

circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 4-pole, line protection TM230, FTAM, I_n=175A overload protection I_r=175A fixed short-circuit protection I_i=5...10 x I_n N conductor unprotected without connection



| Model | |
|---|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | MFAS |
| Product version | System protection |
| design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| design of the overcurrent release | TM230 |
| protection function of the overcurrent release | LI |
| number of poles | 4 |
| General technical data | |
| Tension assignée d'isolement U _i | 800 V |
| Max. rated operational voltage U _e with AC 50/60Hz | 690 V |
| Max. rated operational voltage U _e with DC | 1 000 V |
| power loss [W] / maximum | 35.1 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 11.7 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 | 4 000 |
| electrical endurance (switching cycles) / at 480 V | 8 000 |
| electrical endurance (switching cycles) / at 600 V | 4 000 |
| Neutral conductors / upgradeable/retrofitable | No |
| ground fault monitoring version | Without |
| product function | |
| • communication function | No |
| • other measurement function | No |

Current

| | |
|--|----------|
| marking / acc. to UL 489 / 100%-rated breaker | No |
| Max. rated operational current of the frame size | 250 A |
| Courant permanent assigné lu | 175 A |
| operating current | |
| • at 40 °C | 175 A |
| • at 45 °C | 175 A |
| • at 50 °C | 175 A |
| • at 55 °C | 169.75 A |
| • at 60 °C | 166.25 A |
| • at 65 °C | 161 A |
| • at 70 °C | 154 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 690 V | 7 kA |
| operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 85 kA |
| • at 415 V | 55 kA |
| • at 690 V | 7 kA |
| short-circuit current making capacity (Icm) | |
| • at 240 V | 187 kA |
| • at 415 V | 121 kA |
| • at 690 V | 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 |

Switching capacity according to UL 489

| | |
|--|-------------------------|
| breaking capacity current | |
| <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 Y/347 V | 85 kA 35 kA 18 kA |

Adjustable parameters

| | |
|--|---------|
| Adjustable response value current / Ig min. | 175 A |
| Adjustable response value current / Ig min. | 175 A |
| Adjustable response value current / li min. | 875 A |
| Adjustable response value current / li max. | 1 750 A |
| design of the N-conductor protection | Without |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |

Mechanical Design

| | |
|-------------|--------|
| height [in] | 7.3 in |
| Height | 185 mm |
| width [in] | 5.5 in |
| Width | 140 mm |
| depth [in] | 3.3 in |
| depth | 83 mm |

Connections

| | |
|---|--------------------|
| arrangement of electrical connectors / for main current circuit | Without connection |
| type of electrical connection / for main current circuit | Without |

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 DIN EN 81346-2 | Q |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | No |

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



[Miscellaneous](#)



| | |
|-------------------|-------|
| Shipping Approval | 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=3VA5217-5EC41-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5217-5EC41-0AA0>

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

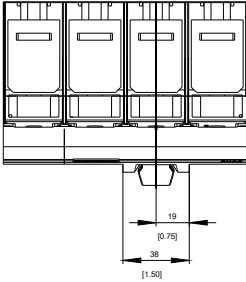
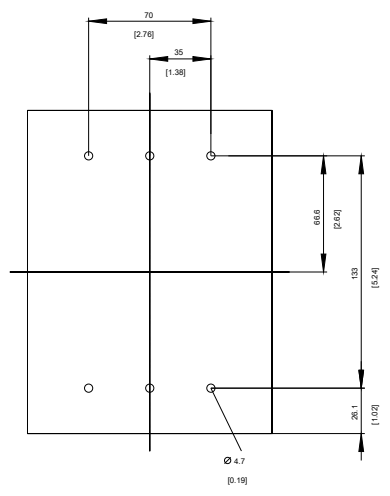
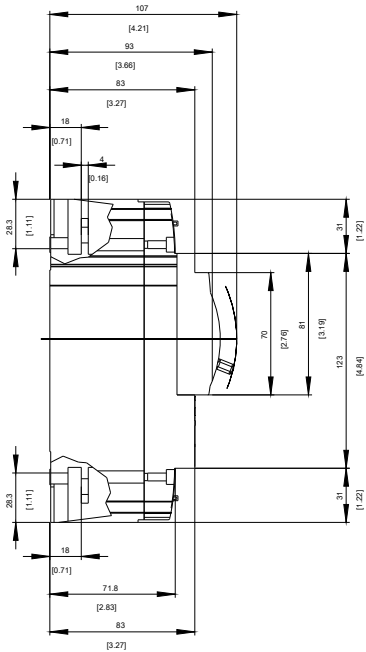
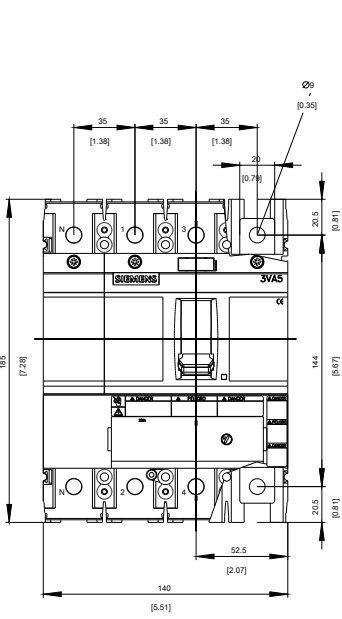
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5217-5EC41-0AA0

CAX-Online-Generator

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

Tender specifications

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



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