



circuit breaker 3VA5 UL frame 125 breaking capacity class M 35kA @ 480 V 2-pole, line protection TM210, FTFM, In=80A overload protection Ir=80A fixed short-circuit protection li=10 x In UL 489 SB (naval), 50° C without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MEAM
Product version	System protection
design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	2
General technical data	
power loss [W] / maximum	11 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	5.5 W
mechanical service life (switching cycles) / typical	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational current of the frame size	125 A
Courant permanent assigné lu	80 A
operational current	
• at 45 °C	80 A
• at 50 °C	80 A
• at 55 °C	77.7 A
• at 60 °C	76.2 A
• at 65 °C	74.8 A
• at 70 °C	73.4 A
Switching capacity according to IEC 60947	

switching capacity class of the circuit breaker	M
<b>Switching capacity according to UL 489</b>	
breaking capacity current	
• at 240 V	85 kA
• at 480 V	35 kA
• at 600 Y/347 V	18 kA
<b>Adjustable parameters</b>	
Adjustable response value current / I <sub>g</sub> min.	80 A
Adjustable response value current / I <sub>g</sub> min.	80 A
Adjustable response value current / I <sub>i</sub> min.	800 A
Adjustable response value current / I <sub>i</sub> max.	800 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No
<b>Mechanical Design</b>	
height [in]	5.5 in
Height	140 mm
width [in]	2 in
Width	50.8 mm
depth [in]	3 in
depth	76.5 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	Yes
<b>Environmental conditions</b>	
protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C
<b>Certificates</b>	
reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes

**General Product Approval**



[Miscellaneous](#)

General Product Approval	EMC	Declaration of Conformity	Test Certificates	Shipping Approval
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[Miscellaneous](#)



other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalog>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3VA5180-5ED21-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5180-5ED21-1AA0>

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

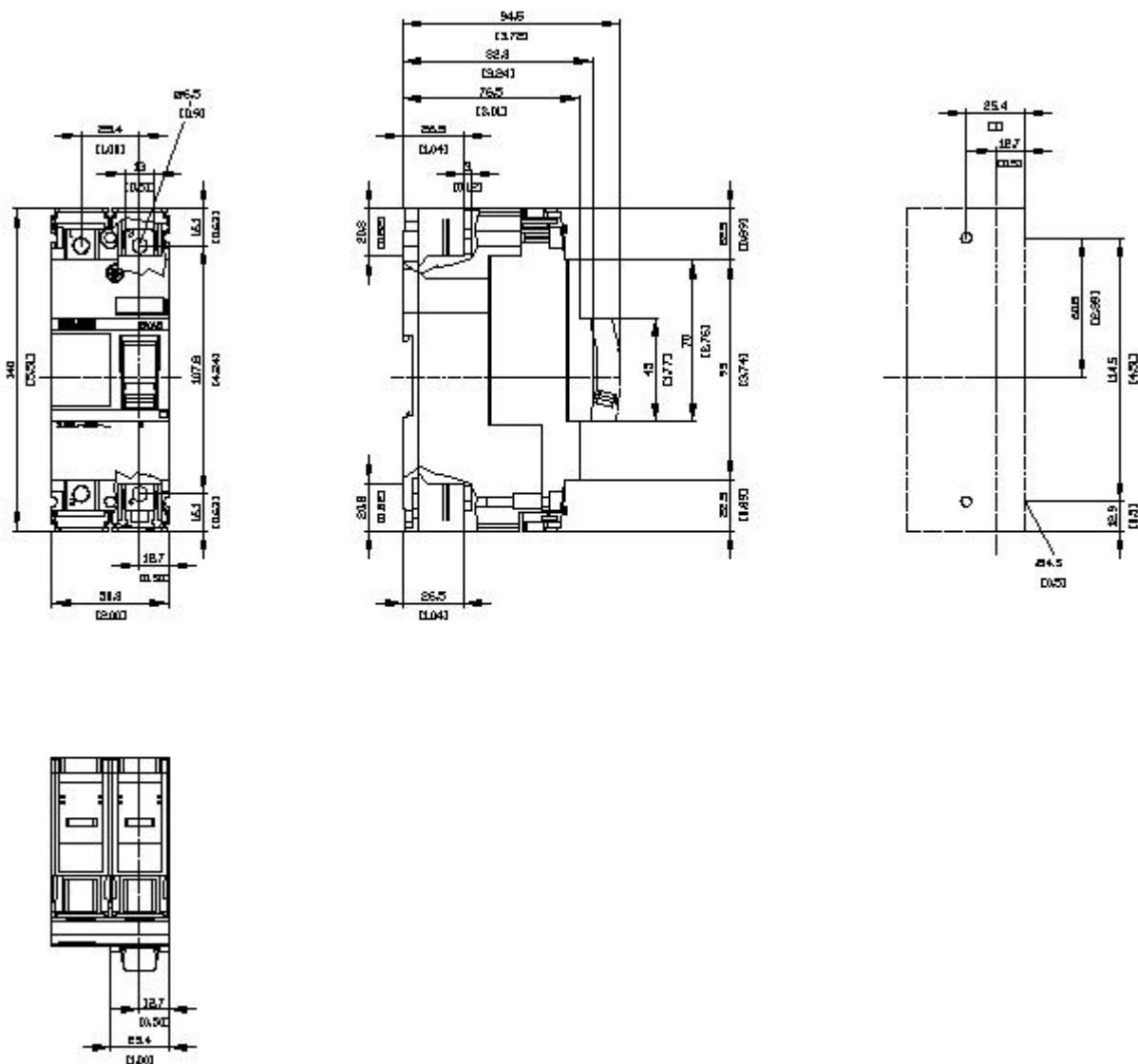
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA5180-5ED21-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5180-5ED21-1AA0)

CAX-Online-Generator

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

Tender specifications

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



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