

circuit breaker 3VA1 IEC frame 1000 breaking capacity class M  
 $I_{cu}=55kA @ 415V$  3-pole, line protection TM240, ATAM,  $I_n=800A$   
 overload protection  $I_r=560A...800A$  short-circuit protection  $I_i=5...10 x$   
 In nut keeper kit



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	TM240
Protective 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 AC 50/60Hz	690 V
Max. rated operational voltage $U_e$ with DC	750 V
Power loss [W] / maximum	240 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	80 W
Latching - endurance	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	5 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	1 000

Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No

### Current

Max. rated operational current of the frame size	1 000 A
Rated continuous current $I_u$	800 A
Operating current	
• at 40 °C	800 A
• at 45 °C	800 A
• at 50 °C	800 A
• at 55 °C	780 A
• at 60 °C	761 A
• at 65 °C	741 A
• at 70 °C	722 A

### 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 500 V	36 kA
• at 690 V	25 kA
Operational short-circuit current breaking capacity ( $I_{cs}$ )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 500 V	36 kA
• at 690 V	19 kA
Short-circuit current making capacity ( $I_{cm}$ )	
• at 240 V	187 kA
• at 415 V	121 kA
• at 500 V	76 kA
• at 690 V	53 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

### Adjustable parameters

Adjustable response value current / $I_r$ min.	560 A
Adjustable response value current / $I_r$ max.	800 A
Adjustable response value current / $I_i$ min.	4 000 A

Adjustable response value current / li max.	8 000 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

### Mechanical Design

Height [in]	12.6 in
Height	320 mm
Width [in]	8.3 in
Width	210 mm
Depth [in]	4.7 in
Depth	120 mm

### Connections

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

### 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	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

### Certificates

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC	Declaration of Conformity	Test Certificates	Shipping Approval
<a href="#">Miscellaneous</a> 	 RCM	 EG-Konf.	<a href="#">Miscellaneous</a>	 LRS

other	
<a href="#">Manufacturer Declaration</a>	<a href="#">Miscellaneous</a>

### 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=3VA1580-5EF32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1580-5EF32-0AA0>

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

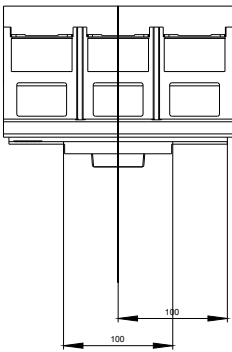
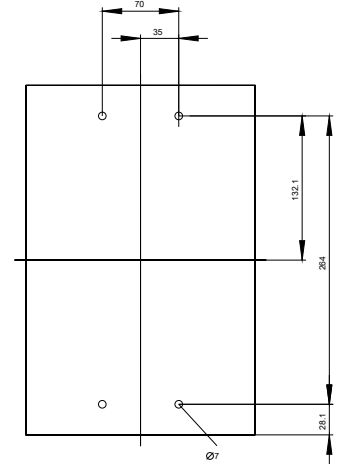
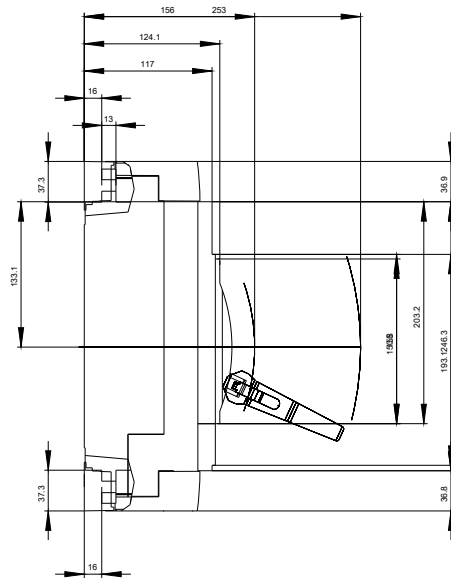
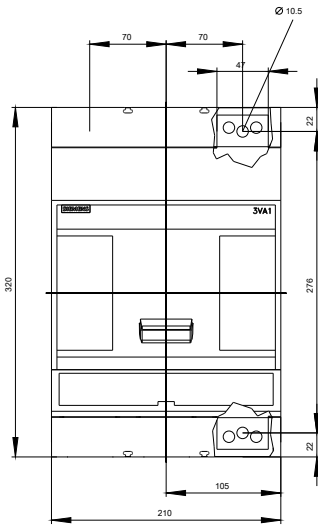
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1580-5EF32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1580-5EF32-0AA0)

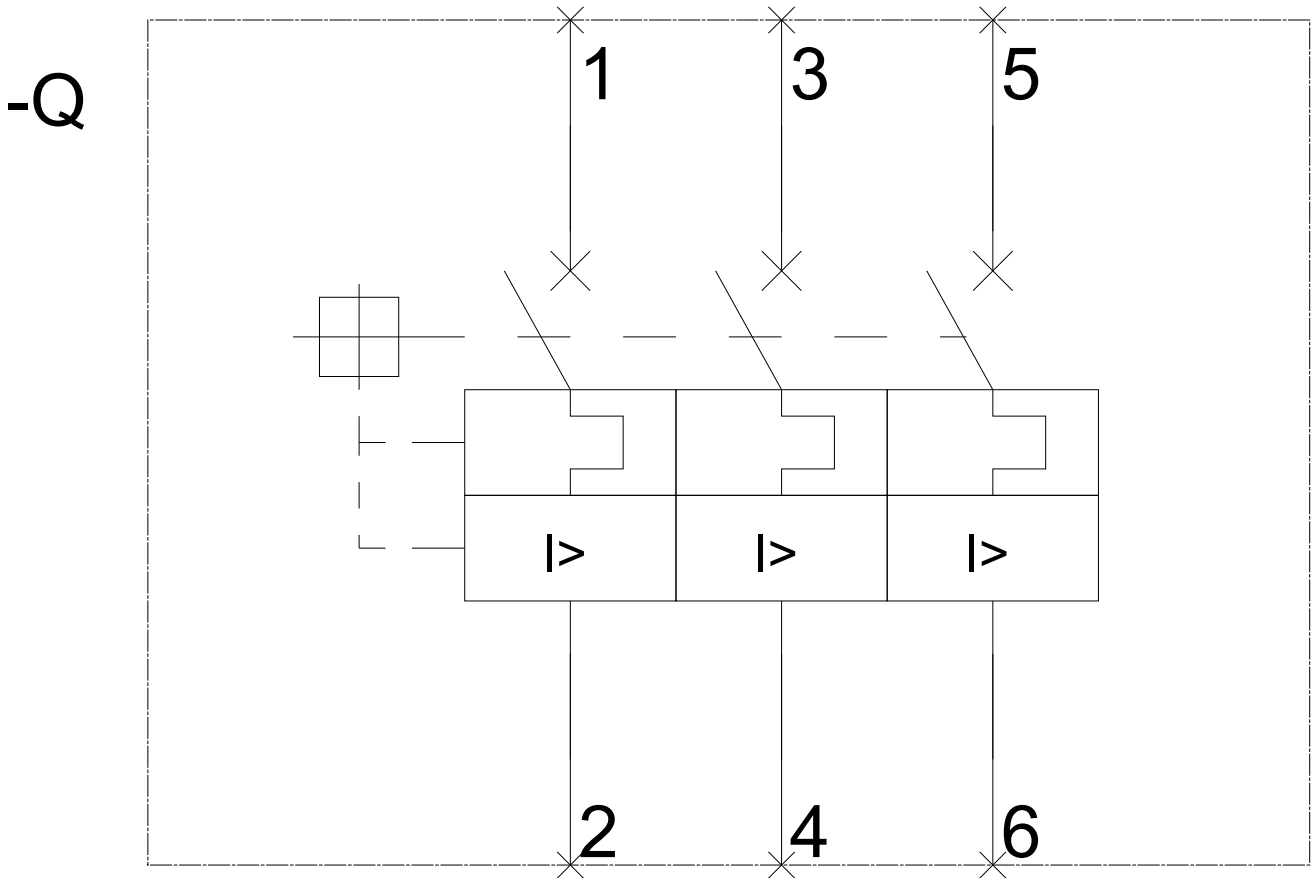
**CAX-Online-Generator**

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

**Tender specifications**

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





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