



circuit breaker 3VA6 UL frame 2000 breaking capacity class H 65kA @ 480 V 3-pole, line protection ETU860, LSIG,  $I_n=2000A$  overload protection  $I_r=800A - 2000A$  short circuit protection  $I_{sd}=0,6-10x I_n$ ,  $I_i=1,5-6x I_n$  w/o connection Product is not marked with CE, not for use in Europe (EU) and in IEC applications

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HRAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU860
protection function of the overcurrent release	LSIG
number of poles	3
General technical data	
operating voltage / at AC / rated value	600 V
power loss [W] / maximum	676 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	676 W
mechanical service life (operating cycles) / typical	3 000
electrical endurance (operating cycles) / at 480 V	500
electrical endurance (operating cycles) / at 600 V	500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	Yes
ground-fault monitoring version	Summation current formation L + N-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	26.1 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	2 000 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current ( $I_r$ ) / of the L-trip / with I2t characteristic	
• minimum	800 A

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 000 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	2.5 s 30 s
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I0t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	1 200 A 12 000 A
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I2t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	1 200 A 12 000 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.5 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	3 000 A 12 000 A
adjustable current response value current / for G-tripping / with standard characteristic	
<ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	400 A 1 200 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.8 s
adjustable response value setting current (I <sub>g</sub> ) / for G-tripping / with I2t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	400 A 1 200 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.8 s
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	Yes
<b>Mechanical Design</b>	
product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• trip indicator</li> </ul>	No No
height [in]	8.14 in
height	206.9 mm
width [in]	8.99 in
width	228.4 mm
depth [in]	16 in
depth	406.4 mm
<b>Connections</b>	
type of electrical connection / for main current circuit	without terminals
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Environmental conditions</b>	
protection class IP / on the front	IP40

ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C
reference code / according to IEC 81346-2	F

#### Approvals / Certificates

General Product Approval	EMV
--------------------------	-----

[Confirmation](#)

[Miscellaneous](#)



[Miscellaneous](#)



other	Dangerous goods
-------	-----------------

[Confirmation](#)

[Miscellaneous](#)

[Transport 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 (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6920-6KQ31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6920-6KQ31-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6920-6KQ31-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6920-6KQ31-0AA0)

##### CAx-Online-Generator

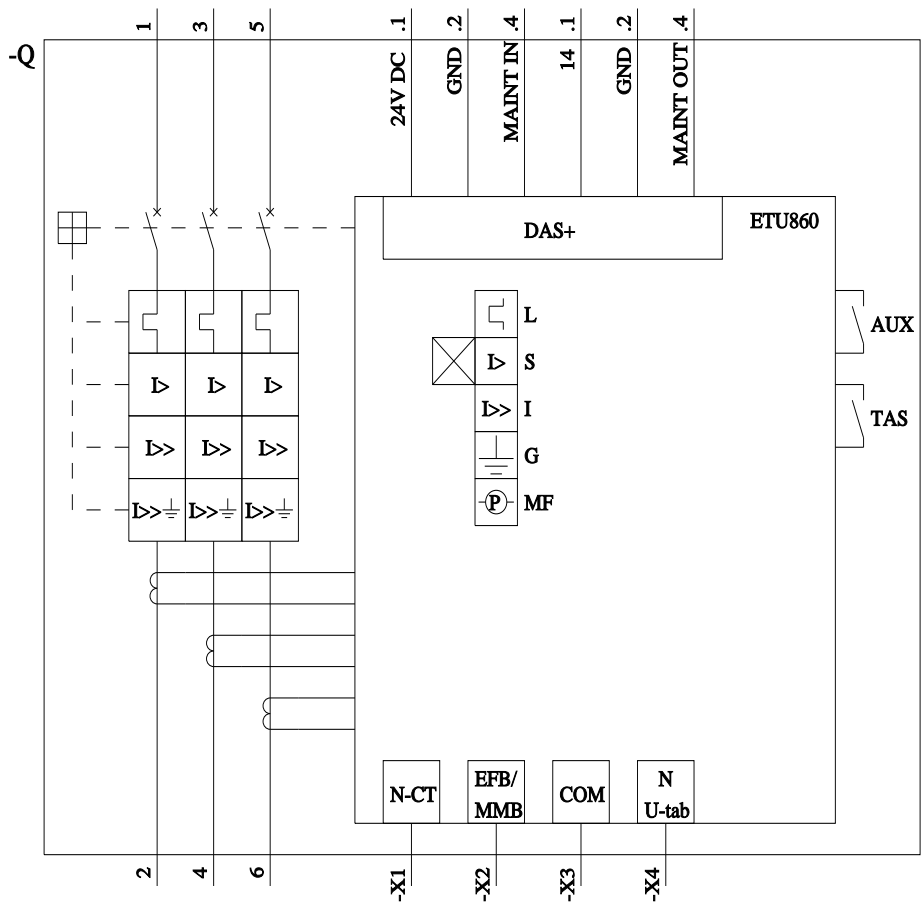
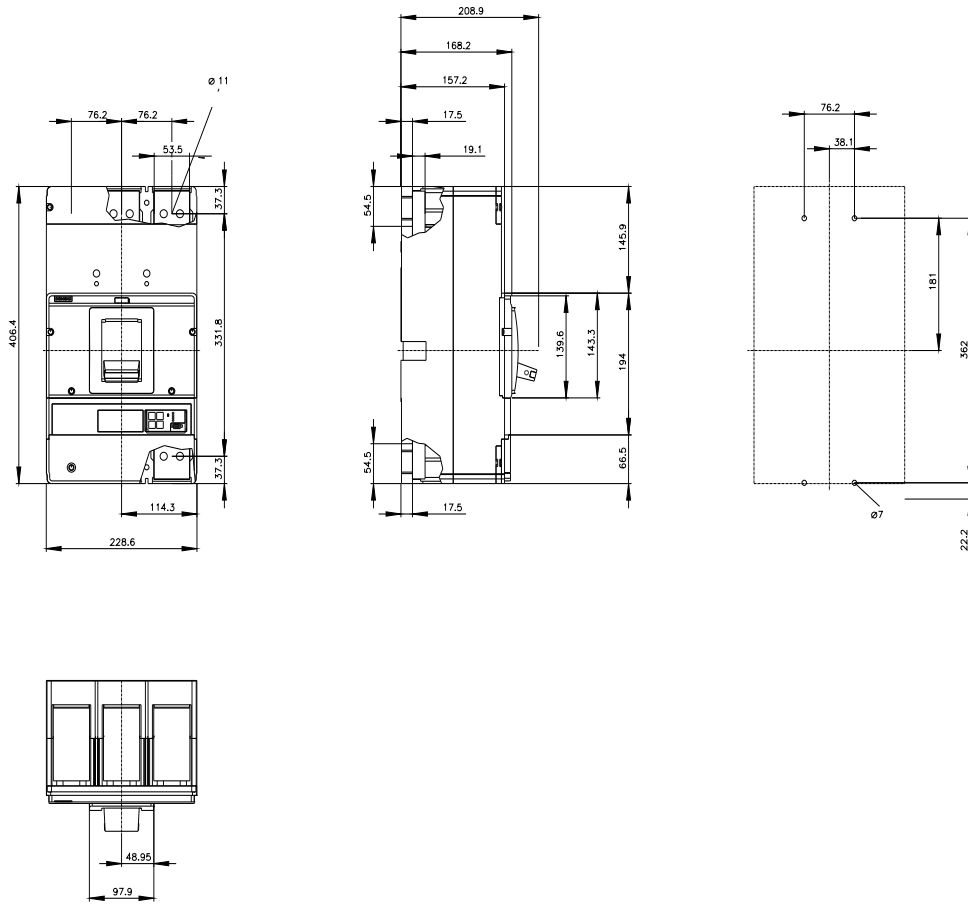
<https://www.siemens.com/cax>

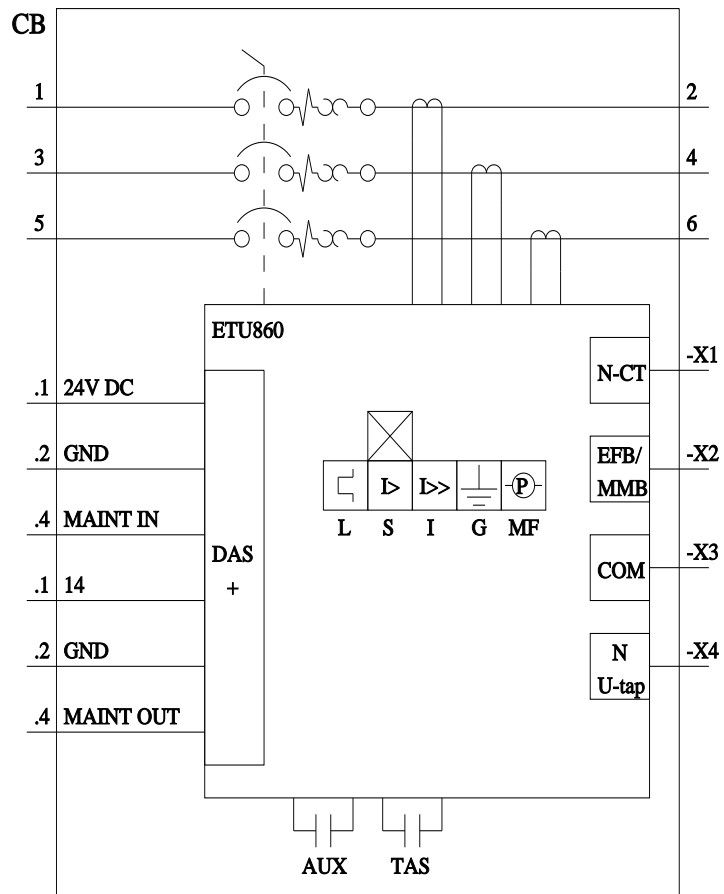
##### Tender specifications

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

##### Characteristic curves

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





last modified:

3/31/2025

