

CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, MOTOR PROTECTION ETU860M, LSIG, IN=500A OVERLOAD PROTECTION IR=200A ...500A SHORT CIRCUIT PROTECTION ISD=1,2...15X IN, II=3...15X IN GROUND-FAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,05-0,8S BUSBAR CONNECTION



Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Motor protection
Design of the overcurrent release	ETU860M
Protective function of the overcurrent release	LSIG
Number of poles	3

General technical data	
Tension assignée d'isolement $U_i$	800 V
Max. rated operational voltage $U_e$ with AC 50/60Hz	690 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	99 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	33 W
Mechanical service life (switching cycles) / typical	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 000
Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz	2 500

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	4.3 kg

### Electricity

Max. rated operational voltage of the size of the circuit-breaker	630 A
Courant permanent assigné Iu	500 A
Operating current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	477 A
• at 60 °C	455 A
• at 65 °C	432 A
• at 70 °C	410 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	9 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	9 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	76 kA
• at 690 V	15.3 kA

### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	200 A
Adjustable response value current / I <sub>g</sub> min.	500 A
Adjustable response value current / I <sub>g</sub> min.	3
Adjustable response value current / I <sub>g</sub> min.	15
Adjustable response value current / I <sub>g</sub> min.	600 A
Adjustable response value current / I <sub>g</sub> min.	7 500 A
Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	No
Adjustable response value current / I <sub>g</sub> min.	0.03 s
Adjustable response value current / I <sub>g</sub> min.	0.03 s
Adjustable response value current / I <sub>g</sub> min.	0 s
Adjustable response value current / I <sub>g</sub> min.	0 s
Adjustable response value current / I <sub>i</sub> min.	1 500 A
Adjustable response value current / I <sub>i</sub> max.	7 500 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.	100 A
Adjustable response value current / I <sub>g</sub> max.	500 A
Adjustable response value current / t <sub>g</sub> min.	0.05 s
Adjustable response value current / I <sub>g</sub> min.	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]	9.8 in
Height	248 mm
Width [in]	5.4 in
Width	138 mm
Depth [in]	4.3 in
Depth	110 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 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10

### 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> </ul>	-25 °C
<ul style="list-style-type: none"> <li>during operation / maximum</li> </ul>	70 °C
<ul style="list-style-type: none"> <li>during storage / minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>during storage / maximum</li> </ul>	80 °C

### Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC	Declaration of Conformity	Test Certificates
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[Sonstige](#)

Test Certificates	other
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### 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=3VA2450-5MQ32-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2450-5MQ32-0AA0/all>

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

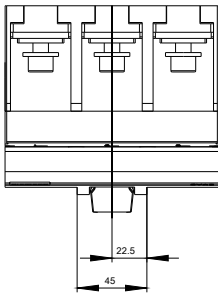
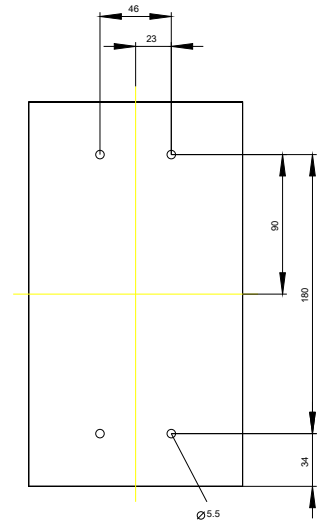
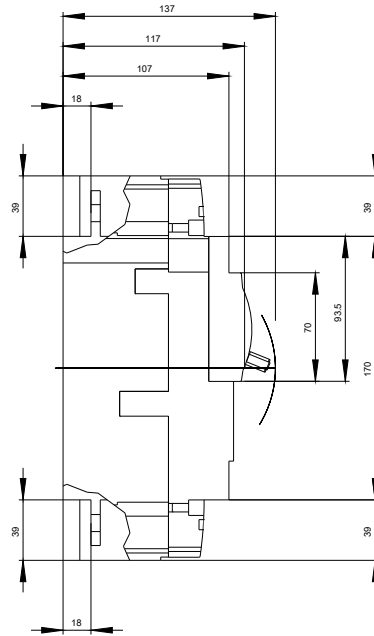
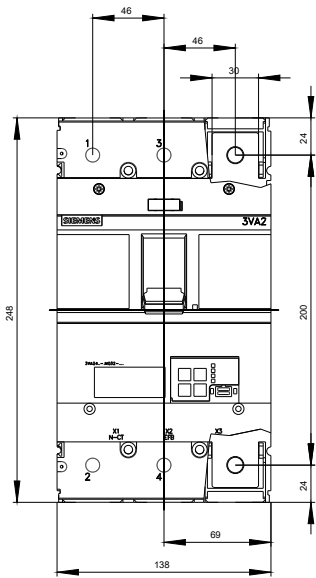
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2450-5MQ32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2450-5MQ32-0AA0)

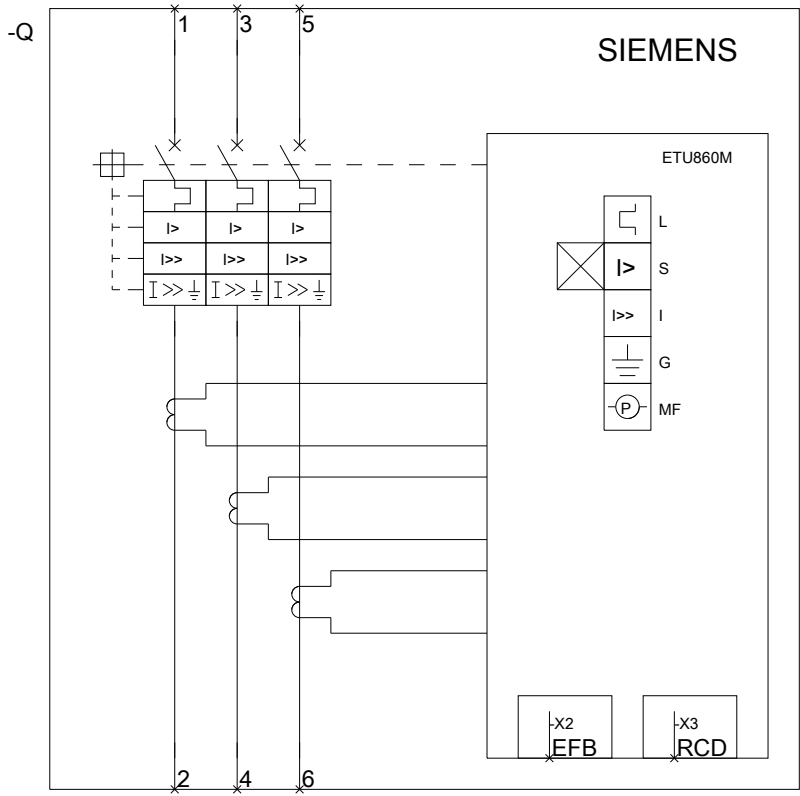
**CAX-Online-Generator**

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

**Tender specifications**

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





Siemens

3VA2xxx-xMQ3

Format / Size: H

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