



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM230, FTAM, In=200A overload protection Ir=200A fixed short-circuit protection Ii=5...10 x In UL 489 SB (naval), 50° C without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MFAM
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	TM230
protection function of the overcurrent release	LI
number of poles	3
General technical data	
power loss [W] / maximum	43 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14.17 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
product function	
• communication function	No
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
operational current	
• at 45 °C	194 A
• at 50 °C	189 A
• at 55 °C	183 A
• at 60 °C	178 A
• at 65 °C	172 A
• at 70 °C	167 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support

	in the last chapter
Switching capacity according to UL 489	
breaking capacity current	
• at 240 V	85 kA
• at 480 V	35 kA
• at 600 V	18 kA
Adjustable parameters	
Adjustable response value current / I _g min.	200 A
Adjustable response value current / I _g min.	200 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No
Mechanical Design	
height [in]	7.28 in
Height	185 mm
width [in]	4.13 in
Width	105 mm
depth [in]	3.27 in
depth	83 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	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	
	EMC



[Miscellaneous](#)



Marine / Shipping other



[Miscellaneous](#)

[Miscellaneous](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/lowvoltage/catalogs>

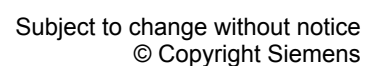
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5220-5EC31-1AA0>

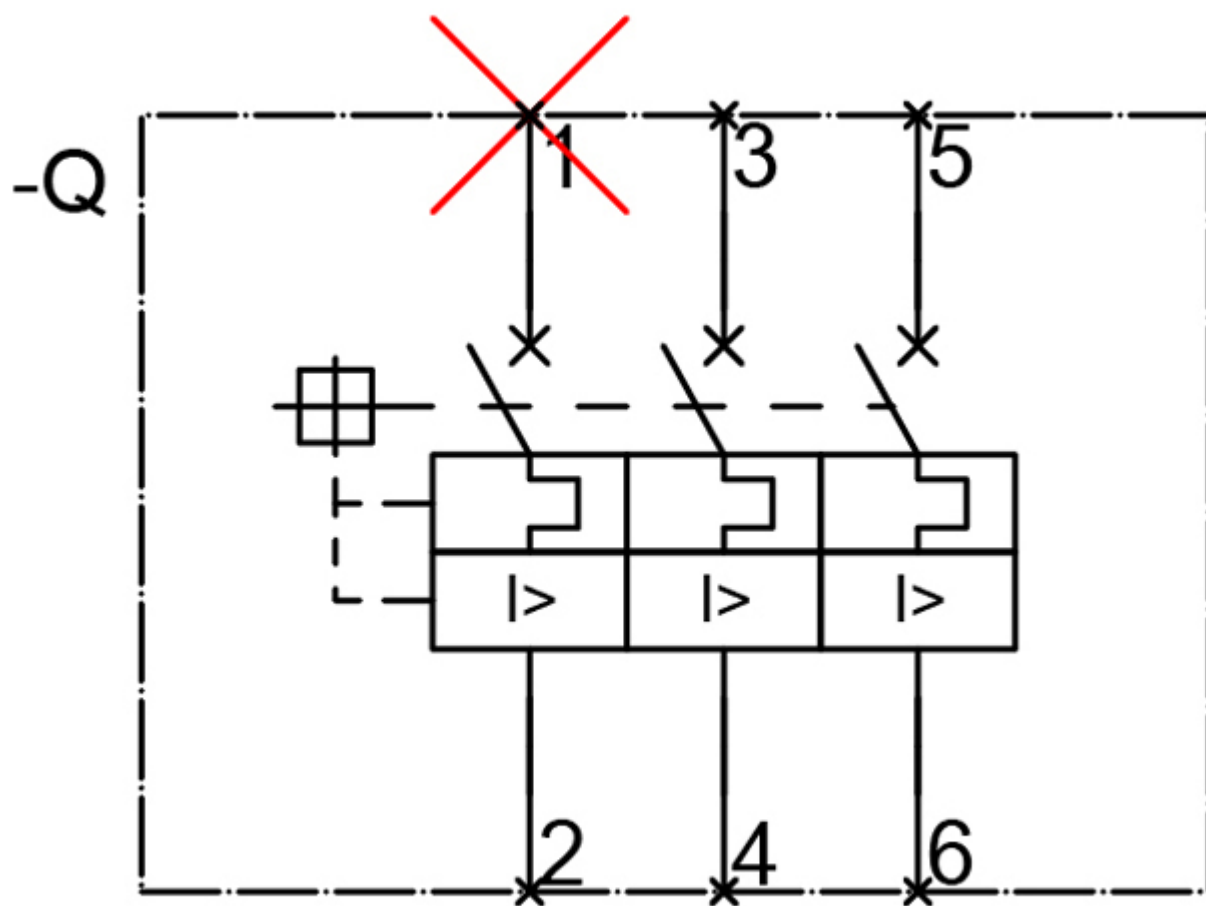
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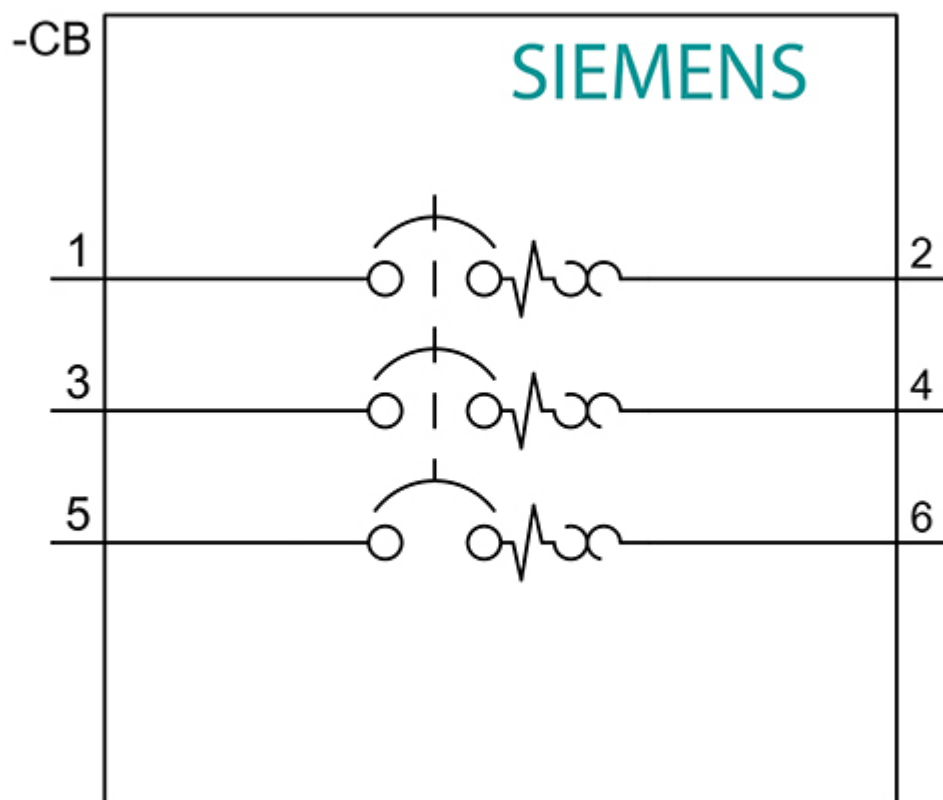
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5220-5EC31-1AA0

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

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