



circuit breaker 3VA5 UL Frame 400 breaking capacity class M 35 kA @ 480 V 3-pole, line protection TM230, FTAM, In=200 A overload protection, 100%-rated Ir=200 A permanently set short-circuit protection Ii=5...10 x In cable connection on two sides

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SENTRON                     |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | MJAS                        |
| 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 load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type)                      | No                          |
| design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)                                | No                          |
| 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                                                                                    | 500 V                       |
| operating voltage / at AC / rated value                                                                                    | 690 V                       |
| power loss [W] / maximum                                                                                                   | 38 W                        |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 12.53 W                     |
| mechanical service life (operating cycles) / typical                                                                       | 20 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                                           | 6 000                       |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                                               | 3 000                       |
| electrical endurance (operating cycles) / at 480 V                                                                         | 6 000                       |
| electrical endurance (operating cycles) / at 600 V                                                                         | 3 000                       |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof                      | No                          |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | No                          |
| • other measurement function                                                                                               | No                          |
| Net Weight                                                                                                                 | 5 950 g                     |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | Yes                         |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 200 A                       |
| • at 45 °C                                                                                                                 | 196 A                       |
| • at 50 °C                                                                                                                 | 192 A                       |
| • at 55 °C                                                                                                                 | 188 A                       |
| • at 60 °C                                                                                                                 | 184 A                       |
| • at 65 °C                                                                                                                 | 180 A                       |
| • at 70 °C                                                                                                                 | 176 A                       |

**Switching capacity according to IEC 60947**

|                                                                                                                                                                       |                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| switching capacity class of the circuit breaker                                                                                                                       | M                                                                                                                                                              |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>   | 85 kA<br>55 kA<br>10 kA                                                                                                                                        |
| operating short-circuit current breaking capacity (I <sub>cs</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul> | 85 kA<br>55 kA<br>6 kA                                                                                                                                         |
| short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>             | 187 kA<br>121 kA<br>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**

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

**Adjustable parameters**

|                                                                                                                                                                                               |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul> | 200 A<br>200 A     |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>     | 1 s<br>1 s         |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>                                      | 1 000 A<br>2 000 A |
| adjustable setting current (I <sub>nN</sub> ) / for N-tripping <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>                                                    | 0 A<br>0 A         |
| product function / grounding protection                                                                                                                                                       | No                 |

**Mechanical Design**

|                                                                                                                                             |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| product component <ul style="list-style-type: none"><li>• undervoltage release</li><li>• voltage trigger</li><li>• trip indicator</li></ul> | No<br>No<br>No          |
| height [in]                                                                                                                                 | 9.76 in                 |
| height                                                                                                                                      | 248 mm                  |
| width [in]                                                                                                                                  | 5.43 in                 |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded                                                   | 1 x (1 AWG - 600 kcmil) |
| width                                                                                                                                       | 138 mm                  |
| depth [in]                                                                                                                                  | 4.33 in                 |
| depth                                                                                                                                       | 110 mm                  |

**Connections**

|                                                                 |                                           |
|-----------------------------------------------------------------|-------------------------------------------|
| arrangement of electrical connectors / for main current circuit | Front connection                          |
| type of electrical connection / for main current circuit        | circular conductor terminal on both sides |

**Auxiliary circuit**

|                                                |   |
|------------------------------------------------|---|
| number of CO contacts / for auxiliary contacts | 0 |
|------------------------------------------------|---|

**Accessories**

|                                                                                                              |                                  |
|--------------------------------------------------------------------------------------------------------------|----------------------------------|
| product extension / optional / motor drive                                                                   | Yes                              |
| manufacturer's article number <ul style="list-style-type: none"><li>• of the supplied basic switch</li></ul> | <a href="#">3VA53205EC362AA0</a> |

**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  |
| reference code / according to IEC 81346-2 | Q      |

#### Approvals / Certificates

|                          |     |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



[Miscellaneous](#)



|                   |       |             |
|-------------------|-------|-------------|
| Test Certificates | other | Environment |
|-------------------|-------|-------------|

[Type Test Certificates/Test Report](#)

[Confirmation](#)

[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,...)

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5320-5EC36-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5320-5EC36-2AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5320-5EC36-2AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5320-5EC36-2AA0)

CAX-Online-Generator

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

Tender specifications

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





