



circuit breaker 3VA6 UL frame 600 3-pole, starter protection ETU310M, I, $I_n=500A$ without overload protection short-circuit protection $I_i=3...12 \times I_n$ without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CLAR
Product version	Starter 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	ETU310M
protection function of the overcurrent release	I
number of poles	3
General technical data	
rated insulation voltage U_i	800 V
power loss [W] / maximum	104.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	34.93 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 500
electrical endurance (switching cycles) / at 480 V	4 000
electrical endurance (switching cycles) / at 600 V	3 500
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No
Net Weight	5,3 kg
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	495 A
• at 60 °C	490 A
• at 65 °C	485 A
• at 70 °C	480 A

Switching capacity according to IEC 60947	
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	6 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	6 kA
Adjustable parameters	
Adjustable response value current / li min.	1 500 A
Adjustable response value current / li max.	6 000 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	9.76 in
Height	248 mm
width [in]	5.43 in
Width	138 mm
depth [in]	4.33 in
depth	110 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
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
Certificates	
reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	



[Miscellaneous](#)

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




[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=3VA6450-1MS31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6450-1MS31-0AA0>

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

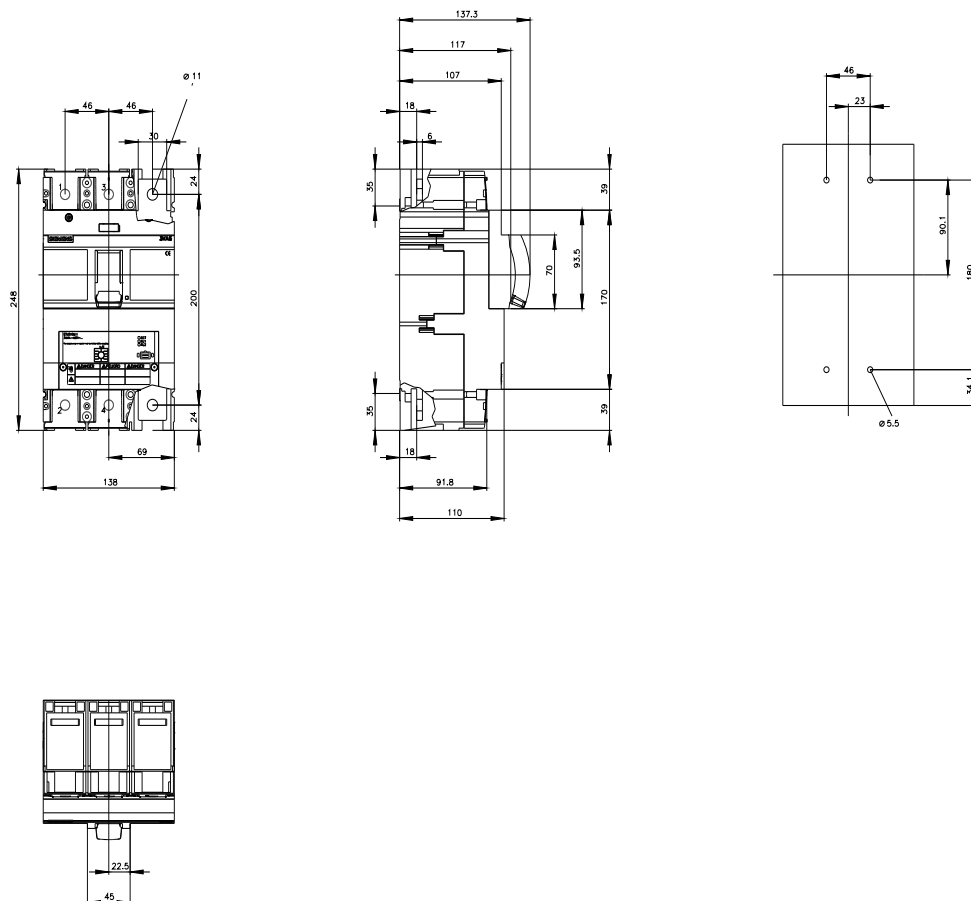
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6450-1MS31-0AA0

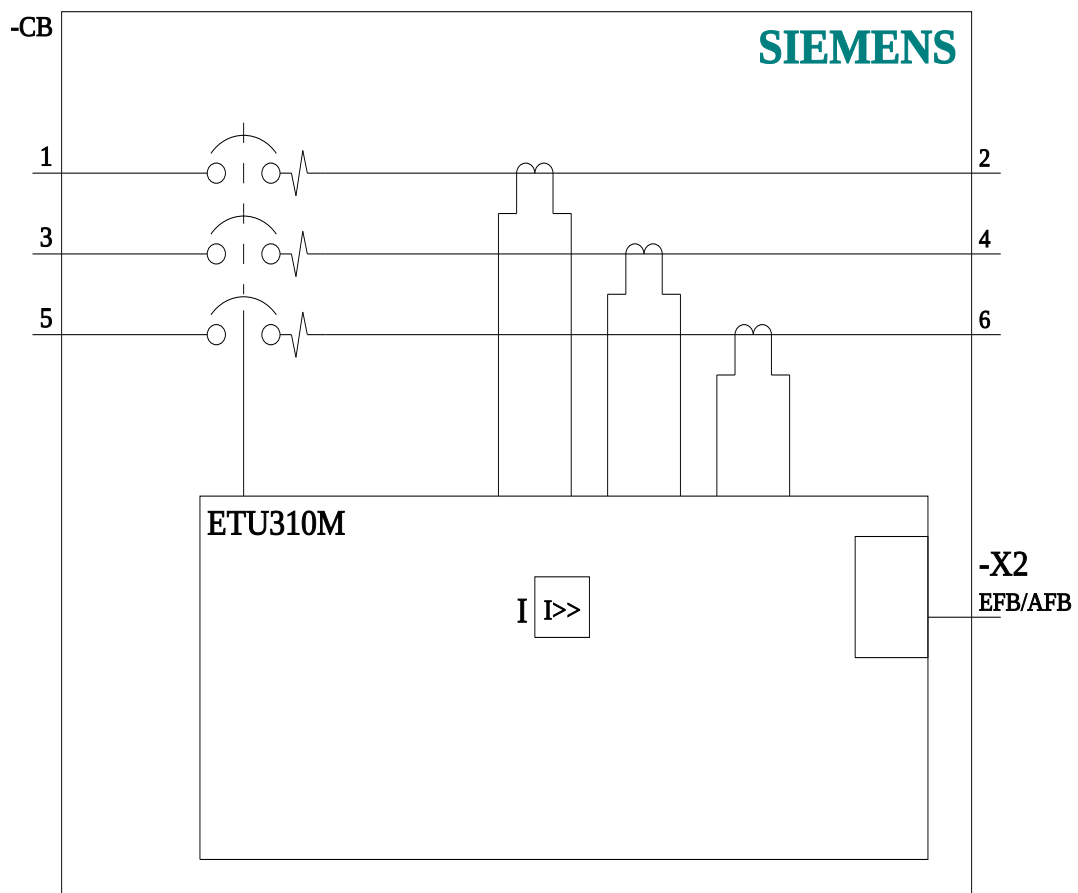
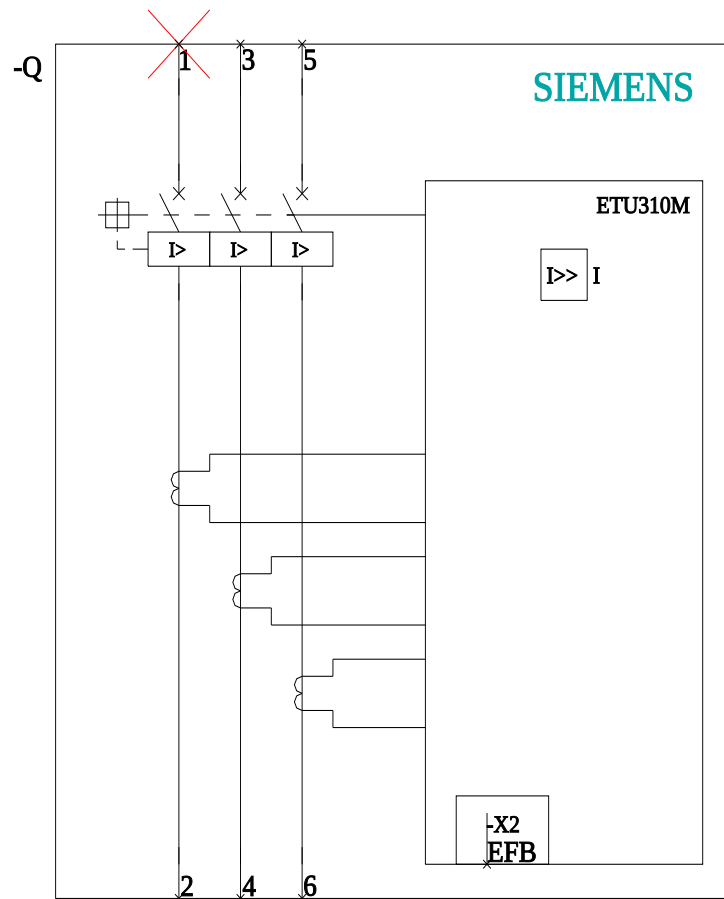
CAX-Online-Generator

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

Tender specifications

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





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