



circuit breaker 3VA5 UL Frame 250 breaking capacity class M 35 kA @ 480 V 3-pole, line protection TM210, FTFM, $I_n=50$ A overload protection $I_r=50$ A permanently set short-circuit protection $I_i=10 \times I_n$ without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MFAS
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)	Yes
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	17 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.8 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/retrofittable / short-circuit and overload proof	No
product function	
• communication function	No
• other measurement function	No
Net Weight	2 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (I_{cu})	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 240 V	85 kA

<ul style="list-style-type: none"> • at 415 V • at 690 V 	55 kA 7 kA
short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V 	85 kA 35 kA 18 kA

Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	50 A 50 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	1 s 1 s
adjustable response value setting current (I _l) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	500 A 500 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]	7.28 in
height	185 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.27 in
depth	83 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
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Accessories

product extension / optional / motor drive	Yes
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Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> • 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	Q

Approvals / Certificates

General Product Approval	
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Confirmation



General Product Approval

EMV

Marine / Shipping

other

Miscellaneous



Miscellaneous

Confirmation

other

Environment

Miscellaneous

Environmental Con-
firmations

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=3VA5250-5ED31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5250-5ED31-0AA0>

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

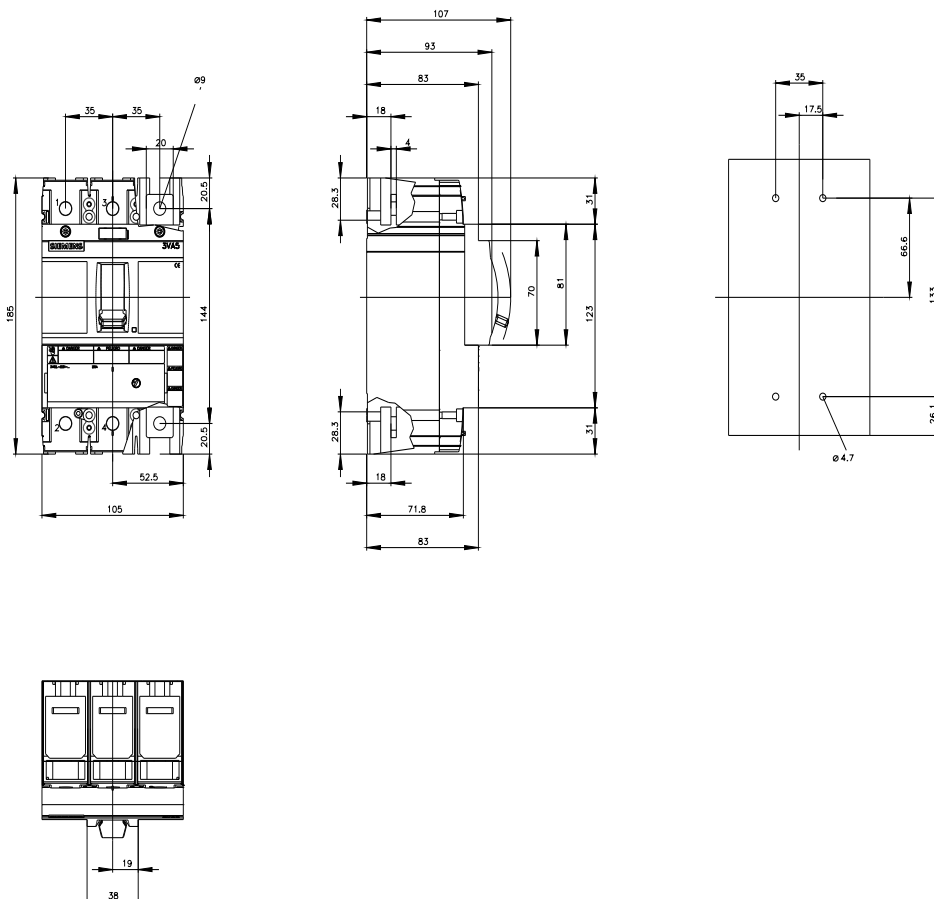
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5250-5ED31-0AA0

CAX-Online-Generator

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

Tender specifications

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





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