



circuit breaker 3VA1 IEC frame 250 breaking capacity class S Icu=36kA @ 415V 3-pole, line protection TM220, ATFM, In=250A overload protection Ir=175A...250A short-circuit protection Ii=10 x In nut keeper kit

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded case circuit breaker |
| Product version  | Line protection             |
| design of the overcurrent release  | TM220                       |
| protection function of the overcurrent release   | LI                          |
| number of poles  | 3                           |
| General technical data   |                             |
| rated insulation voltage Ui  | 800 V                       |
| Max. rated operational voltage Ue with DC  | 500 V                       |
| power loss [W] / maximum   | 57 W                        |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 19 W                        |
| mechanical service life (switching cycles) / typical   | 20 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 8 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 5 400                       |
| Neutral conductors / upgradeable/retrofitable  | No                          |
| ground-fault monitoring version  | Without                     |
| product function   |                             |
| • communication function   | No                          |
| • other measurement function   | No                          |
| Current  |                             |
| Max. rated operational current of the frame size   | 250 A                       |
| Courant permanent assigné Iu   | 250 A                       |
| operational current  |                             |
| • at 40 °C   | 250 A                       |
| • at 45 °C   | 250 A                       |
| • at 50 °C   | 250 A                       |
| • at 55 °C   | 243 A                       |
| • at 60 °C   | 237 A                       |
| • at 65 °C   | 230 A                       |
| • at 70 °C   | 223 A                       |
| Switching capacity according to IEC 60947  |                             |
| switching capacity class of the circuit breaker  | S                           |
| breaking capacity maximum short-circuit current (Icu)  |                             |
| • at 240 V   | 55 kA                       |
| • at 415 V   | 36 kA                       |
| • at 440 V   | 25 kA                       |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• at 500 V</li> <li>• at 690 V</li> </ul>   | 10 kA<br>7 kA  |
| breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul> | 55 kA<br>36 kA<br>25 kA<br>10 kA<br>5 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 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>             | 121 kA<br>75.6 kA<br>52.5 kA<br>17 kA<br>11.9 kA   |
| design of short-circuit protection   | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |

| Adjustable parameters                                      |         |
|--|---------|
| Adjustable response value current / li min.                | 2 500 A |
| Adjustable response value current / li max.                | 2 500 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No      |

| Mechanical Design |         |
|-------------------|---------|
| height [in]       | 6.22 in |
| Height            | 158 mm  |
| width [in]        | 4.13 in |
| Width             | 105 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                                | nut keeper kit on both ends |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 13 x 1 mm                   |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 25 x 8 mm                   |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)   | Silver                      |

| 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"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C |

| Certificates                         |   |
|--------------------------------------|---|
| reference code / acc. to IEC 81346-2 | Q |

| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|
|--------------------------|-----|---------------------------|



Miscellaneous



[UK Declaration of Conformity](#)

| Declaration of | Test Certificates | Marine / Shipping |
|----------------|-------------------|-------------------|
|----------------|-------------------|-------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



other

[Miscellaneous](#)

[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=3VA1225-4EE32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1225-4EE32-0AA0>

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

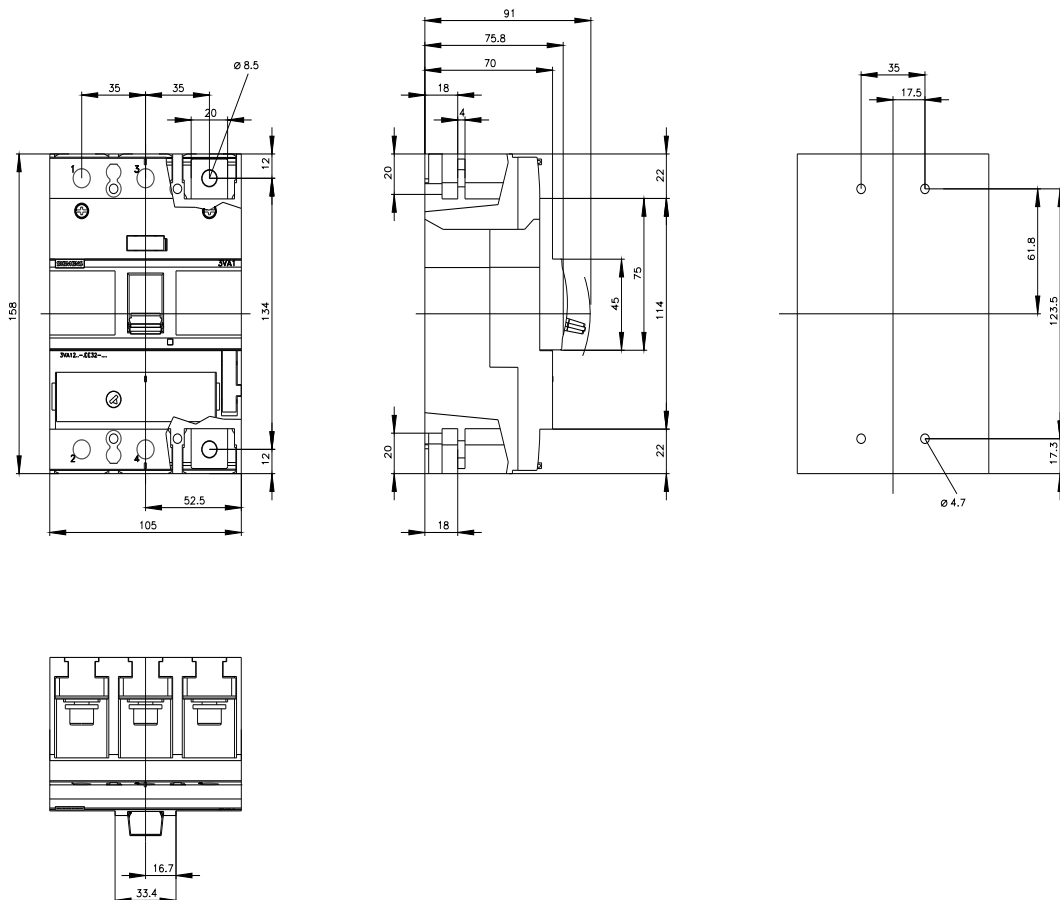
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1225-4EE32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1225-4EE32-0AA0)

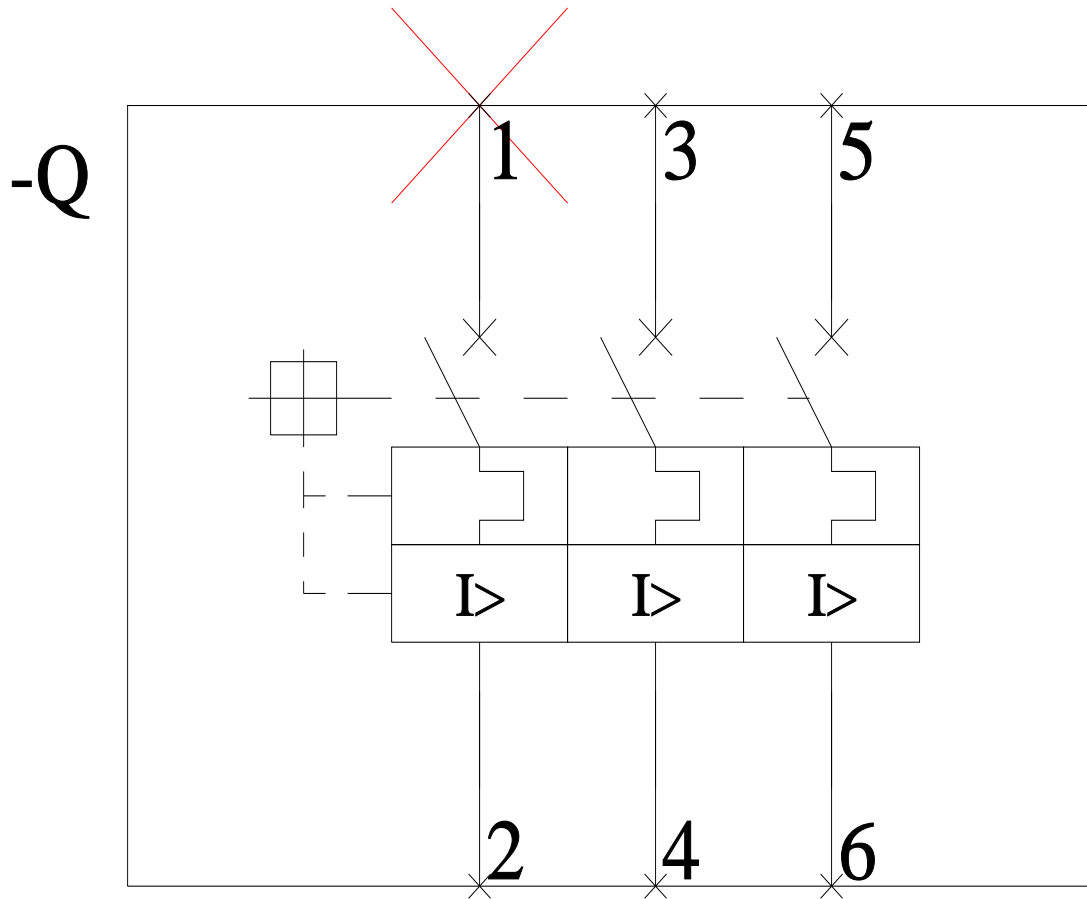
CAx-Online-Generator

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

Tender specifications

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





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