



molded case switch 3VA5 UL frame 125 max. sh-circ breaking capacity 65kA @ 480V 2-pole, line protection MCS110, In=100A without overload protection self-protection li=16 x In without connection

Model	
product brand name	SETRON
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	2
General technical data	
insulation voltage / rated value	500 V
operating voltage / at DC / rated value	250 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	12.8 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	650 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 (I_i) / for I-tripping

- minimum
- maximum

1 600 A
1 600 A

adjustable setting current (I_{nN}) / 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]

2 in

width

50.8 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

No

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



[Miscellaneous](#)



Test Certificates

Maritime application

other

Environment



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=3VA5110-1BB21-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-1BB21-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-1BB21-0AA0

CAX-Online-Generator

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

Tender specifications

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

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>





