing coil (CC) 100% OP 110-127 V AC / 110-125 V DC, applicable for continuous duty, without Remote trip alarm reset coil (RR), without 2nd shunt trip, Shunt trip (ST) 100% OP 110-127 V AC / 110-125 V DC, suitable for continuous duty, Option R30 = Mechanical interlock to prevent opening of the circuit breaker compartment door, if ACB is closed; for withdrawable design.

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	III
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	189.5 kg
Net Weight	172.5 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	1600 W
Current	
continuous current / rated value / maximum	6300 A
continuous current / rated value	6300 A
operational current	
• at 45 °C / rated value	6300 A
• at 55 °C / rated value	5920 A
• at 60 °C / rated value	5810 A
• at 70 °C / rated value	5500 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity ( $I_{cu}$ )	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
operating short-circuit current breaking capacity ( $I_{cs}$ )	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
short-circuit current making capacity ( $I_{cm}$ )	
• at 500 V / rated value	220 kA

<ul style="list-style-type: none"> <li>at 690 V / rated value</li> </ul>	187 kA
short-time withstand current (I <sub>cw</sub> ) / at 500 V AC	
<ul style="list-style-type: none"> <li>for 0.5 s / rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>for 1 s / rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>for 2 s / rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>for 3 s / rated value</li> </ul>	100 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>	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>	85 kA
<ul style="list-style-type: none"> <li>for 3 s / rated value</li> </ul>	85 kA
<b>Electronic release unit</b>	
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
<b>Basic protection functions</b>	
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
reference value setting current (I <sub>r</sub> ) / for L-tripping / with I2t characteristic	x I <sub>n</sub>
set values delay time (t <sub>r</sub> ) / for L-tripping / with I2t characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (t <sub>r</sub> ) / 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>	2520 A
<ul style="list-style-type: none"> <li>maximum</li> </ul>	6300 A
set values delay time (t <sub>r</sub> ) / 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 (t <sub>r</sub> ) / for L-tripping / with I4t characteristic / for eSet	0.5-5;0.001
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>	2520 A
<ul style="list-style-type: none"> <li>maximum</li> </ul>	6300 A
<b>L: Overload protection N-conductor</b>	
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>	1260 A
<ul style="list-style-type: none"> <li>maximum</li> </ul>	12600 A
<b>S: delayed short-circuit protection ST</b>	
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
<b>S: delayed short-circuit protection ST, settings values I0t</b>	
set values setting current (I <sub>sd</sub> ) / for S-tripping / with I0t	1.5;2;2.5;3;4;5;6;8;10

characteristic	
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 (I <sub>sd</sub> ) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I <sub>sd</sub> )	
<ul style="list-style-type: none"> <li>• for S-tripping / with I0t characteristic / for eSet / independent of direction / minimum</li> </ul>	3780 A
<ul style="list-style-type: none"> <li>• at 500 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> </ul>	80 kA
<ul style="list-style-type: none"> <li>• at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum</li> </ul>	68 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 (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic	x I <sub>r</sub>
set values delay time (tsd) / for S-tripping / with I2t characteristic	0.1;0.2;0.3;0.4
set values setting current (I <sub>sd</sub> ) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I <sub>sd</sub> )	
<ul style="list-style-type: none"> <li>• for S-tripping / with I2t characteristic / for eSet / independent of direction / minimum</li> </ul>	3780 A
<ul style="list-style-type: none"> <li>• at 500 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> </ul>	80 kA
<ul style="list-style-type: none"> <li>• at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum</li> </ul>	68 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> </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>i</sub> ) / for I-tripping	1.5;2;3;4;6;8;10;12;15
reference value setting current (I <sub>i</sub> ) / for I-tripping	x I <sub>n</sub>
tripping factor setting current (I <sub>imax</sub> ) / for I-tripping	0.8
reference value setting current (I <sub>imax</sub> ) / for I-tripping	x I <sub>cs</sub>
set values setting current (I <sub>i</sub> ) / for I-tripping / for eSet	1.5-15;0.001
adjustable absolute value setting current (I <sub>i</sub> )	
<ul style="list-style-type: none"> <li>• for I-tripping / for eSet / minimum</li> </ul>	9450 A
<ul style="list-style-type: none"> <li>• at 500 V / for I-tripping / for eSet / maximum</li> </ul>	80 kA
<ul style="list-style-type: none"> <li>• at 690 V / for I-tripping / for eSet / maximum</li> </ul>	68 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> </ul>	Yes
<ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>	Yes
set values setting current (I <sub>g</sub> ) / for G-tripping / with I0t characteristic	0.0476-0.3175;0.001
reference value setting current (I <sub>g</sub> ) / for G-tripping / with I0t characteristic	x I <sub>n</sub>
set values delay time (t <sub>g</sub> ) / for G-tripping / with I0t characteristic	0.02-5;0.001
reference value delay time (t <sub>g</sub> ) / for G-tripping / with I0t characteristic	s
set values setting current (I <sub>g</sub> ) / for G-tripping / with I2t characteristic	0.0476-0.3175;0.001
reference value setting current (I <sub>g</sub> ) / for G-tripping / with I2t characteristic	x I <sub>n</sub>
set values delay time (t <sub>g</sub> ) / for G-tripping / with I2t characteristic	0.02-30; 0.001
reference value delay time (t <sub>g</sub> ) / for G-tripping / with I2t characteristic	s

Further protective functions		
protection function		
<ul style="list-style-type: none"> <li>● maintenance mode DAS+</li> </ul>	Yes	
Measuring functions		
measurement function		
<ul style="list-style-type: none"> <li>● current measurement</li> </ul>	Yes	
Communication		
communication function	No	
Service Life		
mechanical service life (operating cycles)		
<ul style="list-style-type: none"> <li>● without support / typical</li> </ul>	7500	
<ul style="list-style-type: none"> <li>● with support / typical</li> </ul>	15000	
electrical endurance (operating cycles)		
<ul style="list-style-type: none"> <li>● at 690 V / without support / typical</li> </ul>	2000	
<ul style="list-style-type: none"> <li>● at 690 V / with support / typical</li> </ul>	15000	
Dimensions		
height	468 mm	
width	704 mm	
depth	471 mm	
Main connection		
arrangement of electrical connectors / for main current circuit	main connection on the rear, vertical	
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		
<ul style="list-style-type: none"> <li>● undervoltage release</li> </ul>	No	
<ul style="list-style-type: none"> <li>● voltage trigger</li> </ul>	Yes	
<ul style="list-style-type: none"> <li>● trip indicator</li> </ul>	Yes	
<ul style="list-style-type: none"> <li>● motor drive</li> </ul>	Yes	
Environmental conditions		
protection class IP / on the front	IP20	
ambient temperature / during operation		
<ul style="list-style-type: none"> <li>● minimum</li> </ul>	-40 °C	
<ul style="list-style-type: none"> <li>● maximum</li> </ul>	70 °C	
ambient temperature / during storage		
<ul style="list-style-type: none"> <li>● minimum</li> </ul>	-40 °C	
<ul style="list-style-type: none"> <li>● maximum</li> </ul>	80 °C	
Certificates		
reference code / according to IEC 81346-2	Q	
Approvals / Certificates		
Environment	General Product Approval	
     		
General Product Approval	EMV	Radio Equipment Type Approval Certificate
<a href="#">Confirmation</a>   	<a href="#">Industry Canada (IC)</a>	<a href="#">Miscellaneous</a>
Radio Equipment Type Approval Certificate	Test Certificates	Maritime application

[FCC](#)

[Miscellaneous](#)

[Special Test Certificate](#)

[Miscellaneous](#)



**Maritime application** **other**



[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

[Miscellaneous](#)

**other** **Dangerous goods**

[Manufacturer Declaration](#)



[Confirmation](#)

[Transport Information](#)

[Dangerous goods information](#)

**Further information**

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1363-5AF31-3DA3-Z R30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1363-5AF31-3DA3-Z R30>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1363-5AF31-3DA3-Z R30](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1363-5AF31-3DA3-Z R30)

CAX-Online-Generator

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

