



circuit breaker 3VA6 UL Frame 600 breaking capacity class H 65 kA @ 480 V 3-pole, line protection ETU550, LSI, In=400 A overload protection Ir=160 A ...400 A short-circuit protection Isd=0.6..10x In, li=1.5..12x In neutral conductor protection optionally with ext. CT; up to 160% cable connection on two sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HLAE
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	70 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	4 000
electrical endurance (operating cycles) / at 600 V	3 500
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	5.996 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	400 A
• at 45 °C	400 A
• at 50 °C	400 A
• at 55 °C	400 A
• at 60 °C	400 A
• at 65 °C	400 A

<ul style="list-style-type: none"> <li>at 70 °C</li> </ul>	400 A
<b>Switching capacity according to IEC 60947</b>	
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 6 kA
operating short-circuit current breaking capacity (I <sub>cs</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 6 kA
short-circuit current making capacity (I <sub>cm</sub> ) <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 9 kA
<b>Switching capacity according to UL 489</b>	
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
<b>Adjustable parameters</b>	
adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	150 A 400 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> 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>0t</sub> characteristic <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	240 A 4 000 A
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	240 A 4 000 A
adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> 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>2t</sub> 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>l</sub> ) / for I-tripping <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	600 A 4 800 A
adjustable setting current (I <sub>nN</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	0.2 A 1.6 A
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	No
<b>Mechanical Design</b>	
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]	9.76 in
height	248 mm

width [in]	5.43 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (1 AWG ... 600 kcmil)
width	138 mm
depth [in]	4.33 in
depth	110 mm

#### Connections

arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides

#### Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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#### Accessories

product extension / optional / motor drive	Yes
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#### Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> <li>during operation / minimum</li> <li>during operation / maximum</li> <li>during storage / minimum</li> <li>during storage / maximum</li> </ul>	<ul style="list-style-type: none"> <li>-25 °C</li> <li>70 °C</li> <li>-40 °C</li> <li>80 °C</li> </ul>

#### Environmental footprint

Environmental Product Declaration (EPD)	Yes
global warming potential [CO2 eq] / total	495 kg
global warming potential [CO2 eq] / during manufacturing	28.7 kg
global warming potential [CO2 eq] / during operation	470 kg
global warming potential [CO2 eq] / after end of life	-4.07 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



EG-Konf.



UL



UL

General Product Approval	EMV	other
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[Miscellaneous](#)



RCM

[Confirmation](#)

[Miscellaneous](#)

Dangerous goods	Environment
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[Transport Information](#)



Siemens EcoTech



[Environmental Confirmations](#)

#### 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=3VA6440-6JP36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-6JP36-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6440-6JP36-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6440-6JP36-0AA0)

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='HAUPT'></mmp_prod_no>)





