

circuit breaker 3VA2 IEC frame 160 breaking capacity class M  
 $I_{cu}=55kA @ 415V$  3-pole, motor protection ETU860M, LSIG,  $I_n=63A$   
 overload protection  $I_r=25A...63A$  short-circuit protection  $I_{sd}=1.2..15x$   
 $I_n$ ,  $I_i=3..15x I_n$  gr.-fault prot., can be sw. off  $I_g=0.25...1 x I_n$ ,  $t_g=0.05-0.8s$  clamp connection



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Motor protection
Design of the overcurrent release	ETU860M
Protective function of the overcurrent release	LSIG
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
Operating power / at AC-3 / at 400 V	30 000 W
Operating power / at AC-3 / at 230 V	18 500 W
Power loss [W] / maximum	10 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.33 W
Latching - endurance	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000

Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz	7 500
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Summation current formation L-conductor
Product function	
• communication function	Yes
• Phase failure detection	Yes
• other measurement function	Yes
Net weight	2.4 kg

### Current

Max. rated operational current of the frame size	160 A
Rated continuous current I <sub>u</sub>	63 A
Operating current	
• at 40 °C	63 A
• at 45 °C	63 A
• at 50 °C	63 A
• at 55 °C	63 A
• at 60 °C	63 A
• at 65 °C	63 A
• at 70 °C	63 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Operational short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	76 kA

• at 690 V

3.8 kA

### Adjustable parameters

Adjustable response value current / I <sub>r</sub> min.	25 A
Adjustable response value current / I <sub>r</sub> max.	63 A
Adjustable response value time / t <sub>r</sub> min.	3
Adjustable response value time / t <sub>r</sub> max.	30
Adjustable response value current / I <sub>sd</sub> min.	76 A
Adjustable response value current / I <sub>sd</sub> max.	945 A
Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	No
Adjustable response value time / t <sub>sd</sub> min.	0.03 s
Adjustable response value time / t <sub>sd</sub> max.	0.03 s
Adjustable response value current / I <sub>i</sub> min.	189 A
Adjustable response value current / I <sub>i</sub> max.	945 A
Ground fault protection can be switched ON/OFF	Yes
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	Yes
Adjustable response value current / I <sub>g</sub> min.	13 A
Adjustable response value current / I <sub>g</sub> max.	63 A
Adjustable response value current / t <sub>g</sub> min.	0.05 s
Adjustable response value current / t <sub>g</sub> max.	0.8 s
Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / min.	0.2 A
Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / max.	1 A

### Mechanical Design

Height [in]	7.1 in
Height	181 mm
Width [in]	4.1 in
Width	105 mm
Depth [in]	3.4 in
Depth	86 mm

### Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	box terminal
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (6-120 mm <sup>2</sup> )

### 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	-40 °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



CCC



VDE

**CB**

CB

[Miscellaneous](#)

**EAC**



RCM

### Declaration of Conformity

### Test Certificates

### Shipping Approval

### other



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)



LRS

[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

### other

[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=3VA2163-5MQ36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-5MQ36-0AA0>

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

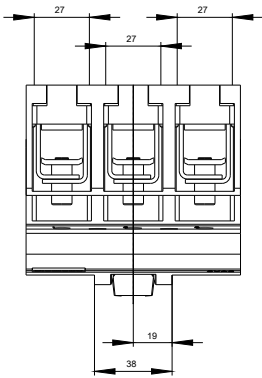
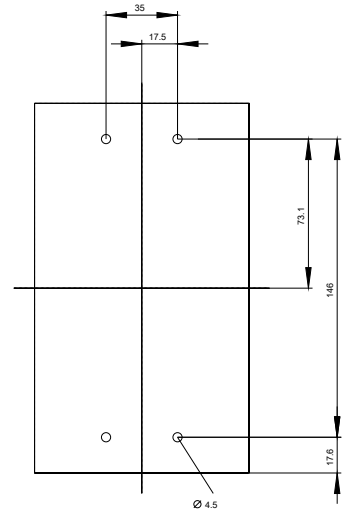
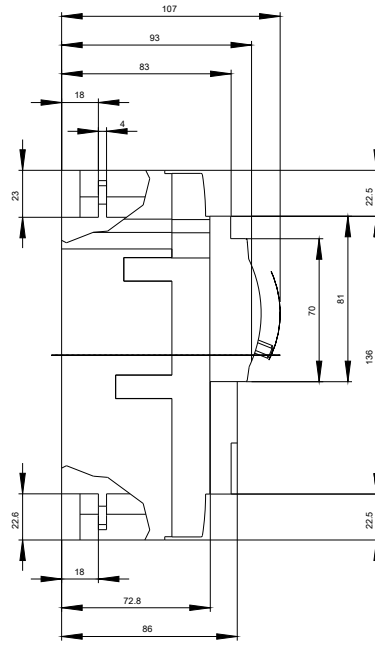
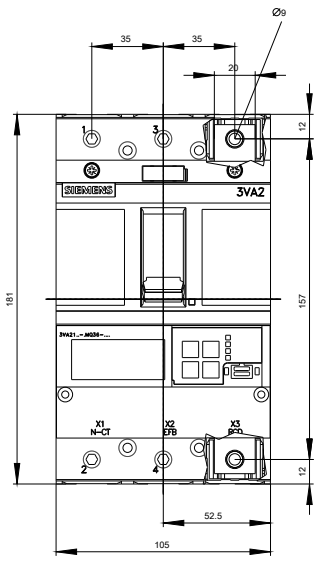
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2163-5MQ36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-5MQ36-0AA0)

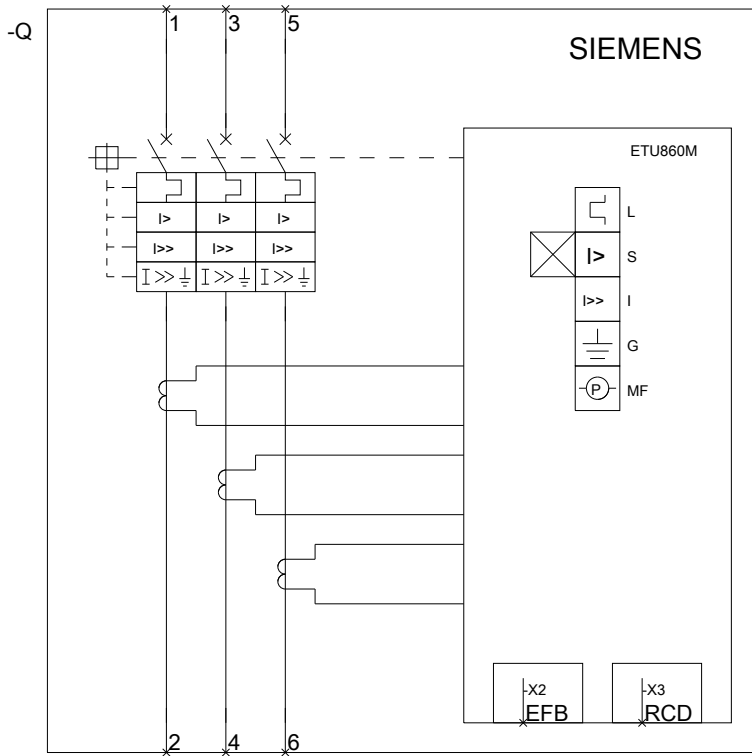
### CAX-Online-Generator

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

### Tender specifications

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





Siemens

3VA2xxx-xMQ3x-0  
Format / Size: Hybrid

**last modified:**

12/11/2019