

Siemens  
EcoTech



circuit breaker 3VA6 UL Frame 250 breaking capacity class H 65 kA @ 480 V 3-pole, line protection ETU320, LI, In=250 A overload protection Ir=100 A...250 A short-circuit protection Ii=1.5...10 x In without connection



Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HFAE
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	42 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	14 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	12 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	8 400
electrical endurance (operating cycles) / at 480 V	12 000
electrical endurance (operating cycles) / at 600 V	8 400
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	2.18 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	250 A
• at 45 °C	250 A
• at 50 °C	250 A
• at 55 °C	241 A
• at 60 °C	232 A
• at 65 °C	222 A
• at 70 °C	213 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> )	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	3 kA
operating short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	3 kA
short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	4.5 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 <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic	
• minimum	100 A
• maximum	250 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	
• minimum	0.5 s
• maximum	13 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping	
• minimum	375 A
• maximum	2 500 A
adjustable setting current (I <sub>nN</sub> ) / 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**

Siemens Eco Profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

**Approvals / Certificates**

**General Product Approval**



[Confirmation](#)



<b>General Product Approval</b>	<b>EMV</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
---------------------------------	------------	--------------------------	--------------------------



[Miscellaneous](#)



[Type Test Certificates/Test Report](#)



<b>Marine / Shipping</b>	<b>other</b>
--------------------------	--------------



[Miscellaneous](#)

[Confirmation](#)

<b>other</b>	<b>Dangerous goods</b>	<b>Environment</b>
--------------	------------------------	--------------------

[Miscellaneous](#)

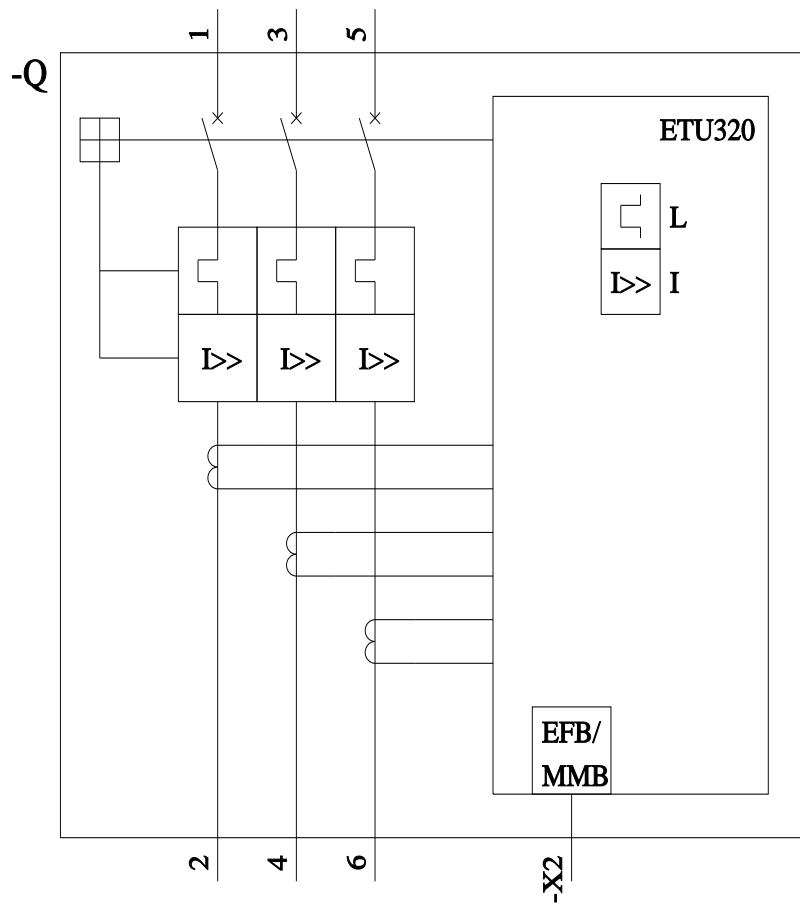
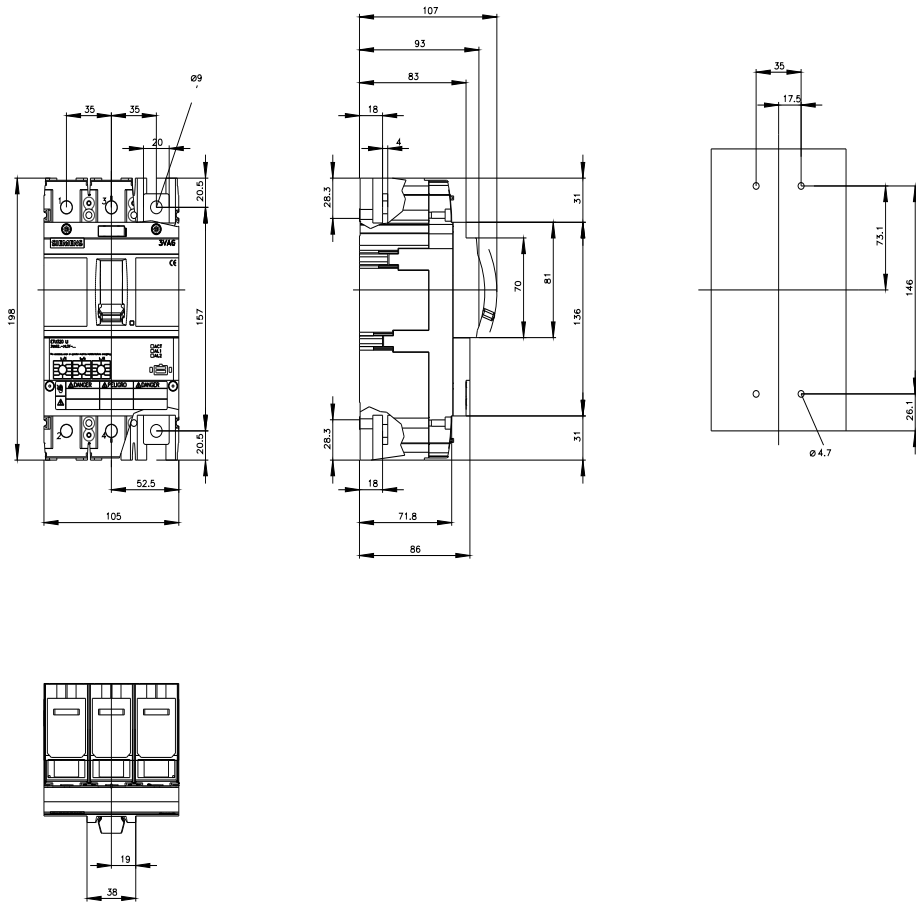
[Transport Information](#)

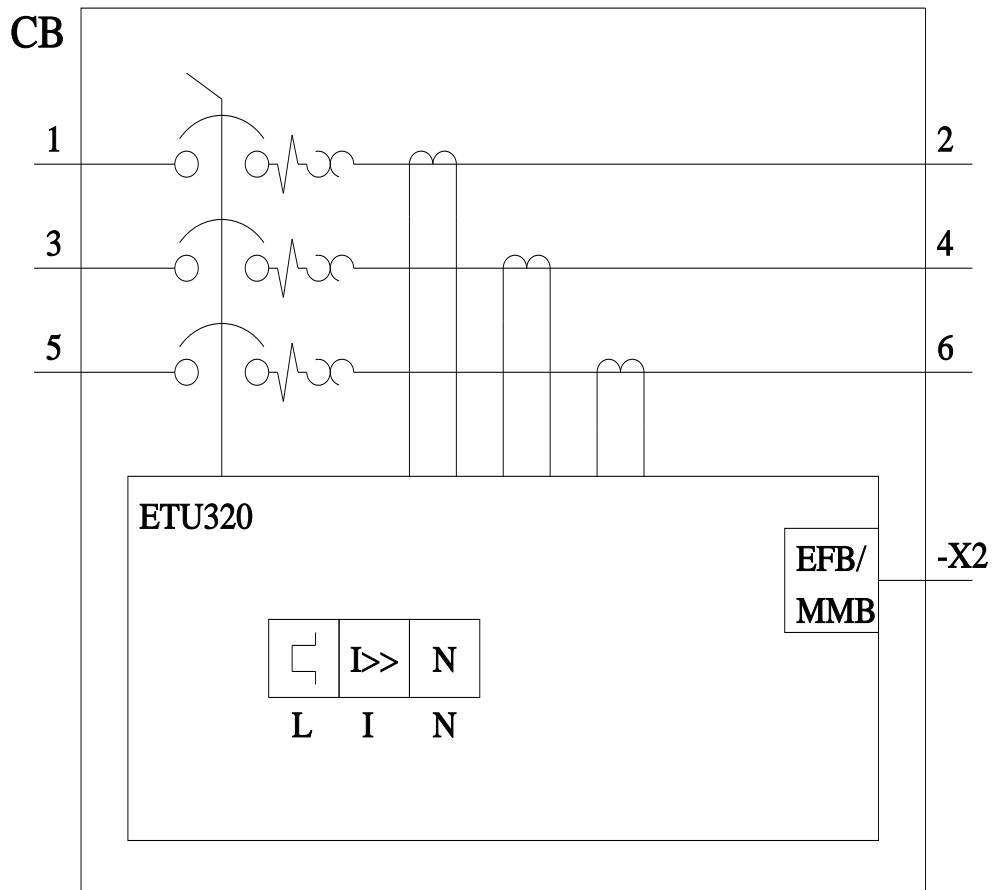


[Environmental Confirmations](#)

**Further information**

- 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=3VA6225-6HL31-0AA0>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3VA6225-6HL31-0AA0>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6225-6HL31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6225-6HL31-0AA0)
- CAX-Online-Generator  
<http://www.siemens.com/cax>
- Tender specifications  
<http://www.siemens.com/specifications>





last modified:

3/11/2024 

