



circuit breaker 3VA6 UL frame 150 breaking capacity class H 65kA @ 480V 3-pole, line protection ETU550, LSI, In=40A overload protection Ir=16A...40A short-circuit protection I<sub>sd</sub>=0.6..10x I<sub>n</sub>, I<sub>i</sub>=1.5..12x I<sub>n</sub> N conductor protection optionally with external current transformer, up to 160% without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HDAE
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	ETU550
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	2.4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.8 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
electrical endurance (operating cycles) / at 480 V	14 000
electrical endurance (operating cycles) / at 600 V	9 800
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	Yes
ground-fault monitoring version	without
product function	
• communication function	Yes
• other measurement function	No
Net Weight	2.5 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	40 A
• at 60 °C	40 A
• at 65 °C	40 A
• at 70 °C	40 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I <sub>cu</sub> )	

<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	110 kA 85 kA 2.5 kA
operating short-circuit current breaking capacity (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	110 kA 85 kA 2.5 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	242 kA 187 kA 3.8 kA

#### Switching capacity according to UL 489

current breaking capacity <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	100 kA 65 kA 22 kA
--	--------------------------

#### Adjustable parameters

adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2</sub> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	16 A 40 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2</sub> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.5 s 25 s
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>0</sub> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	24 A 400 A
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>2</sub> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	24 A 400 A
adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0</sub> t 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 (t <sub>sd</sub> ) / for S-tripping / with I <sub>2</sub> t 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>	60 A 480 A
adjustable setting current (I <sub>n</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0 A 0 A
adjustable delay time / of S-trip / with I <sub>2</sub> t characteristic	0.5 s
adjustable current response value current / of instantaneous short-circuit trip unit <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	60 A 480 A
design of the N-conductor protection	adjustable OFF; 40% to 160%
product function / grounding protection	No

#### Mechanical Design

product component <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul>	No No No
height [in]	7.8 in
height	198 mm
width [in]	4.13 in
width	105 mm

depth [in]	3.39 in
depth	86 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	Yes
<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
<b>Certificates</b>	
reference code / according to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
<b>General Product Approval</b>	



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	EMC	Declaration of Conformity	Marine / Shipping
--------------------------	-----	---------------------------	-------------------



EG-Konf.



ABS



BUREAU VERITAS

Marine / Shipping	other	Dangerous Good
-------------------	-------	----------------



DNV



RMRS

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6140-6JP31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-6JP31-0AA0>

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

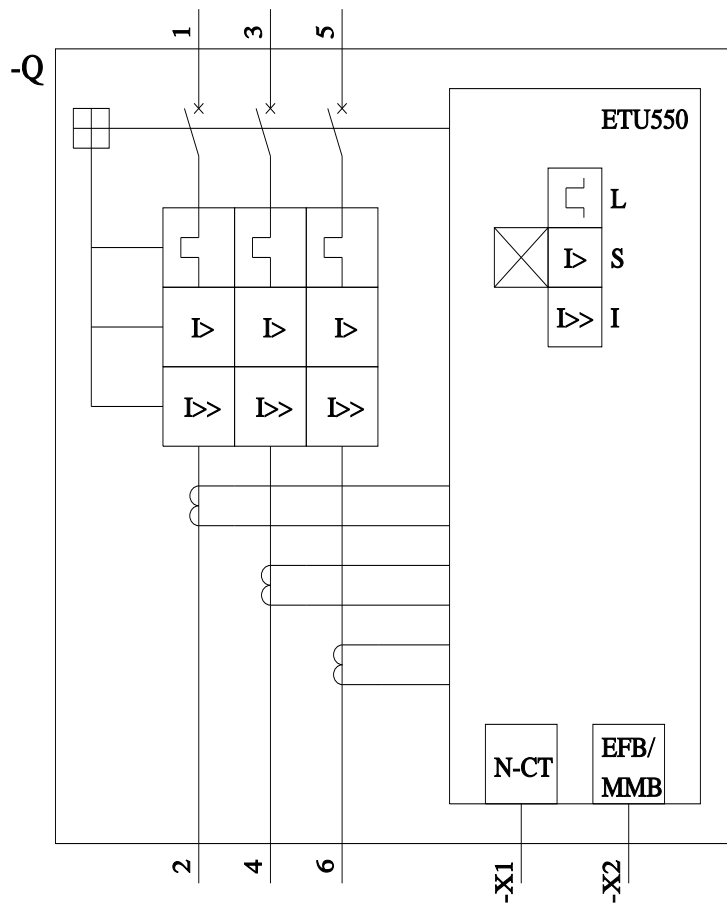
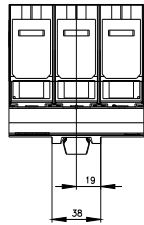
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6140-6JP31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-6JP31-0AA0)

CAX-Online-Generator

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

Tender specifications

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





last modified:

8/14/2023



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

[3VA61406JP310AA0](#)