



circuit breaker 3VA5 UL frame 800 breaking capacity class M 35kA @ 480 V 4-pole, line protection TM230, FTAM, In=700A overload protection Ir=700A 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	MMAS
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	183 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	61 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 800
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 300
electrical endurance (operating cycles) / at 480 V	4 800
electrical endurance (operating cycles) / at 600 V	3 300
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
product function	
• communication function	No
• other measurement function	No
Net Weight	18.716 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	700 A
• at 45 °C	680 A
• at 50 °C	659 A
• at 55 °C	639 A
• at 60 °C	619 A
• at 65 °C	599 A
• at 70 °C	578 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (Icu)	

• at 240 V • at 415 V • at 690 V	85 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V • at 415 V • at 690 V	85 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 690 V	187 kA
design of short-circuit protection	121 kA
	52.5 kA
	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	85 kA
	35 kA
	18 kA

Adjustable parameters

adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum • maximum	700 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum • maximum	1 s
adjustable response value setting current (Ii) / for I-tripping	
• minimum • maximum	3 500 A
adjustable absolute value setting current (InN) / for N-tripping	
• minimum • maximum	7 000 A
design of the N-conductor protection	700 A
product function / grounding protection	700 A
	100%
	No

Mechanical Design

product component	
• undervoltage release • voltage trigger • trip indicator	No
height [in]	No
height	No
width [in]	12.91 in
width	328 mm
depth [in]	11.02 in
depth	280 mm
	4.72 in
	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	3VA55705GC462AA0

Environmental conditions

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

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

70 °C
-40 °C
80 °C

Certificates

reference code / according to IEC 81346-2

Q

General Product Approval

Declaration of Con-
formity

[Confirmation](#)



[Miscellaneous](#)



Test Certificates

Marine / Shipping

other

[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

[Confirmation](#)

Further information

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=3VA5570-5GC46-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5570-5GC46-2AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5570-5GC46-2AA0

CAX-Online-Generator

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

Tender specifications

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





