



circuit breaker 3VA5 UL Frame 800 breaking capacity class H 65 kA @ 480 V 3-pole, line protection TM230, FTAM, In=800 A overload protection Ir=800 A permanently set short-circuit protection Ii=5...10 x In cable connection on two sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HMAS
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)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM230
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	210 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	70 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 800
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	5 800
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	17.66 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	800 A
• at 45 °C	783 A
• at 50 °C	766 A
• at 55 °C	750 A
• at 60 °C	733 A

<ul style="list-style-type: none"> <li>• at 65 °C</li> <li>• at 70 °C</li> </ul>	716 A 699 A
<b>Switching capacity according to IEC 60947</b>	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I <sub>cu</sub> ) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	100 kA 70 kA 35 kA
operating short-circuit current breaking capacity (I <sub>cs</sub> ) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	100 kA 70 kA 19 kA
short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	220 kA 154 kA 73.5 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
<b>Switching capacity according to UL 489</b>	
current breaking capacity <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	100 kA 65 kA 25 kA
<b>Adjustable parameters</b>	
adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sup>2</sup> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	800 A 800 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sup>2</sup> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	1 s 1 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	4 000 A 8 000 A
adjustable setting current (I <sub>nN</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0 A 0 A
product function / grounding protection	No
<b>Mechanical Design</b>	
product component <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul>	No No No
height [in]	12.91 in
height	328 mm
width [in]	8.27 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	4 x (4/0 - 500 kcmil)
width	210 mm
depth [in]	4.72 in
depth	120 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	No

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
reference code / according to IEC 81346-2	Q

#### Approvals / Certificates

##### General Product Approval



EG-Konf.

[Confirmation](#)



UL



UL



VDE

##### General Product Approval

##### EMV

##### Test Certificates

##### Maritime application

[Miscellaneous](#)



RCM

[Type Test Certificates/Test Report](#)



ABS



BUREAU  
VERITAS

##### Maritime application

##### other

##### Environment



DNV



LRS



RMRS

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5580-6EC36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5580-6EC36-0AA0>

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

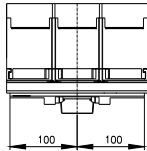
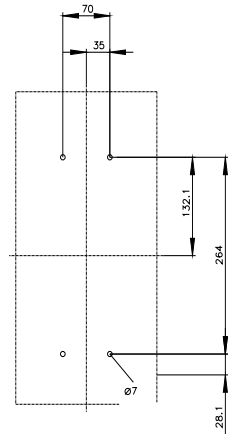
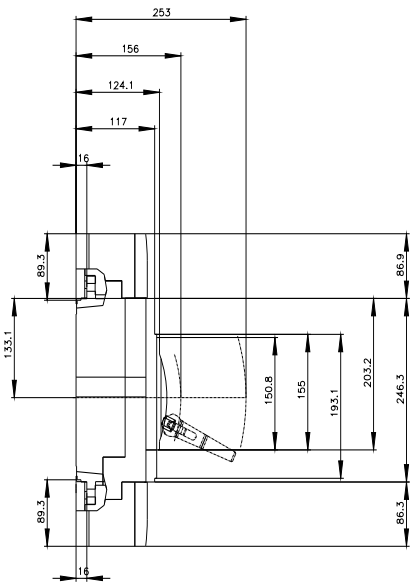
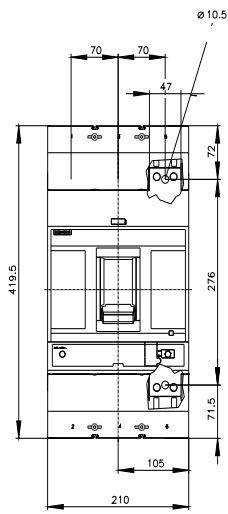
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5580-6EC36-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5580-6EC36-0AA0)

##### CAx-Online-Generator

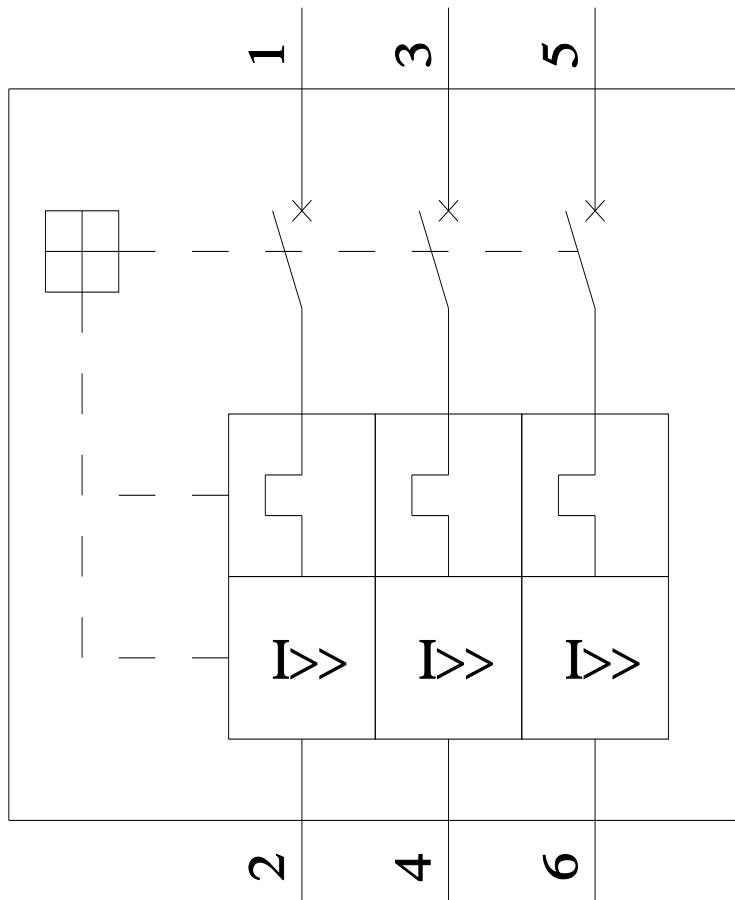
<https://www.siemens.com/cax>

##### Tender specifications

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



Q



**CB**



last modified:

3/31/2025 

