



circuit breaker 3VA5 UL frame 800 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM230, FTAM, In=800A overload protection Ir=800A fixed short circuit protection li=5...10 x In

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MMAS
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	TM230
protection function of the overcurrent release	LI
number of poles	3
General technical data	
rated insulation voltage $U_i$	800 V
Max. rated operational voltage $U_e$ with DC	750 V
power loss [W] / maximum	210 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	70 W
mechanical service life (switching cycles) / typical	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	5 800
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	5 800
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
product function	
• communication function	No
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
operational current	
• 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	M
breaking capacity maximum short-circuit current ( $I_{cu}$ )	

<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	85 kA 55 kA 25 kA
breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	85 kA 55 kA 19 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	187 kA 121 kA 52.5 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

breaking capacity current <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	85 kA 35 kA 18 kA
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### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	800 A
Adjustable response value current / I <sub>g</sub> min.	800 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No

### Mechanical Design

height [in]	12.91 in
Height	328 mm
width [in]	8.27 in
Width	210 mm
depth [in]	4.72 in
depth	120 mm

### Connections

arrangement of electrical connectors / for main current circuit	Front connection
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 4 mm

### Auxiliary circuit

product component <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul>	No No No
number of CO contacts / for auxiliary contacts	0

### Environmental conditions

protection class IP / on the front	IP40
ambient temperature <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	-25 °C 70 °C -40 °C 80 °C

### Certificates

reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	No

### General Product Approval EMC



[Miscellaneous](#)



[UK Declaration of Conformity](#)



[Miscellaneous](#)

[Miscellaneous](#)

Further information

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=3VA5580-5EC32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5580-5EC32-0AA0>

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

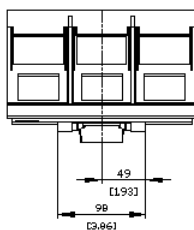
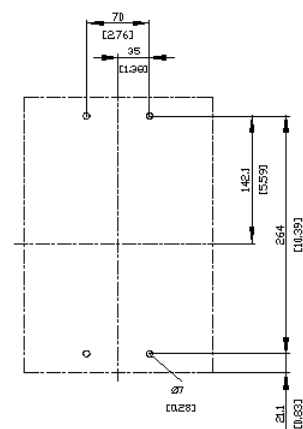
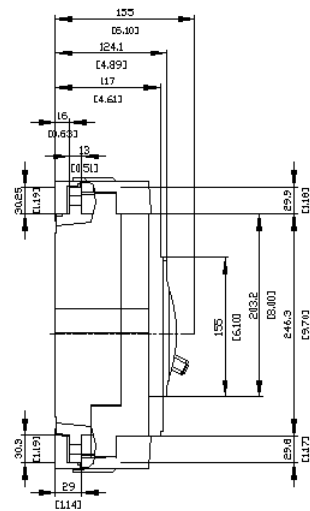
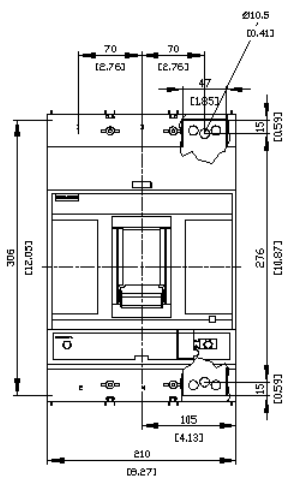
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5580-5EC32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5580-5EC32-0AA0)

CAx-Online-Generator

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

Tender specifications

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



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