



circuit breaker 3VA5 UL frame 2000 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM230, FTAM, In=1800A overload protection Ir=1800A fixed short circuit protection li=5 - 6,7 x In w/o connection

| Model | |
|--|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | MRAS |
| design of the product | System protection |
| design of the load switch / according 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 | 3 |
| General technical data | |
| insulation voltage / rated value | 800 V |
| operating voltage / at DC / rated value | 750 V |
| operating voltage / at AC / rated value | 600 V |
| power loss [W] / maximum | 531 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 531 W |
| mechanical service life (operating cycles) / typical | 3 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 500 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 500 |
| electrical endurance (operating cycles) / at 480 V | 500 |
| electrical endurance (operating cycles) / at 600 V | 500 |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | No |
| product function | |
| • communication function | No |
| • phase failure detection | No |
| • other measurement function | No |
| Net Weight | 3.133 kg |
| Current | |
| marking / according to UL 489 / 100%-rated breaker | No |
| operational current | |
| • at 40 °C | 1 800 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 | 65 kA |
| • at 415 V | 50 kA |
| • at 690 V | 20 kA |
| operating short-circuit current breaking capacity (Ics) | |

| | | |
|--|--|-------|
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V | 35 kA | |
| short-circuit current making capacity (I _{cm}) | | |
| <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V | 143 kA | |
| | 105 kA | |
| | 63 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 | | |
| current breaking capacity | | |
| <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 Y/347 V • at 600 V | 85 kA | |
| | 35 kA | |
| | 25 kA | |
| | 25 kA | |
| Adjustable parameters | | |
| adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic | | |
| <ul style="list-style-type: none"> • minimum • maximum | 1 800 A | |
| | 1 800 A | |
| adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic | | |
| <ul style="list-style-type: none"> • minimum • maximum | 1 s | |
| | 1 s | |
| adjustable response value setting current (I _i) / for I-tripping | | |
| <ul style="list-style-type: none"> • minimum • maximum | 5 000 A | |
| | 10 000 A | |
| product function / grounding protection | No | |
| Mechanical Design | | |
| product component | | |
| <ul style="list-style-type: none"> • undervoltage release • trip indicator | No | |
| | No | |
| height [in] | 8.14 in | |
| height | 207 mm | |
| width [in] | 8.99 in | |
| width | 228.4 mm | |
| depth [in] | 16 in | |
| depth | 406.4 mm | |
| Connections | | |
| type of electrical connection / for main current circuit | without terminals | |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) | silver | |
| 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 | |
| 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 | |
| reference code / according to IEC 81346-2 | F | |
| Approvals / Certificates | | |
| General Product Approval | EMV | other |



Miscellaneous



Confirmation

| | |
|-------|-------------|
| other | Environment |
|-------|-------------|

[Miscellaneous](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5918-5EC31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5918-5EC31-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5918-5EC31-0AA0

CAX-Online-Generator

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

Tender specifications

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





