



circuit breaker 3VA5 UL frame 125 breaking capacity class H 65kA @ 480 V 3-pole, line protection TM230, FTAM, In=100A overload protection Ir=100A fixed short-circuit protection Ii=5...10 x In cable connection on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAS
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	TM230
protection function of the overcurrent release	LI
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	22.8 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	7.6 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	1.034 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	100 A
• at 45 °C	98 A
• at 50 °C	95 A
• at 55 °C	93 A
• at 60 °C	91 A
• at 65 °C	89 A

<ul style="list-style-type: none"> at 70 °C 	87 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I _{cu}) <ul style="list-style-type: none"> at 240 V at 415 V at 690 V 	150 kA 70 kA 10 kA
operating short-circuit current breaking capacity (I _{cs}) <ul style="list-style-type: none"> at 240 V at 415 V at 690 V 	150 kA 70 kA 5 kA
short-circuit current making capacity (I _{cm}) <ul style="list-style-type: none"> at 240 V at 415 V at 690 V 	330 kA 154 kA 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 <ul style="list-style-type: none"> at 240 V at 480 V at 600 Y/347 V 	150 kA 65 kA 25 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I ² t characteristic <ul style="list-style-type: none"> minimum maximum 	100 A 100 A
adjustable response value delay time (t _r) / for L-tripping / with I ² t characteristic <ul style="list-style-type: none"> minimum maximum 	1 s 1 s
adjustable response value setting current (I _i) / for I-tripping <ul style="list-style-type: none"> minimum maximum 	500 A 1 000 A
adjustable setting current (I _{nN}) / for N-tripping <ul style="list-style-type: none"> minimum maximum 	0 A 0 A
product function / grounding protection	No
Mechanical Design	
product component <ul style="list-style-type: none"> undervoltage release voltage trigger trip indicator 	No No No
height [in]	5.51 in
height	140 mm
width [in]	3 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (8 AWG - 3/0)
width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides
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



EG-Konf.



CCC



[Confirmation](#)



UL



UL

General Product Approval

EMV

Test Certificates

Marine / Shipping



VDE

[Miscellaneous](#)



RCM

[Special Test Certificate](#)



ABS

Marine / Shipping

other



RMRS

[Miscellaneous](#)

[Confirmation](#)

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=3VA5110-6EC36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-6EC36-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-6EC36-0AA0

CAX-Online-Generator

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

Tender specifications

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