## **Data sheet**



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480V 4-pole, line protection TM210, FTFM, In=150A overload protection Ir=150A fixed short-circuit protection Ii=10 x In N conductor protection 100% without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CFAS
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 overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	1 000 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	30 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	9.97 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-1 / at 690 V	4 000
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 / short-circuit and overload proof	No
ground-fault monitoring version	without
product function	
• communication function	No
other measurement function	No
Net Weight	2.7 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	150 A
• at 45 °C	146 A
• at 50 °C	141 A
• at 55 °C	137 A
• at 60 °C	132 A
● at 65 °C	128 A

Switching capacity according to IEC 6947 withing capacity class of the circuit breaker maximum after-circuit current breaking capacity (ics)  • 240 V • 64 45 V • 68 000 V 9 certains paint-circuit current breaking capacity (ics)  • 240 V • 64 145 V • 68 000 V 9 certains paint-circuit current breaking capacity (ics)  • 12 40 V • 14 145 V • 68 000 V 9 certains paint-circuit current breaking capacity (ics)  • 12 40 V • 14 145 V • 18 000 V 10 kA  • 18 000 V 10 kA  • 18 15 VA • 18 000 V 10 kA  • 18 16 VA •	● at 70 °C	123 A
switching capacity class of the crount breaking capacity (cu)  at 240 V  at 415 V  at 660 V  operating short circular unrent breaking capacity (cu)  at 415 W  at 415		
maximum short-orout current breaking capacity (lou)  • 12 40 V  • 16 415 V  • 16 600 V  • 12 400 V  • 12 400 V  • 14 15 V  • 16 100 V  • 11 15 V  • 16 100 V  • 11 15 V  • 16 100 V  • 11 15 V  • 16 100 V  • 12 40 V  • 16 15 V  • 16		С
eat 440 V		
eat 415 V   at 890 V   10 kA		200 kA
operating short circuit current breaking capacity (ics)  • at 240 V • at 415 V • at 690 V • at 440 V • at 690		
e at 240 V e 14 15 V e 16 90 V 10 kA  short-frout current making capacity (fcm) e 24 240 V e 34 15 V e 18 150 V 17 KA  design of short-circuit protection  beginner device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Support in the last breaker device manual; link to be found under Service & Suport in		
e at 415 V 9 at 690 V 10 kA  short-circuit current making capacity (icm)  e at 240 V 440 kA  at 415 V 187 kA  e at 450 V 17 kA  design of short-circuit protection  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  which in a 240 V 200 kA  e at 240 V 200 kA  e at 240 V 35 kA  Adjustable parameters  adjustable response value setting current (iri / of the L-trip / with 12t characteristic  e minimum  maximum  maximum  adjustable response value setting current (iii / for I-tripping / with 12t characteristic  e minimum  maximum  150 A  e minimum  maximum  150 A  adjustable setting current (iii) / for I-tripping  e minimum  maximum  150 A  adjustable setting current (iii) / for I-tripping  e minimum  maximum  150 A  adjustable setting current (iii) / for I-tripping  e minimum  maximum  150 A  150 A  150 A  150 A  40	operating short-circuit current breaking capacity (lcs)	
e at 650 V short-circuit current making capacity (Icm) e at 240 V e at 415 V 187 kA 18	• at 240 V	200 kA
short-circuit current making capacity (tcm)  all 240 V  all 415 V  at 1800 V  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  all 240 V  at 480 V  at 800 V  at 8	• at 415 V	85 kA
e at 240 V e at 415 V e at 415 V e at 690 V 17 kA design of short-circuit protection  Switching capacity according to UL 489  current breaking capacity e at 240 V e at 480 V e at 580 E  Adjustable response value setting current (itr) of the L-trip / with 12 characteristic e minimum e maximum e max	• at 690 V	10 kA
e at 415 V 17 kA 1	short-circuit current making capacity (Icm)	
e at 890 V 17 kA  design of short-circuit protection	• at 240 V	440 kA
design of short-circuit protection  For switching power values in DC networks, see the 3VA molded case circuit breaking capacity  at 240 V  at 240 V  at 480 V  at 800 V  at 800 V  Adjustable response value setting current (ii') / of the L-tirp / with 12t characteristic  maximum  maximum  maximum  1 s  maximum  1 s  maximum  1 s  maximum  1 s  maximum  1 so A  m	• at 415 V	187 kA
breaker device manual; link to be found under Service & Support in the last chapter  Switching capacity according to UL 489  current breaking capacity	• at 690 V	17 kA
Switching capacity according to UL 489  current breaking capacity	design of short-circuit protection	breaker device manual; link to be found under Service & Support in the last
current breaking capacity  at 240 V  at 480 V  at 480 V  at 600 V  35 kA  Adjustabile parameters  adjustable response value setting current (in) / of the L-trip / with 12 characteristic  minimum  maximum  maximum  150 A  adjustable response value delay time (tr) / for L-tripping / with 12 characteristic  minimum  maximum  1 s  maximum  1 s  adjustable response value setting current (ii) / for I-tripping / with 12 characteristic  minimum  1 s  maximum  1 s  adjustable response value setting current (ii) / for I-tripping  minimum  1 s  maximum  1 500 A  adjustable response value setting current (iii) / for I-tripping  minimum  1 50 A  adjustable setting current (inN) / for N-tripping  minimum  150 A  maximum  150 A  adjustable current response value current / of the current  150 150 A  design of the N-conductor protection  product function / grounding protection  No  Mechanical Design  product component  undervoltage release voltage friger  No vol	Switching capacity according to UL 489	
at 240 V at 800 V 3 to 800 V 3 s kA  Adjustable response value setting current (ir) / of the L-trip / with IZt characteristic minimum smaximum 150 A maximum 150 A maximum 1 s adjustable response value delay time (tr) / for L-tripping / with IZt characteristic minimum smaximum 1 s adjustable response value setting current (ii) / for I-tripping / with IZt characteristic minimum smaximum 1 s adjustable seponse value setting current (iii) / for I-tripping minimum maximum 1 s0 A adjustable setting current (inN) / for N-tripping minimum 1 s0 A adjustable setting current (inN) / for N-tripping minimum 150 A adjustable setting current (inN) / for N-tripping minimum 150 A adjustable current response value current / of the current-dependent overload release design of the N-conductor protection No Mechanical Design product function / grounding protection No Mechanical Design product component undervoltage release voltage friger No voltage frige		
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Adjustable parameters  adjustable response value setting current (ir) / of the L-trip / with 12t characteristic  e minimum  maximum  adjustable response value delay time (tr) / for L-tripping / with 12t characteristic  e minimum  maximum  1 s  maximum  1 s  adjustable response value delay time (tr) / for L-tripping / with 12t characteristic  minimum  maximum  1 s  adjustable response value setting current (ii) / for I-tripping  minimum  maximum  1 500 A  adjustable setting current (inN) / for N-tripping  minimum  maximum  1 500 A  adjustable setting current (inN) / for N-tripping  minimum  maximum  1 50 A  adjustable current response value current / of the current-dependent overfoad release  design of the N-conductor protection  product function of grounding protection  No  No  No  No  No  No  No  No  No	• at 480 V	100 kA
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12t characteristic   minimum	Adjustable parameters	
■ maximum     adjustable response value delay time (tr) / for L-tripping / with I2t characteristic     ■ minimum     ■ minimum		
adjustable response value delay time (tr) / for L-tripping / with 12t characteristic  • minimum • maximum 1 s  adjustable response value setting current (ii) / for I-tripping • minimum • maximum 1 1500 A  • maximum 1 1500 A  adjustable setting current (inN) / for N-tripping • minimum • maximum 1 1500 A  adjustable setting current (inN) / for N-tripping • minimum • maximum 1 150 A  adjustable current response value current / of the current-dependent overload release design of the N-conductor protection 100% product function / grounding protection No  Mechanical Design  product component • undervoltage release • voltage trigger • trip indicator • beight [in] 7 28 in height 185 mm width [in] 5.51 in width 140 mm depth [in] 3.27 in depth 83 mm  Connections arrangement of electrical connectors / for main current circuit Without connection 100% Without connection	• minimum	150 A
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maximum adjustable setting current (InN) / for N-tripping minimum modified parameters (InN) / for N-tripping maximum adjustable current response value current / of the current-dependent overload release design of the N-conductor protection product function / grounding protection No  Mechanical Design  product component undervoltage release voltage trigger trip indicator height [In] height [In] height [In]  width 140 mm depth [In] depth 3.27 in depth 83 mm  Connections arrangement of electrical connectors / for main current circuit type of electrical connector / for main current circuit Mithout Auxillary circuit number of CO contacts / for auxiliary contacts  O Accessories product extension / optional / motor drive Yes Environmental conditions		
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product function / grounding protection  Mechanical Design  product component  • undervoltage release • voltage trigger • No • trip indicator No height [in] height ini height i	dependent overload release	
Product component  • undervoltage release • voltage trigger • voltage trigger • trip indicator height [in] height height in] height in] height in]  No  **Trip indicator height height height  **Trip indicator height heig	· ·	
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voltage trigger     trip indicator     No height [in] height		No
in trip indicator     height [in]     height	-	
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type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  Without  Without  Yes		Without connection
Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions		
number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  0  Yes		
Accessories  product extension / optional / motor drive  Environmental conditions  Yes		0
product extension / optional / motor drive Yes Environmental conditions		
	product extension / optional / motor drive	Yes
protection class IP / on the front IP40	Environmental conditions	
	protection class IP / on the front	IP40

ambient temperature

• during operation / minimum

• during operation / maximum

70 °C

• during storage / minimum

• during storage / maximum

80 °C

Certificates

reference code / according to IEC 81346-2

Q

General Product Approval

Confirmation







**Miscellaneous** 



EMC Declaration of Conformity

Marine / Shipping

other









<u>Confirmation</u> <u>Miscellaneous</u>

other

**Miscellaneous** 

## 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=3VA5215-7GD41-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5215-7GD41-0AA0

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

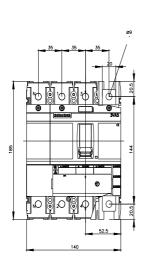
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5215-7GD41-0AA0

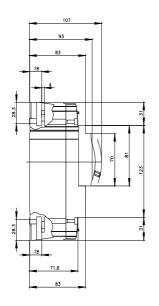
**CAx-Online-Generator** 

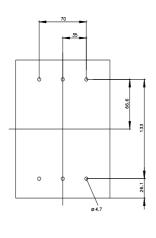
http://www.siemens.com/cax

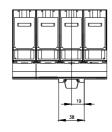
Tender specifications

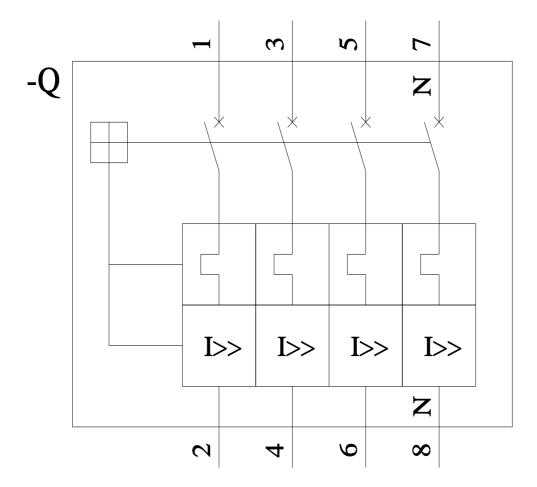
http://www.siemens.com/specifications

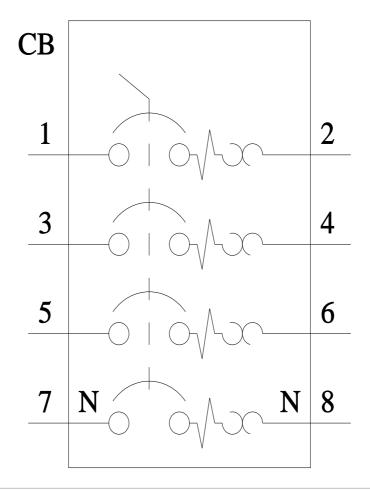












last modified: 7/15/2022 🖸



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3VA52157GD410AA0