



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, MOTOR PROTECTION ETU860M, LSIG, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION ISD=1,2...15X IN, II=3...15X IN GROUND-FAULT, SWITCHABLE IG=0,4... 1 X IN, TG=0,05-0,8S CABLE 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 Ui                                                                  | 800 V    |
| Max. rated operational voltage Ue with AC 50/60Hz                                                | 690 V    |
| Operating power / at AC-3 / at 400 V                                                             | 18 500 W |
| Operating power / at AC-3 / at 230 V                                                             | 11 000 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 75 W     |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole   | 25 W     |
| Mechanical service life (switching cycles) / typical                                             | 20 000   |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                        | 12 000   |

|                                                                           |                                         |
|---------------------------------------------------------------------------|-----------------------------------------|
| Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz | 10 000                                  |
| 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                                  |

## Electricity

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| Max. rated operational voltage of the size of the circuit-breaker | 160 A  |
| Courant permanent assigné Iu                                      | 40 A   |
| Operating current                                                 |        |
| • at 40 °C                                                        | 40 A   |
| • at 45 °C                                                        | 40 A   |
| • at 50 °C                                                        | 40 A   |
| • at 55 °C                                                        | 38.8 A |
| • at 60 °C                                                        | 38 A   |
| • at 65 °C                                                        | 36.8 A |
| • at 70 °C                                                        | 35.2 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                                                | 2.5 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                                                | 2.5 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                                                | 3.8 kA |

| Adjustable parameters                                                                           |                              |
|-------------------------------------------------------------------------------------------------|------------------------------|
| Adjustable response value current / I <sub>g</sub> min.                                         | 16 A                         |
| Adjustable response value current / I <sub>g</sub> min.                                         | 40 A                         |
| Adjustable response value current / I <sub>g</sub> min.                                         | 3                            |
| Adjustable response value current / I <sub>g</sub> min.                                         | 30                           |
| Adjustable response value current / I <sub>g</sub> min.                                         | 48 A                         |
| Adjustable response value current / I <sub>g</sub> min.                                         | 600 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.                                         | 120 A                        |
| Adjustable response value current / I <sub>i</sub> max.                                         | 600 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.                                         | 8 A                          |
| Adjustable response value current / I <sub>g</sub> max.                                         | 40 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]                                                                                     | 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                            |
| Accessories                                                                                     |                              |

|                                            |     |
|--------------------------------------------|-----|
| Product extension / optional / motor drive | Yes |
|--------------------------------------------|-----|

## 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

|                                            |   |
|--------------------------------------------|---|
| Equipment marking / acc. to DIN EN 81346-2 | Q |
|--------------------------------------------|---|

| General Product Approval                                                                 | EMC                                                                                      | Declaration of Conformity                                                                       | Test Certificates                                                                        |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <br>CCC | <br>VDE | <br>EAC        | <br>RCM |
|                                                                                          |                                                                                          | <br>EG-Konf. | <a href="#">Sonstige</a>                                                                 |

| Test Certificates | other |
|-------------------|-------|
|-------------------|-------|

[spezielle Prüfbescheinigungen](#)  
[Bestätigungen](#)  
[Sonstige](#)

## 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=3VA2140-5MQ36-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2140-5MQ36-0AA0/all>

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

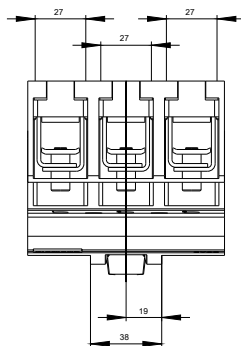
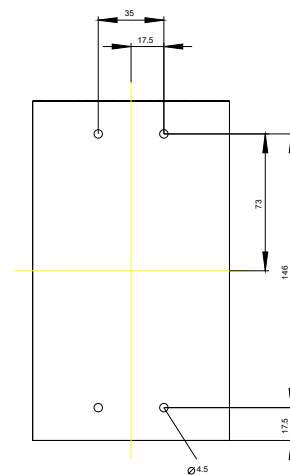
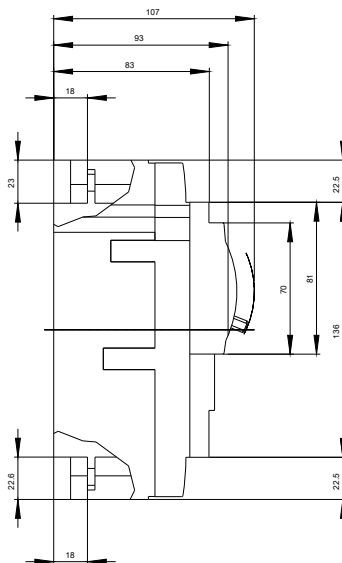
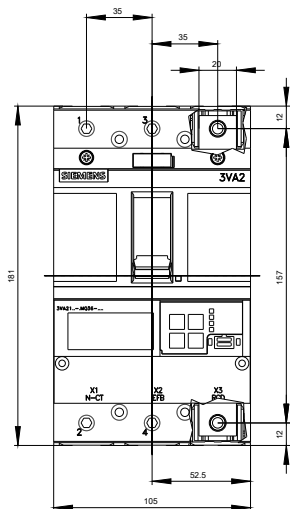
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2140-5MQ36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-5MQ36-0AA0)

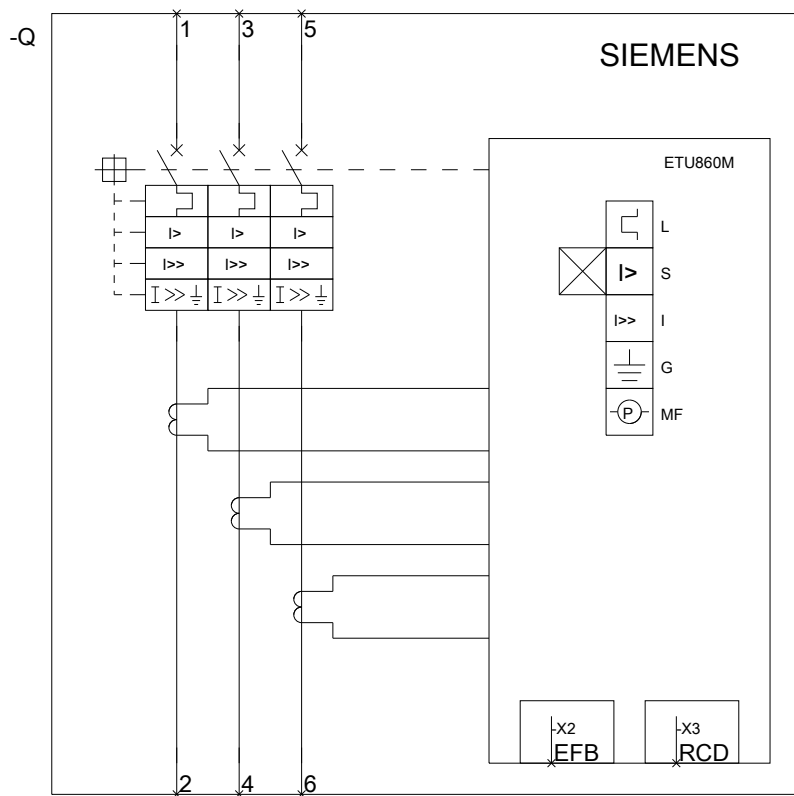
### CAX-Online-Generator

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

### Tender specifications

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





Siemens

3VA2xxx-xMQ3

Format / Size: H

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