



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM210, FTFM, $I_n=110A$ overload protection $I_r=110A$ fixed short-circuit protection $I_i=10 \times I_n$ UL 489 SB (naval), 50° C without connection

| Model | |
|---|--|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | MFAM |
| 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 | TM210 |
| protection function of the overcurrent release | LI |
| number of poles | 3 |
| General technical data | |
| power loss [W] / maximum | 22.6 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 7.53 W |
| mechanical service life (switching cycles) / typical | 20 000 |
| 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 I_u | 110 A |
| operational current | |
| • at 40 °C | 110 A |
| • at 45 °C | 110 A |
| • at 50 °C | 110 A |
| • at 55 °C | 105 A |
| • at 60 °C | 102 A |
| • at 65 °C | 99 A |
| • at 70 °C | 96 A |
| Switching capacity according to IEC 60947 | |
| switching capacity class of the circuit breaker | M |
| 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 | |
| • at 240 V | 85 kA |
| • at 480 V | 35 kA |
| • at 600 V | 18 kA |

Adjustable parameters

| | |
|---|---------|
| Adjustable response value current / I _g min. | 110 A |
| Adjustable response value current / I _g min. | 110 A |
| Adjustable response value current / I _i min. | 1 100 A |
| Adjustable response value current / I _i max. | 1 100 A |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | No |

Mechanical Design

| | |
|-------------|--------|
| height [in] | 7.3 in |
| Height | 185 mm |
| width [in] | 4.1 in |
| Width | 105 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 | |
| • during operation / minimum | -25 °C |
| • during operation / maximum | 70 °C |
| • during storage / minimum | -40 °C |
| • during storage / maximum | 80 °C |

Certificates

| | |
|--|-----|
| reference code / acc. to IEC 81346-2 | Q |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes |

General Product Approval

EMC



[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?mfb=3VA5211-5ED31-1AA0>

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

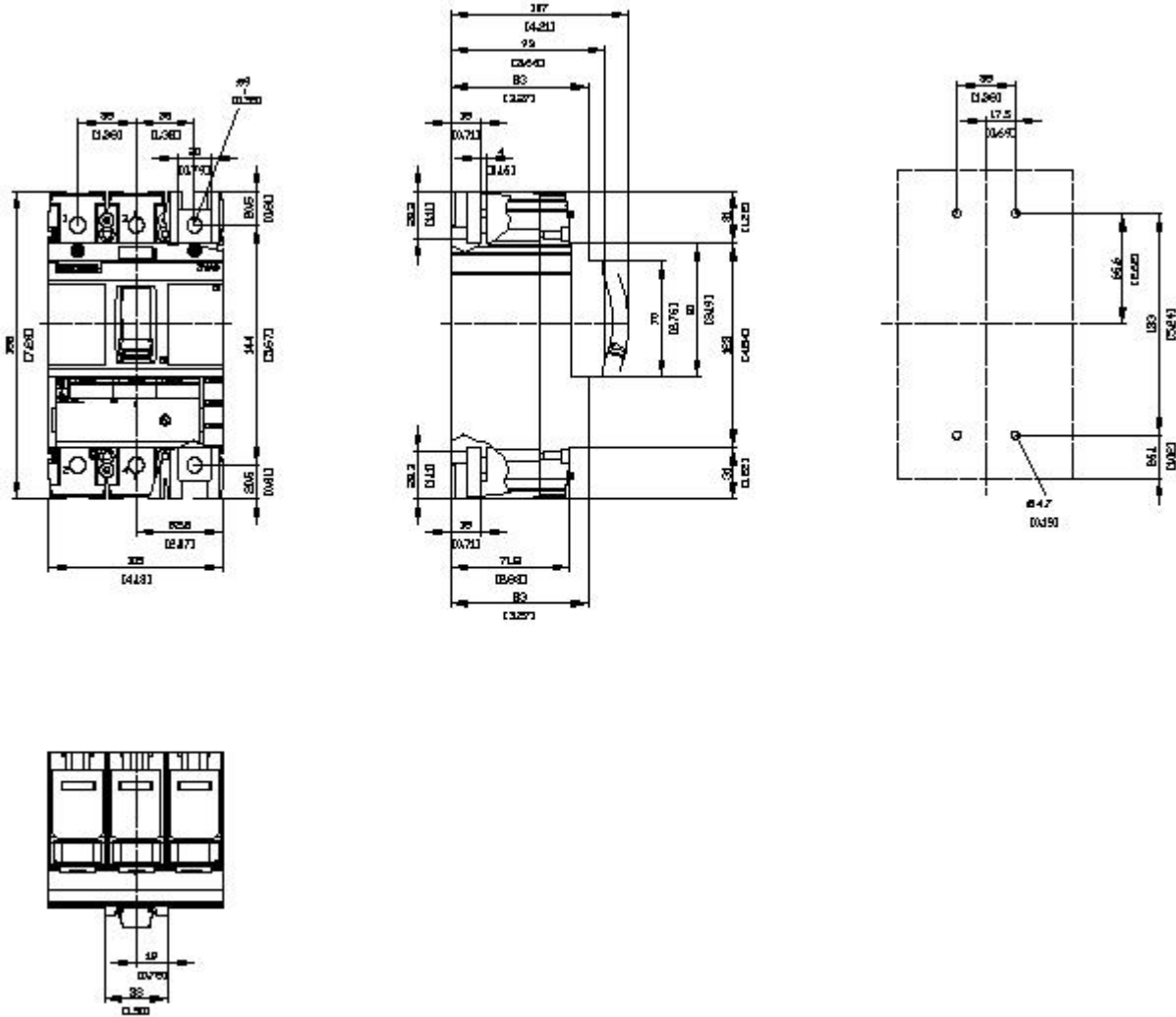
<https://support.industry.siemens.com/cs/ww/en/ps/3VA5211-5ED31-1AA0>

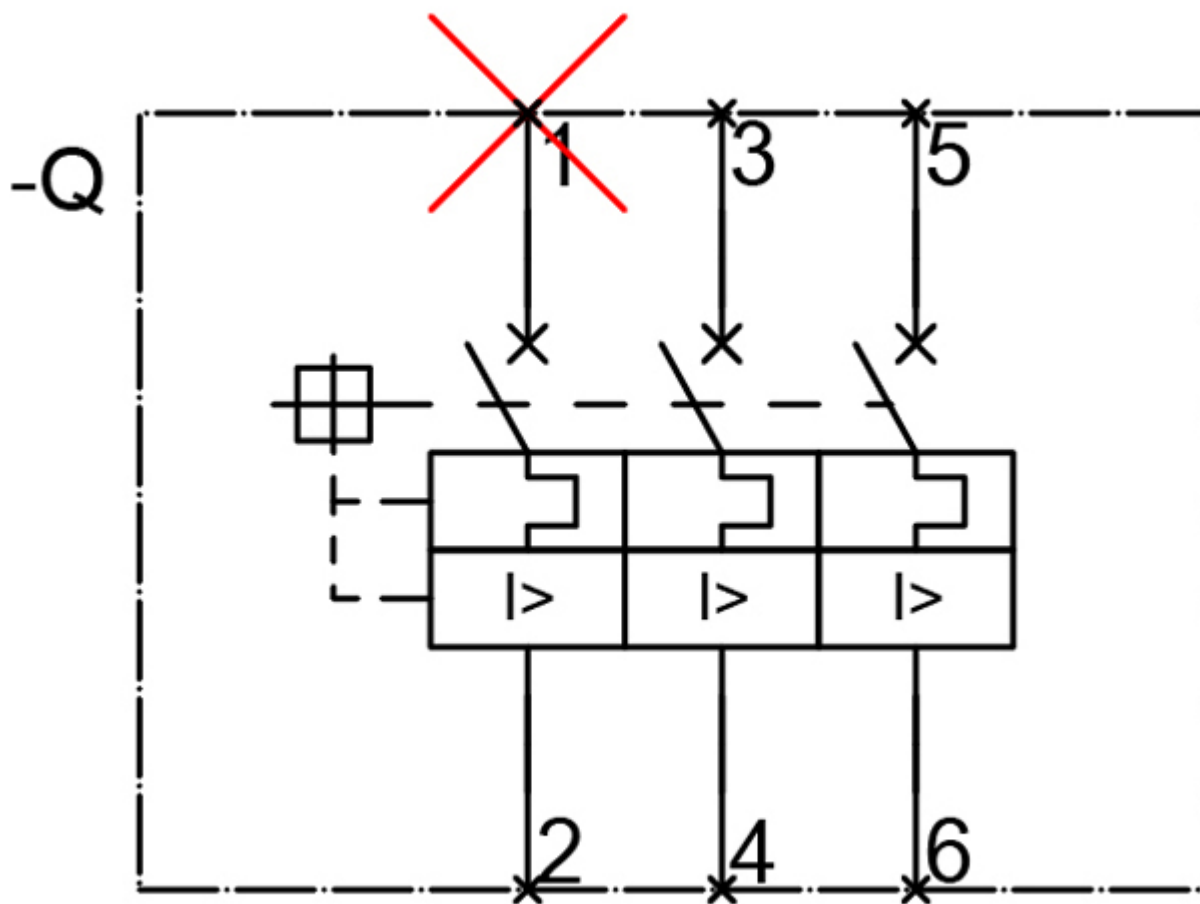
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

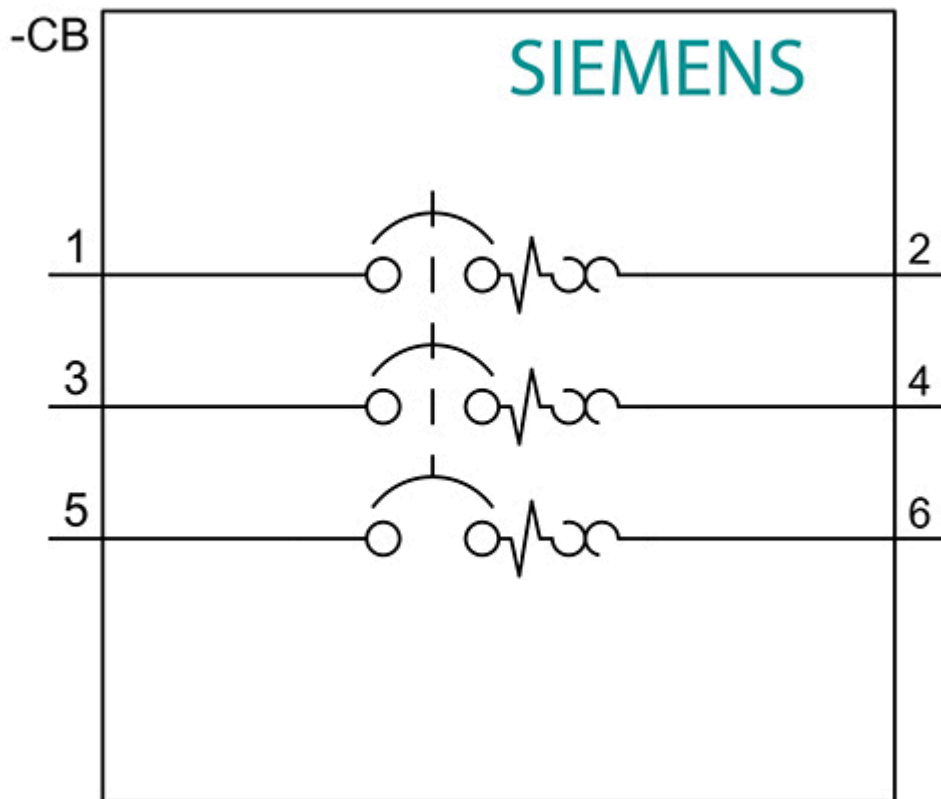
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5211-5ED31-1AA0

Tender specifications

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







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