



circuit breaker 3VA5 UL frame 800 breaking capacity class C 100kA @ 480 V 4-pole, line protection TM230, FTAM, In=800A overload protection Ir=800A fixed short circuit protection Ii=5...10 x In neutral protection 1 Al-lug, line and load side

Model	
product designation / according to UL file	CMAS
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	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	210 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	70 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 800
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	5 800
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	21.916 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	800 A
• at 45 °C	783 A
• at 50 °C	766 A
• at 55 °C	750 A
• at 60 °C	733 A
• at 65 °C	716 A
• at 70 °C	699 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	

• at 240 V • at 415 V • at 690 V	200 kA 110 kA 35 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V • at 415 V • at 690 V	150 kA 85 kA 19 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 690 V	440 kA 242 kA 73.5 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 • at 480 V • at 600 V	200 kA 100 kA 50 kA

Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum • maximum	800 A 800 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum • maximum	1 s 1 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum • maximum	4 000 A 8 000 A
adjustable absolute value setting current (I _{nN}) / for N-tripping	
• minimum • maximum	800 A 800 A
design of the N-conductor protection	100%
product function / grounding protection	No

Mechanical Design

product component	
• undervoltage release • voltage trigger • trip indicator	No No No
height [in]	12.91 in
height	328 mm
width [in]	11.02 in
width	280 mm
depth [in]	4.72 in
depth	120 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
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	No
manufacturer's article number	
• of the supplied basic switch	3VA55807GC462AA0

Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum	-25 °C

- 70 °C
-40 °C
80 °C

reference code / according to IEC 81346-2	Q	
General Product Approval		Declaration of Conformity



EAC



other



Miscellaneous

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=3VA5580-7GC46-2AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3VA5580-7GC46-2AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5580-7GC46-2AA0

CAX-Online-Generator
<http://www.siemens.com/cax>

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





