



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM210, FTFM, In=45A overload protection Ir=45A fixed short circuit protection Ii=10 x In Al-lug, line and deg. cel. nut keeper kit on both sides

Model	
product designation / according to UL file	MFAS
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	TM210
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	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	22 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	7.4 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	2330 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	45 A
• at 45 °C	44 A
• at 50 °C	43 A
• at 55 °C	42.1 A
• at 60 °C	41.1 A
• at 65 °C	40.1 A
• at 70 °C	39.1 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 55 kA 7 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 690 V	85 kA 55 kA 7 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 690 V	187 kA 121 kA 11.9 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	85 kA 35 kA 18 kA
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Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic • minimum • maximum	45 A 45 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	450 A 450 A
adjustable absolute value 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]	7.28 in
height	185 mm
width [in]	4.13 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (14 AWG - 1/0)
width	105 mm
depth [in]	3.27 in
depth	83 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	Yes
manufacturer's article number • of the supplied basic switch	3VA52455ED362AA0

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

Certificates

reference code / according to IEC 81346-2

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General Product Approval

Declaration of Conformity

Marine / Shipping

[Confirmation](#)



other

[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=3VA5245-5ED36-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5245-5ED36-2AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5245-5ED36-2AA0

CAX-Online-Generator

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

Tender specifications

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





