## **Data sheet**



circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480V 4-pole, line protection TM240, ATAM, In=200A overload protection Ir=160A...200A short-circuit protection Ii=5...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	HFAS
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	TM240
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	43 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	14.17 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	2.55 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	200 A
● 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	Н
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 690 V	10 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 690 V	10 kA
short-circuit current making capacity (Icm)	
• at 240 V	220 kA
● at 415 V	154 kA
• at 690 V	17 kA
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 $\mbox{\sc l2t}$ characteristic	
• minimum	160 A
• maximum	200 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1s
maximum  adjustable response value setting current (li) / for I tripping	1 s
adjustable response value setting current (li) / for I-tripping  • minimum	1 000 A
minimum     maximum	2 000 A
adjustable setting current (InN) / for N-tripping	2 000 /1
minimum	200 A
maximum	200 A
adjustable current response value current / of the current- dependent overload release	140 200 A
design of the N-conductor protection	100%
product function / grounding protection	No
Mechanical Design	
product component	
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>voltage trigger</li> </ul>	No
• trip indicator	No
height [in]	7.28 in
height	185 mm
width [in]	5.51 in
width	140 mm
depth [in]	3.27 in
depth	83 mm
Connections	Without connection
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	0
number of CO contacts / for auxiliary contacts	0
Accessories	Yes
product extension / optional / motor drive Environmental conditions	169
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 / according to IEC 81346-2

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**General Product Approval** 



Confirmation





<u>Miscellaneous</u>



**EMC** 

**Declaration of Conformity** 















Marine / Shipping

other



Confirmation

**Miscellaneous** 

**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=3VA5220-6GF41-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5220-6GF41-0AA0

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

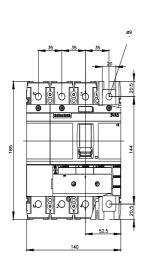
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5220-6GF41-0AA0

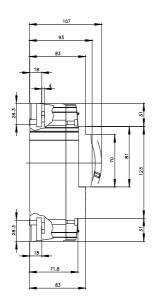
**CAx-Online-Generator** 

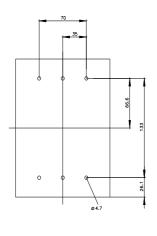
http://www.siemens.com/cax

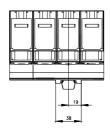
Tender specifications

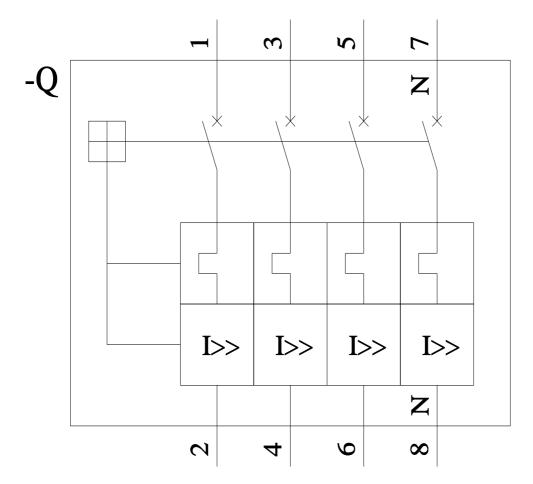
http://www.siemens.com/specifications

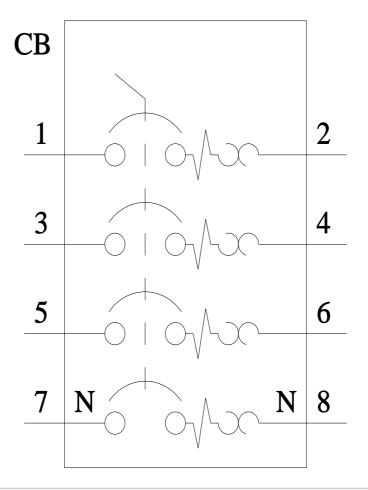












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