



CIRCUIT BREAKER 3VA5 UL Frame 600 3POLE, MOTOR STARTER PROTECTION TM120M, AM, In=600A WITHOUT OVERLOAD PROTECTION SHORT CIRCUIT PROTECTION  $i_i=3...6 \times I_n$  W/O CONNECTION

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HLAP
design of the product	Starter 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	TM120M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	2 700
electrical endurance (operating cycles) / at 480 V	4 000
electrical endurance (operating cycles) / at 600 V	2 700
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No
Net Weight	5.2 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	600 A
• at 45 °C	587 A
• at 50 °C	574 A
• at 55 °C	560 A
• at 60 °C	547 A
• at 65 °C	534 A
• at 70 °C	521 A
Switching capacity according to IEC 60947	
maximum short-circuit current breaking capacity (Icu)	

<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 10 kA
operating short-circuit current breaking capacity (Ics) <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 6 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>	220 kA 154 kA 17 kA

#### Adjustable parameters

adjustable response value setting current (Ii) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	1 800 A 3 600 A
adjustable setting current (InN) / 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

#### Mechanical Design

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]	9.76 in
height	248 mm
width [in]	5.43 in
width	138 mm
depth [in]	4.33 in
depth	110 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"> <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
reference code / according to IEC 81346-2	Q

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



General Product Approval	EMV	Marine / Shipping	other
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[Miscellaneous](#)



[Miscellaneous](#)

[Confirmation](#)[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?mifb=3VA5460-0MU31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5460-0MU31-0AA0>

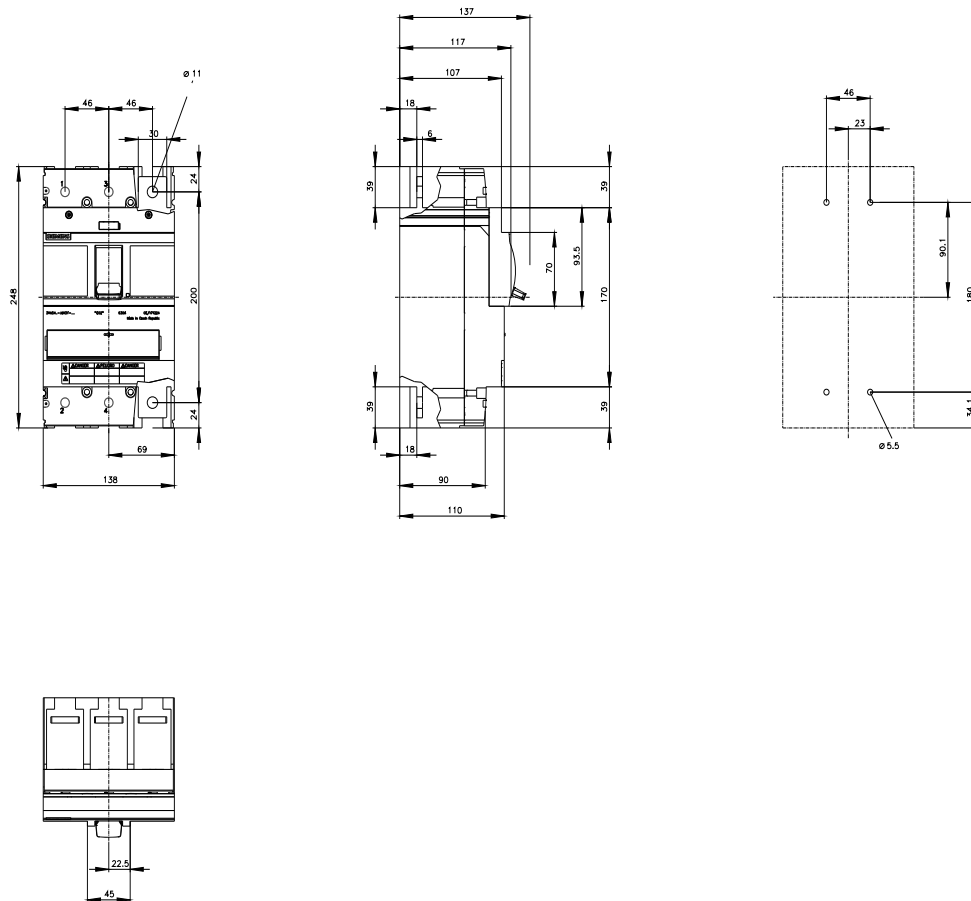
## Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

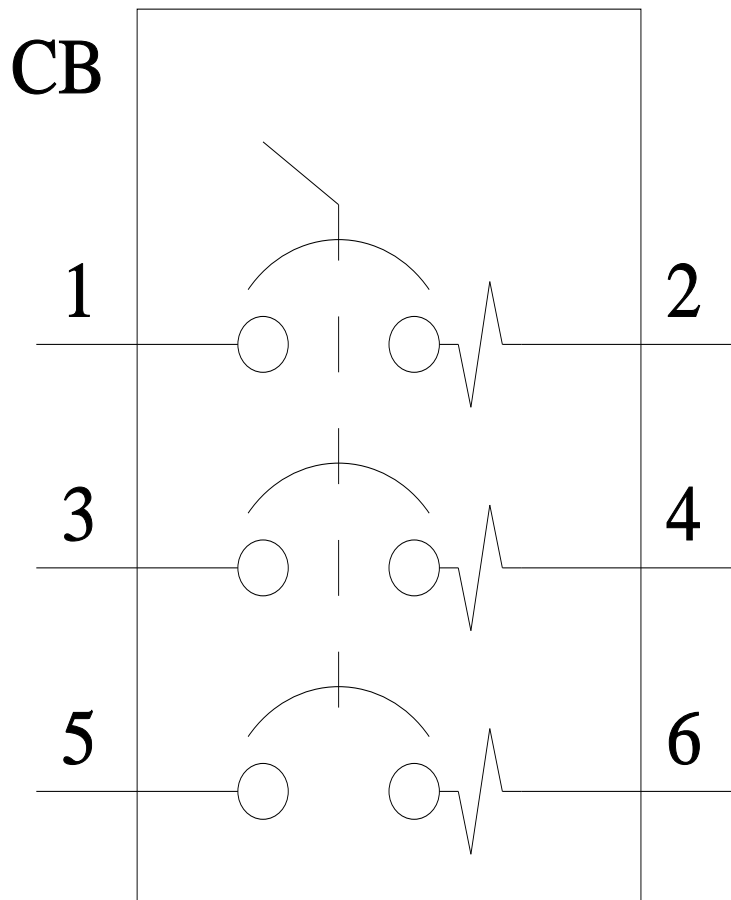
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mifb=3VA5460-0MU31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mifb=3VA5460-0MU31-0AA0)

## CAx-Online-Generator

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

## Tender specifications

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



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6/16/2022

