



molded case switch 3VA5 UL frame 125 max. sh-circ breaking capacity 65kA @ 480V 3-pole, line protection MCS110, $I_n=100A$ without overload protection self-protection $I_i=16 \times I_n$ without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAS
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	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	19.2 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	6.4 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
product function	
• communication function	No
• other measurement function	No
Net Weight	950 g
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A

• at 65 °C • at 70 °C	97 A			
	94 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	1 600 A 1 600 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]	5.51 in			
height	140 mm			
width [in]	3 in			
width	76.2 mm			
depth [in]	3.01 in			
depth	76.5 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	Q			
Approvals / Certificates				
General Product Approval				
 CCC  EG-Konf.  Confirmation  CCC  UL				
General Product Approval				
 UL  VDE KC Miscellaneous  				
EMV	Test Certificates	Maritime application	other	Environment



[Special Test Certificate](#)



[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5110-1BB31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-1BB31-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-1BB31-0AA0

CAX-Online-Generator

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

Tender specifications

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





