



circuit breaker 3VA1 IEC frame 160 breaking capacity class M $I_{cu}=55kA$ @ 415V 3-pole, starter protection TM120M, AM, $I_n=40A$ without overload protection short-circuit protection $I_i=7...16 \times I_n$ clamp connection

| Model | |
|--|-----------------------------|
| product brand name | SETRON |
| product designation | Molded case circuit breaker |
| Product version | Starter protection |
| design of the overcurrent release | TM120M |
| protection function of the overcurrent release | I |
| number of poles | 3 |
| General technical data | |
| rated insulation voltage U_i | 800 V |
| power loss [W] / maximum | 10.8 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 3.6 W |
| mechanical service life (switching cycles) / typical | 20 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 9 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz | 6 300 |
| Neutral conductors / upgradeable/retrofitable | No |
| ground-fault monitoring version | Without |
| product function | |
| • communication function | No |
| • phase failure detection | No |
| • other measurement function | No |
| net weight | 0.9 kg |
| Current | |
| Max. rated operational current of the frame size | 160 A |
| Courant permanent assigné I_u | 40 A |
| operational current | |
| • at 40 °C | 40 A |
| • at 45 °C | 40 A |
| • at 50 °C | 40 A |
| • at 55 °C | 39 A |
| • at 60 °C | 39 A |
| • at 65 °C | 38 A |
| • at 70 °C | 37 A |
| Switching capacity according to IEC 60947 | |
| switching capacity class of the circuit breaker | M |
| breaking capacity maximum short-circuit current (I_{cu}) | |

| | |
|--|---------------------------------|
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 85 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 55 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 36 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 5 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 5 kA |
| breaking capacity operating short-circuit current (Ics) | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 85 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 55 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 36 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 5 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 5 kA |
| short-circuit current making capacity (Icm) | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 187 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 121 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 75.6 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 7.5 kA |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V | 7.5 kA |
| Adjustable parameters | |
| Adjustable response value current / li min. | 280 A |
| Adjustable response value current / li max. | 640 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |
| Mechanical Design | |
| height [in] | 5.12 in |
| Height | 130 mm |
| width [in] | 3 in |
| Width | 76.2 mm |
| depth [in] | 2.76 in |
| depth | 70 mm |
| Connections | |
| arrangement of electrical connectors / for main current circuit | Front terminal |
| type of electrical connection / for main current circuit | box terminal on both sides |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (1.5 - 70 mm ²) |
| 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 | |
| <ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum | -25 °C |
| | 70 °C |
| | -40 °C |
| | 80 °C |
| Certificates | |
| reference code / acc. to IEC 81346-2 | Q |
| General Product Approval | EMC |



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[KC](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[UK Declaration of Conformity](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

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Marine / Shipping

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=3VA1140-5MH36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1140-5MH36-0AA0>

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

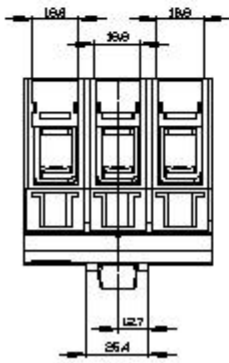
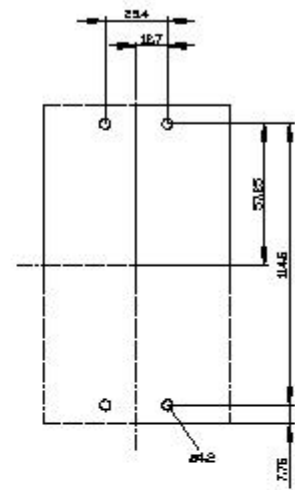
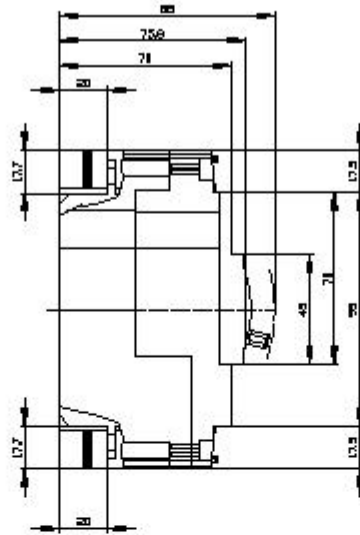
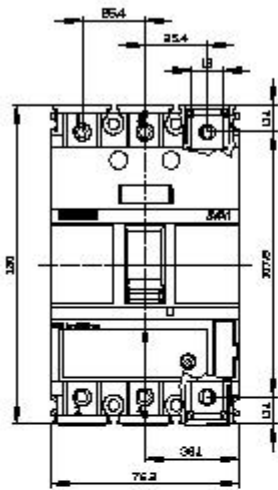
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1140-5MH36-0AA0

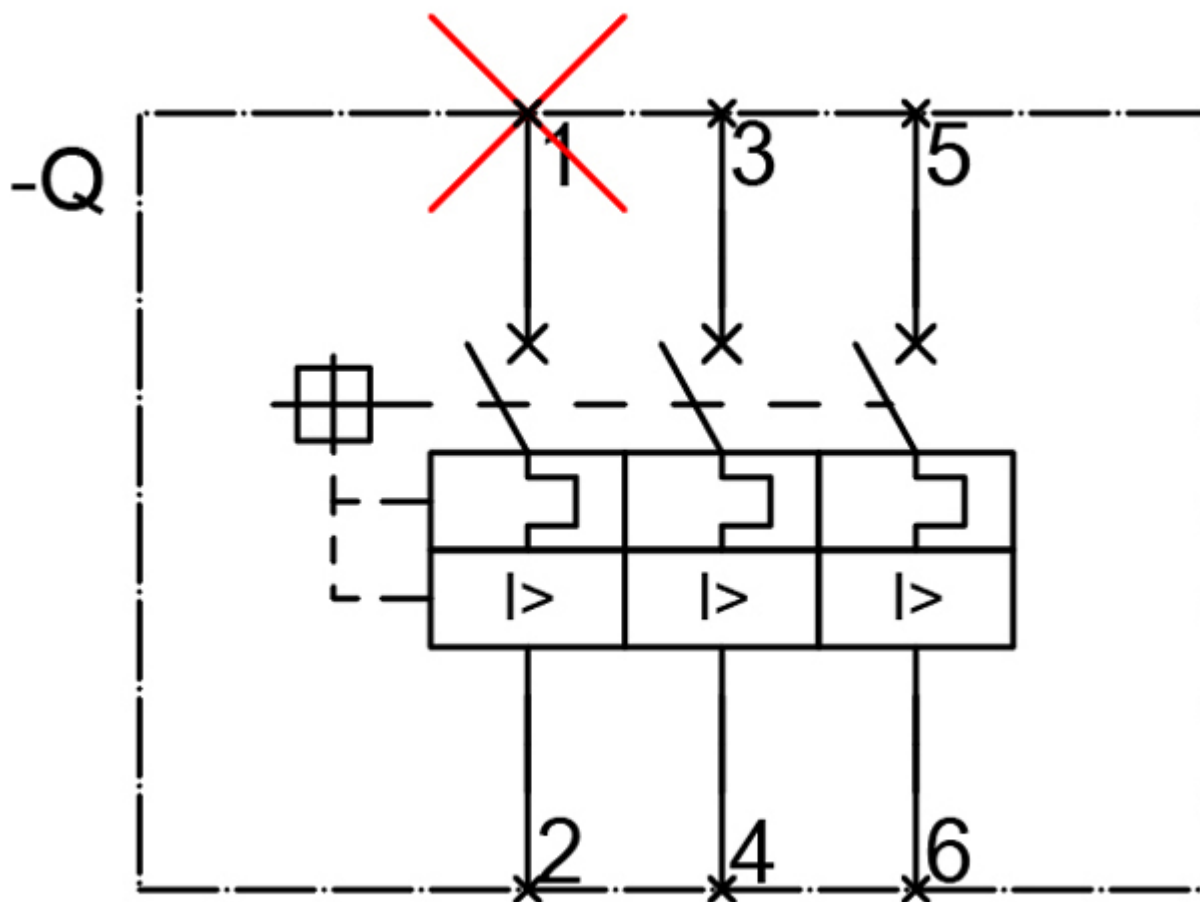
CAX-Online-Generator

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

Tender specifications

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





last modified:

8/10/2021 