



circuit breaker 3VA6 UL Frame 150 breaking capacity class H 65 kA @ 480 V 3-pole, line protection ETU320, LI, In=40 A overload protection Ir=16 A...40 A short-circuit protection Ii=1.5...12 x In 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	ETU320
protection function of the overcurrent release	LI
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	No
ground-fault monitoring version	without
product function	
• communication function	No
• other measurement function	No
Net Weight	2.051 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 (Icu)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	2.5 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	2.5 kA

short-circuit current making capacity (I _{cm})	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	3.8 kA
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	22 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum	15 A
• maximum	40 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum	60 A
• maximum	480 A
adjustable setting current (I _{nN}) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	No
Mechanical Design	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	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
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
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
Environmental footprint	
Environmental Product Declaration (EPD)	Yes
global warming potential [CO ₂ eq] / total	61.814 kg
global warming potential [CO ₂ eq] / during manufacturing	14.6 kg
global warming potential [CO ₂ eq] / during operation	48.9 kg
global warming potential [CO ₂ eq] / after end of life	-2.2 kg
Siemens eco profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q
Approvals / Certificates	

General Product Approval



[Miscellaneous](#)



[Miscellaneous](#)



General Product Approval

EMV

Test Certificates



[Confirmation](#)



EG-Konf.



[Type Test Certificates/Test Report](#)

Maritime application

other



[Miscellaneous](#)

other

Dangerous goods

Environment

[Confirmation](#)

[Transport Information](#)

[Environmental Confirmations](#)

Siemens
EcoTech



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=3VA6140-6HL31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-6HL31-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-6HL31-0AA0

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>

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