



Circuit breaker 3VA5 UL Frame 250 Breaking capacity class H 65kA @ 480 V 2-pole, line protection TM210, FTFM, In=45A Overload protection Ir=40A fixed Short-circuit protection Ii=10 x In Without connection

| Model | |
|---|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | HFAS |
| 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 | 2 |
| General technical data | |
| Tension assignée d'isolement Ui | 800 V |
| Max. rated operational voltage Ue with AC 50/60Hz | 690 V |
| Max. rated operational voltage Ue with DC | 500 V |
| power loss [W] / maximum | 14.8 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 7.4 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 Iu | 45 A |
| Switching capacity according to IEC 60947 | |
| switching capacity class of the circuit breaker | H |
| breaking capacity maximum short-circuit current (Icu) | |
| • at 240 V | 100 kA |
| • at 415 V | 70 kA |

| | |
|--|--|
| <ul style="list-style-type: none"> at 690 V | 10 kA |
| breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> at 240 V at 415 V at 690 V | 100 kA 70 kA 10 kA |
| short-circuit current making capacity (Icm) <ul style="list-style-type: none"> at 240 V at 415 V at 690 V | 220 kA 154 kA 17 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 | 100 kA 65 kA 25 kA |
|--|--------------------------|

Adjustable parameters

| | |
|---|-------|
| Adjustable response value current / I _g min. | 45 A |
| Adjustable response value current / I _g min. | 45 A |
| Adjustable response value current / I _i min. | 450 A |
| Adjustable response value current / I _i max. | 450 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 <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 |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | No |

General Product Approval



[Miscellaneous](#)



| | | | |
|-----|----------------|-------------------|-------|
| EMC | Declaration of | Shipping Approval | other |
|-----|----------------|-------------------|-------|



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=3VA5245-6ED61-0AA0>

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

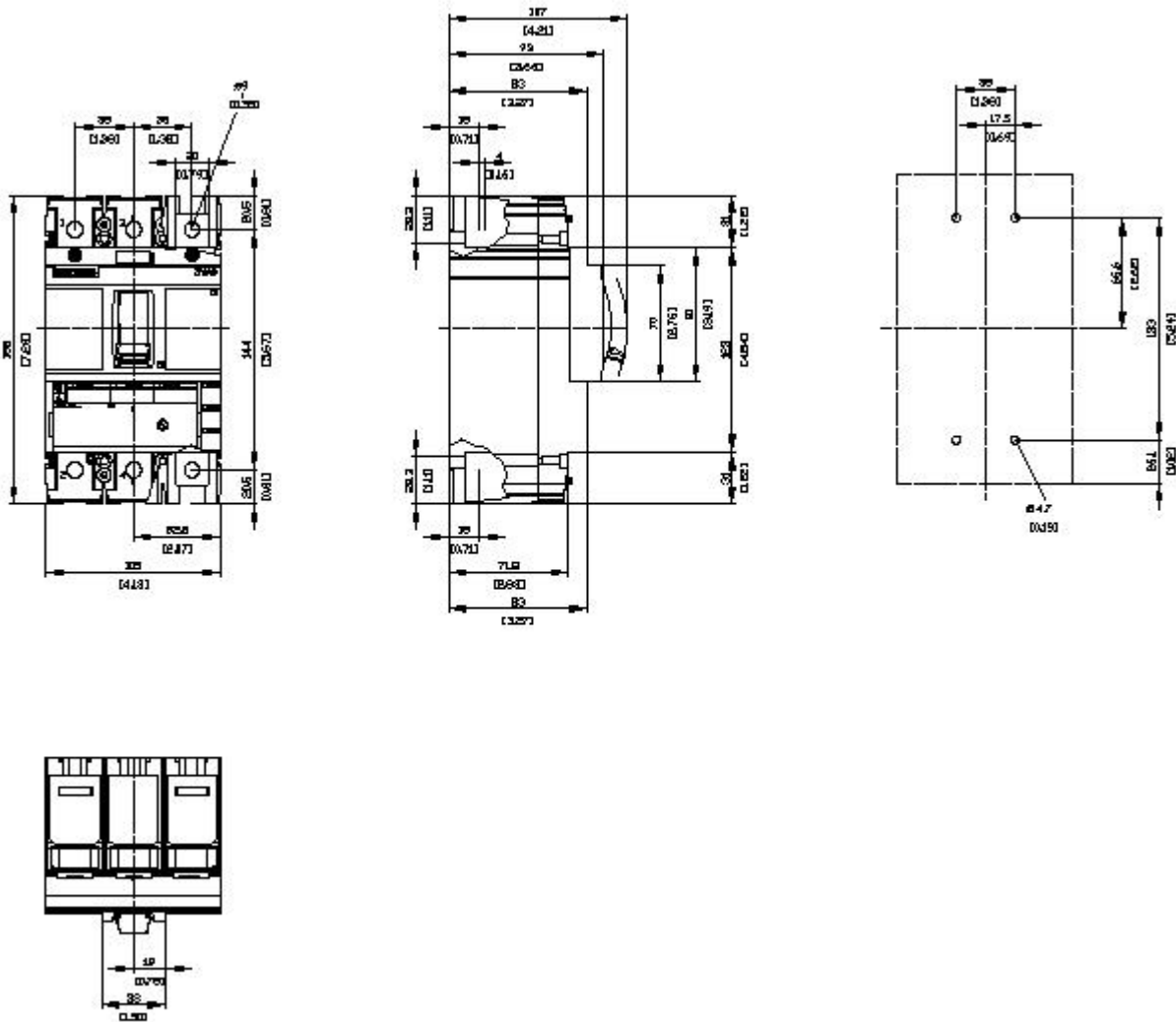
<https://support.industry.siemens.com/cs/ww/en/ps/3VA5245-6ED61-0AA0>

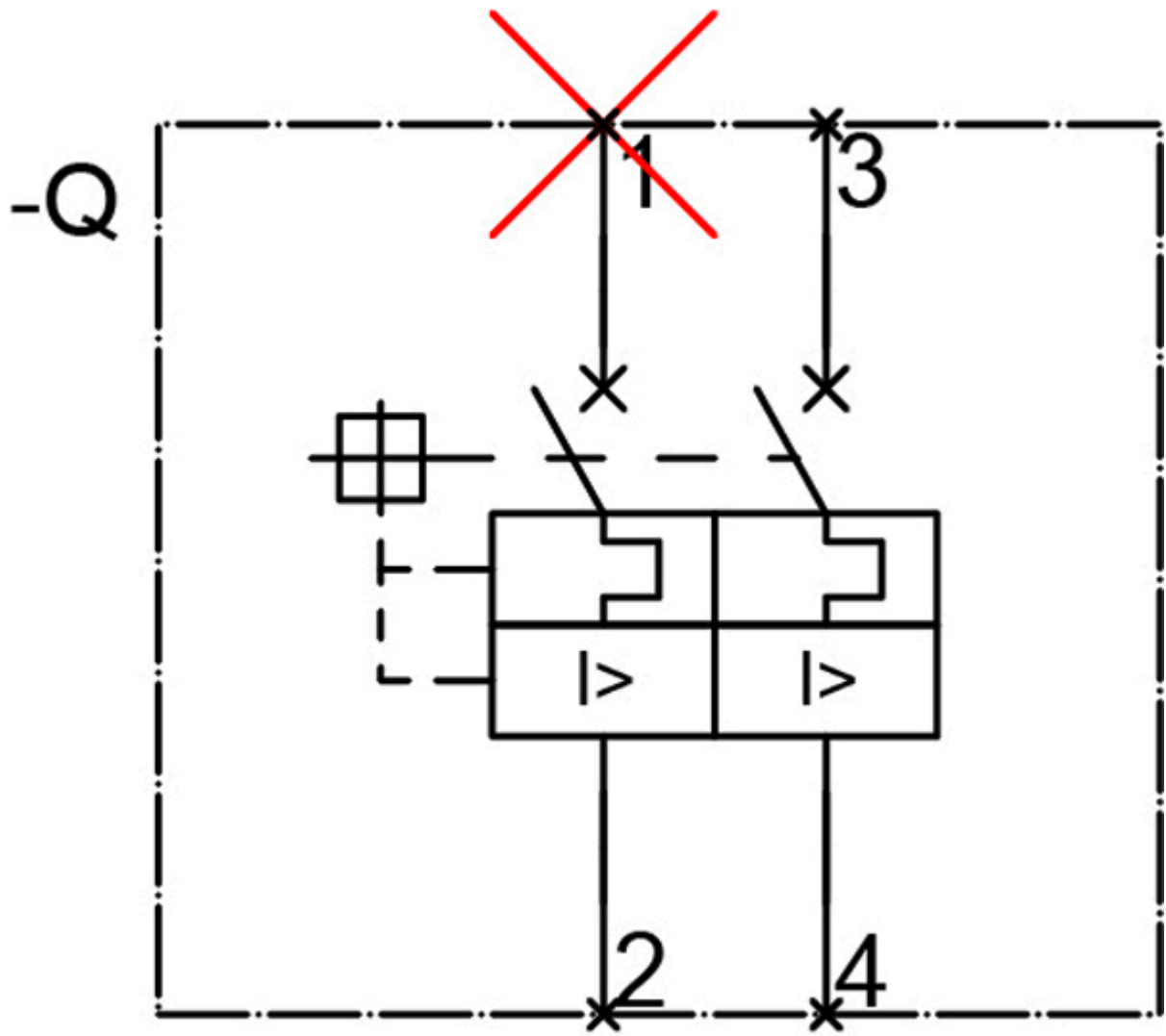
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

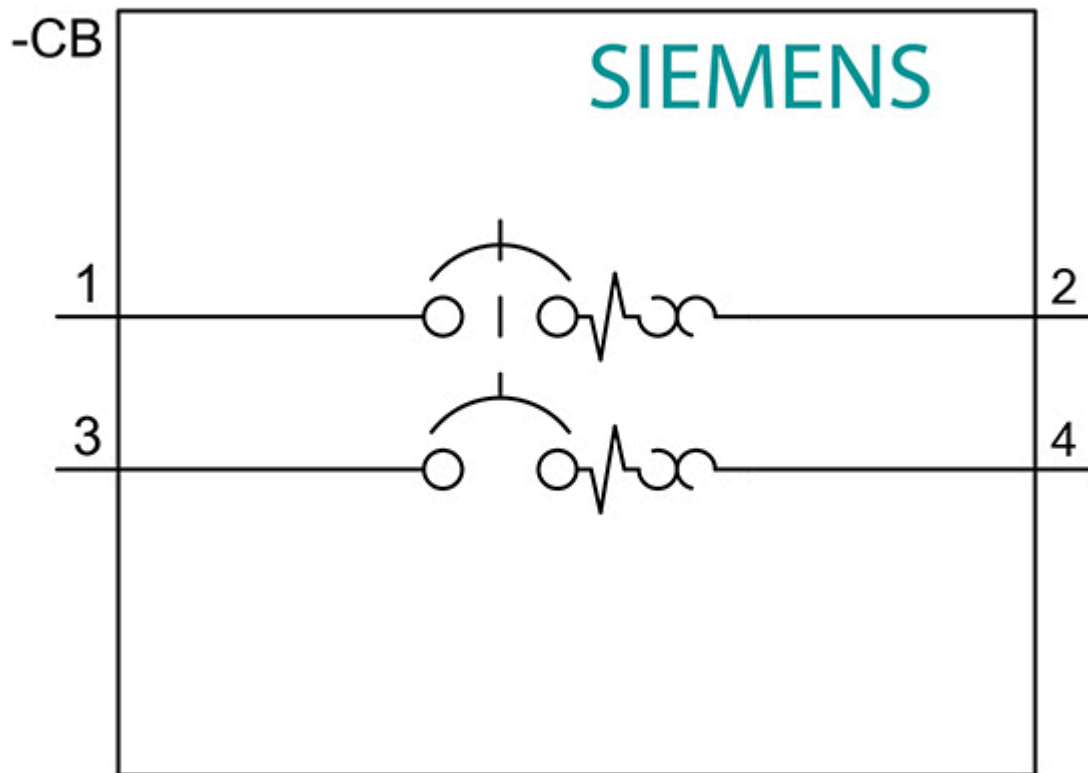
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5245-6ED61-0AA0

Tender specifications

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







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