SIEMENS

Data sheet

3VA5225-6ED31-1AA0



circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480V 3-pole, line protection TM210, FTFM, In=250A overload protection Ir=250A fixed short-circuit protection Ii=10 x In UL 489 SB (naval), 50 °C without connection

product brand name SENTRON product designation Molded-case circuit breaker product designation / according to UL file HFAM design of the product System protection design of the product factor or the load switch / according to UL 489 / Heating, Air Conditioning, and Refingerator (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the overcurrent release Ll number of poles 3 General tochnical data Operating voltage / at AC / rated value operating voltage / at AC / rated value 690 V power loss [W] / naminum 58 W power loss [W] / for rated value of the current / at AC / in hot operating voltage / at AC / rated value of the current / at AC / in bot operating cycles / at AC / rat a80/415 V 8 000 electrical endurance (operating cycles / typical 20 000 0 electrical endurance (operating cycles / at AC / at a80/415 V 8 000 0 electrical endurance (operating cycles / at	Model	
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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 load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No general technical data 0 operating voltage / at AC / rated value 690 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 98 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / at AC-1 / at 80/V1 8 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at 60 V 4 000 product find the oricin No / south findurance (o	product designation	Molded-case circuit breaker
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Conditioning, and Refrigeration circuit breaker (HACR Type) No design of the load switch / according to UL 489 / Switching Duty No design of the load switch / according to UL 489 / Switching Duty No design of the load switch / according to UL 489 / Switching Duty No design of the load switch / according to UL 489 / Switching Duty No design of the load switch / according to UL 489 / Switching Duty No design of the load switch / according to UL 489 / Switching Duty No general trechnical data TM210 protection function of the overcurrent release Ll number of poles 3 General technical data Operating voltage / at AC / rated value operating voltage / at AC / rated value of the current / at AC / in hot operating state / per pole 19.33 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC 0 V 4 000 electrical endurance (operating cycles) / at A00 V 4 000 electrical endurance (operating cycles) / at A00 V 4 000 ground-fault monitoring version without product fauture / for neutral conductors / upgradab	design of the product	System protection
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protection function of the overcurrent release Ll number of poles 3 General technical data		No
number of poles 3 General technical data operating voltage / at AC / rated value 690 V power loss [W] / maximum 58 W power loss [W] / for rated value of the current / at AC / in hot 19.33 W operating state / per pole 19.33 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof No ground-fault monitoring version without product function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 250 A 250 A	design of the overcurrent release	TM210
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power loss [W] / maximum 58 W power loss [W] / for rated value of the current / at AC / in hot 19.33 W operating state / per pole 20 000 mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operating cycles °C 250 A 250 A • at 45 °C 250 A 250 A	General technical data	
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electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2 kg Current No • at 40 °C 250 A • at 45 °C 250 A		19.33 W
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electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current 250 A • at 40 °C 250 A	electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof No ground-fault monitoring version without product function ocmmunication function • communication function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker operational current 250 A • at 40 °C 250 A	electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2 kg Current Mo • at 40 °C 250 A • at 45 °C 250 A	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 250 A • at 45 °C 250 A	electrical endurance (operating cycles) / at 600 V	4 000
product functionNo• communication functionNo• other measurement functionNoNet Weight2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current• at 40 °C250 A• at 45 °C250 A		No
• communication functionNo• other measurement functionNoNet Weight2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentImage: Colspan="2">Image: Colspan="2" Image:	ground-fault monitoring version	without
• other measurement functionNoNet Weight2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current	product function	
Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current at 40 °C • at 40 °C 250 A • at 45 °C 250 A	 communication function 	No
Current marking / according to UL 489 / 100%-rated breaker No operational current 250 A • at 40 °C 250 A • at 45 °C 250 A	other measurement function	No
marking / according to UL 489 / 100%-rated breaker No operational current	Net Weight	2 kg
operational current 250 A • at 40 °C 250 A • at 45 °C 250 A	Current	
• at 40 °C 250 A • at 45 °C 250 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C 250 A	operational current	
	• at 40 °C	250 A
• at 50 °C 250 A	• at 45 °C	250 A
	• at 50 °C	250 A
• at 55 °C 241 A	● at 55 °C	241 A
• at 60 °C 233 A	• at 60 °C	233 A
• at 65 °C 225 A	● at 65 °C	225 A
• at 70 °C 216 A	● at 70 °C	216 A

Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
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	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	25 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	250 A
• maximum	250 A
adjustable response value delay time (tr) / for L-tripping / with l2t characteristic	
• minimum	1 s
• maximum	1s
adjustable response value setting current (li) / for I-tripping	
• minimum	2 500 A
• maximum	2 500 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of the current- dependent overload release	250 250 A
product function / grounding protection	No
lechanical Design	
product component	
undervoltage release	No
voltage trigger	No
trip indicator	No 7.28 in
height [in]	185 mm
height 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	
number of CO contacts / for auxiliary contacts	0
	0
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	-25 °C
 during operation / minimum during operation / maximum 	-25 C 70 °C
during operation / maximum during storage / minimum	-40 °C
during storage / maximum	-40 °C
Certificates	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	

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Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3VA5225-6ED31-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-6ED31-1AA0

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

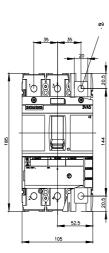
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-6ED31-1AA0

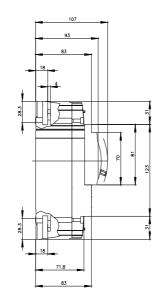
CAx-Online-Generator

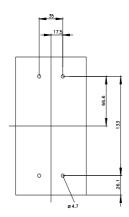
http://www.siemens.com/cax

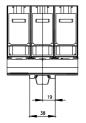
Tender specifications

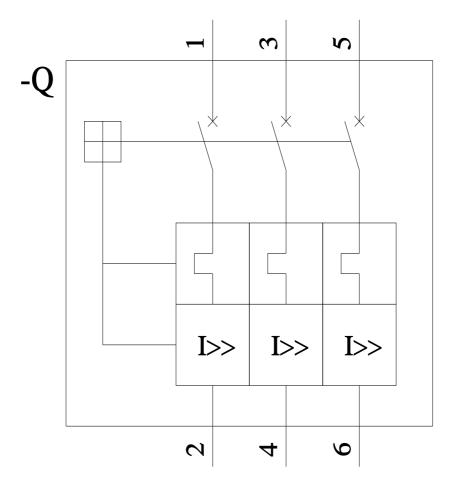
http://www.siemens.com/specifications

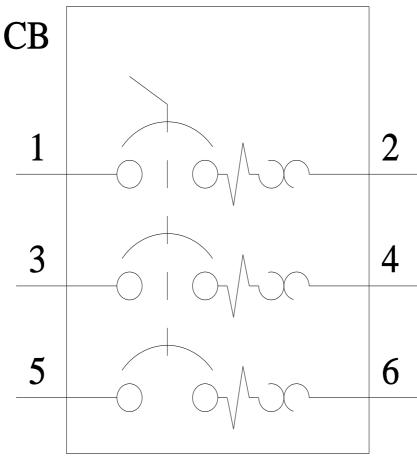












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