



circuit breaker 3VA6 UL frame 250 breaking capacity class M 35kA @ 480V 3-pole, line protection ETU320, LI, I<sub>n</sub>=250A overload protection I<sub>r</sub>=100A...250A short-circuit protection I<sub>i</sub>=1.5...10 x I<sub>n</sub> without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MFAE
Product version	System protection
design of the load switch / acc. 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	
rated insulation voltage U <sub>i</sub>	800 V
power loss [W] / maximum	42 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 W
mechanical service life (switching cycles) / typical	25 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 400
electrical endurance (switching cycles) / at 480 V	12 000
electrical endurance (switching cycles) / at 600 V	8 400
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	2,2 kg
Current	
marking / acc. 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	M
breaking capacity maximum short-circuit current (I <sub>cu</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	3 kA
breaking capacity operating short-circuit current (I <sub>cs</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	3 kA
short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	4.5 kA
<b>Switching capacity according to UL 489</b>	
breaking capacity current	
• at 240 V	100 kA
• at 480 V	35 kA
• at 600 Y/347 V	18 kA
• at 600 V	18 kA
<b>Adjustable parameters</b>	
Adjustable response value current / I <sub>g</sub> min.	0.5 s
Adjustable response value current / I <sub>g</sub> min.	13 s
Adjustable response value current / I <sub>i</sub> min.	375 A
Adjustable response value current / I <sub>i</sub> max.	2 500 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No
<b>Mechanical Design</b>	
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>	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
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 / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
<b>General Product Approval</b>	



[Miscellaneous](#)

General Product Approval	EMC	Declaration of Conformity	Marine / Shipping
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[UK Declaration of Conformity](#)



Marine / Shipping	other
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[Miscellaneous](#)

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**Further information**

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=3VA6225-5HL31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6225-5HL31-0AA0>

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

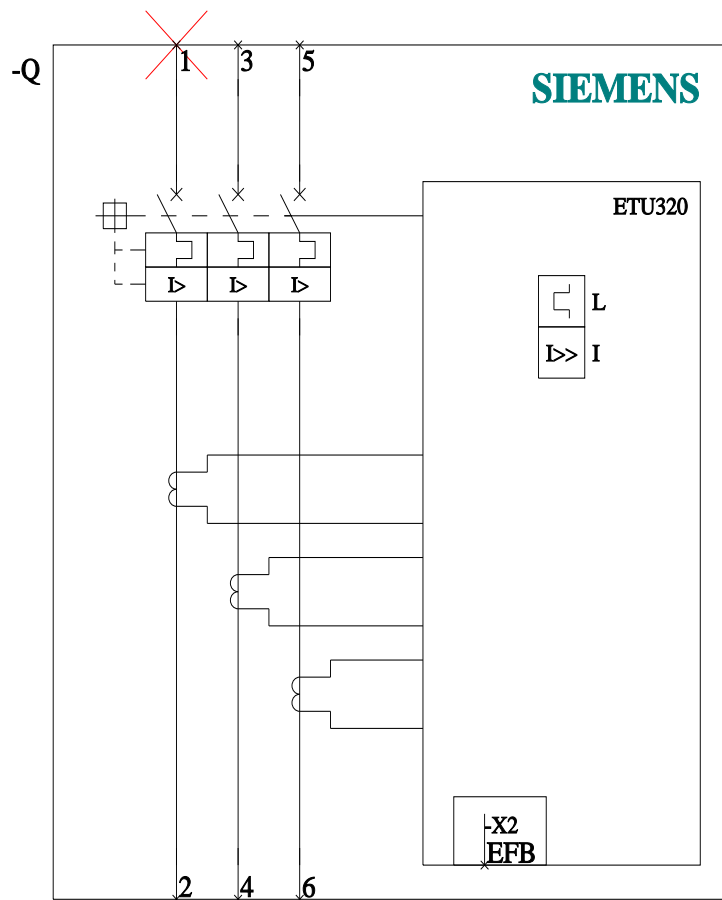
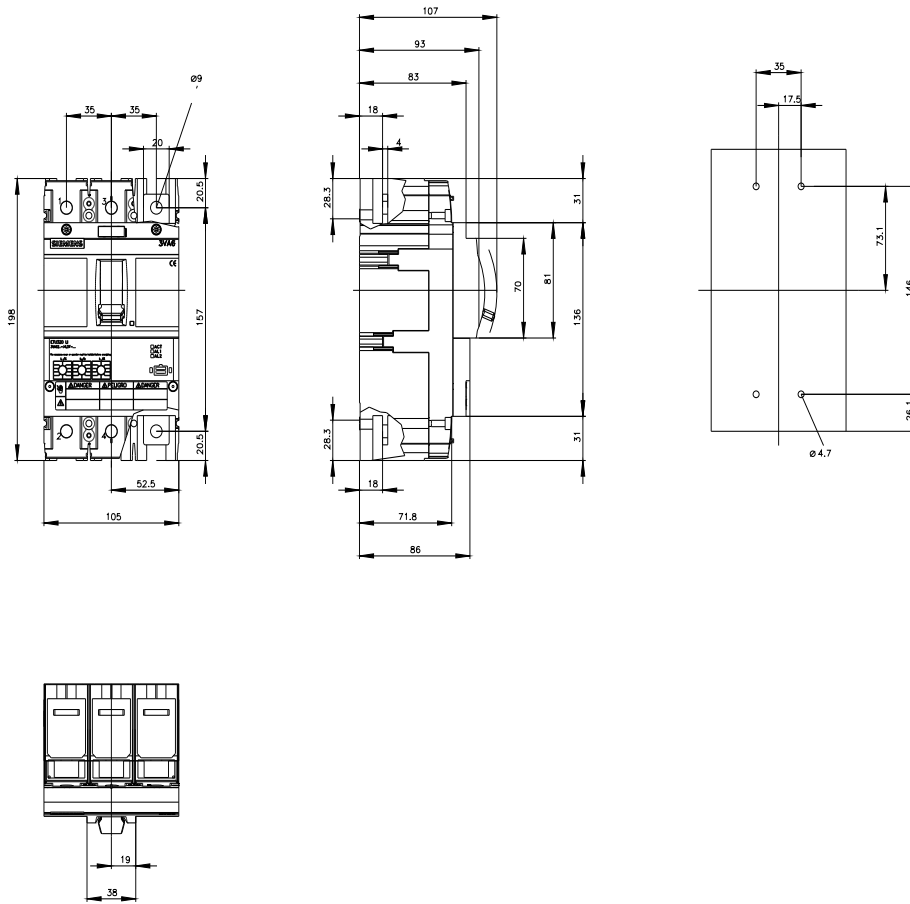
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6225-5HL31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6225-5HL31-0AA0)

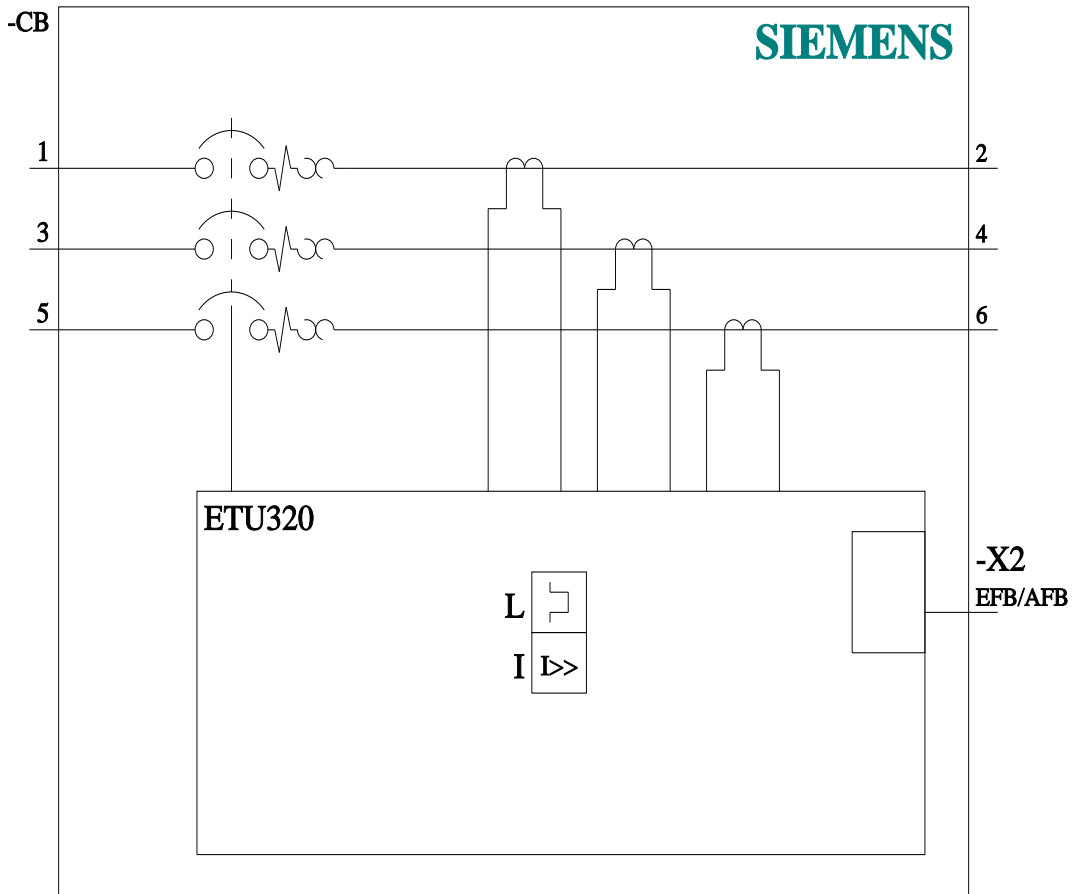
CAX-Online-Generator

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

Tender specifications

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





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