



molded case switch 3VA5 UL frame 250 max. sh-circ breaking capacity 65kA @ 480V 3-pole, line protection MCS110, In=250A without overload protection self-protection Ii=10 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HFAS
design of the product	Molded case switch
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	MCS110
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	54.4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	18.13 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/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	without
product function	
• 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	244 A
• at 50 °C	239 A
• at 55 °C	233 A
• at 60 °C	227 A
• at 65 °C	222 A

- at 70 °C

216 A

**Switching capacity according to IEC 60947**

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

**Adjustable parameters**

adjustable response value setting current (Ii) / for I-tripping

- minimum
- maximum

2 500 A  
2 500 A

adjustable setting current (InN) / for N-tripping

- minimum
- maximum

0 A  
0 A

product function / grounding protection

No

**Mechanical Design**

product component

- undervoltage release
- voltage trigger
- trip indicator

No  
No  
No

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**

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
- during operation / maximum
- during storage / minimum
- during storage / maximum

-25 °C  
70 °C  
-40 °C  
80 °C

reference code / according to IEC 81346-2

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**Approvals / Certificates**

**General Product Approval**



[Confirmation](#)



**General Product Approval**

**EMV**

**Marine / Shipping**

**other**



[Miscellaneous](#)



[Confirmation](#)

**other**

[Miscellaneous](#)

[Miscellaneous](#)

## Further information

### 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=3VA5225-0BB31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-0BB31-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5225-0BB31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-0BB31-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





