

Siemens  
EcoTech



circuit breaker 3VA2 IEC Frame 160 breaking capacity class E Icu=200 kA @ 415 V 3-pole, motor protection ETU350M, LSI, In=63 A overload protection Ir=25 A ... 63 A short-circuit protection Isd=3...15xIr, li=15xIn nut keeper kit



| Model                                                                                                  |                             |
|--------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                     | SENTRON                     |
| product designation                                                                                    | Molded case circuit breaker |
| design of the product                                                                                  | Motor protection            |
| design of the overcurrent release                                                                      | ETU350M                     |
| protection function of the overcurrent release                                                         | LSI                         |
| number of poles                                                                                        | 3                           |
| General technical data                                                                                 |                             |
| insulation voltage / rated value                                                                       | 800 V                       |
| operating voltage / at AC / rated value                                                                | 690 V                       |
| operating power / at AC-3 / at 400 V                                                                   | 30 000 W                    |
| operating power / at AC-3 / at 230 V                                                                   | 18 500 W                    |
| power loss [W] / maximum                                                                               | 3.1 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole            | 1.03 W                      |
| mechanical service life (operating cycles) / typical                                                   | 25 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                       | 14 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                           | 9 800                       |
| electrical endurance (operating cycles) / at AC-3 / at 380/415 V                                       | 7 500                       |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No                          |
| ground-fault monitoring version                                                                        | Without                     |
| product function                                                                                       |                             |
| • communication function                                                                               | No                          |
| • phase failure detection                                                                              | Yes                         |
| • other measurement function                                                                           | No                          |
| Net Weight                                                                                             | 2.246 kg                    |
| Current                                                                                                |                             |
| operational current                                                                                    |                             |
| • at 40 °C                                                                                             | 63 A                        |
| • at 45 °C                                                                                             | 63 A                        |
| • at 50 °C                                                                                             | 63 A                        |
| • at 55 °C                                                                                             | 63 A                        |
| • at 60 °C                                                                                             | 63 A                        |
| • at 65 °C                                                                                             | 63 A                        |
| • at 70 °C                                                                                             | 63 A                        |

**Switching capacity according to IEC 60947**

|                                                                                                                                                    |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| switching capacity class of the circuit breaker                                                                                                    | E                |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> ) <ul style="list-style-type: none"><li>• at 415 V</li><li>• at 690 V</li></ul>   | 200 kA<br>85 kA  |
| operating short-circuit current breaking capacity (I <sub>cs</sub> ) <ul style="list-style-type: none"><li>• at 415 V</li><li>• at 690 V</li></ul> | 200 kA<br>65 kA  |
| short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"><li>• at 415 V</li><li>• at 690 V</li></ul>             | 440 kA<br>187 kA |

**Adjustable parameters**

|                                                                                                                                                                                               |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| product feature / for L-tripping / can be switched on/off                                                                                                                                     | No               |
| 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> | 25 A<br>63 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>     | 4 s<br>17 s      |
| adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>0t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>    | 75 A<br>945 A    |
| adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>    | 0.03 s<br>0.03 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>                                      | 945 A<br>945 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               |
| adjustable trip class (T <sub>c</sub> CLASS)                                                                                                                                                  | 10A, 10E, 20E    |
| tripping time (T <sub>p</sub> ) / with adjustable trip class (T <sub>c</sub> CLASS) <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>                               | 4 s<br>17 s      |

**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]                                                                                                                                 | 7.13 in        |
| height                                                                                                                                      | 181 mm         |
| width [in]                                                                                                                                  | 4.13 in        |
| width                                                                                                                                       | 105 mm         |
| depth [in]                                                                                                                                  | 3.39 in        |
| depth                                                                                                                                       | 86 mm          |

**Connections**

|                                                                                           |                              |
|-------------------------------------------------------------------------------------------|------------------------------|
| arrangement of electrical connectors / for main current circuit                           | Front terminal               |
| type of electrical connection / for main current circuit                                  | on both sides nut keeper kit |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum | 13 x 1 mm                    |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 25 x 8 mm                    |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)        | tin                          |
| design of the surface / of the connections / on the bottom of the                         | tin                          |

|                                                          |                 |
|----------------------------------------------------------|-----------------|
| switch (N, 2, 4, 6)                                      |                 |
| <b>Auxiliary circuit</b>                                 |                 |
| number of CO contacts / for auxiliary contacts           | 0               |
| <b>Accessories</b>                                       |                 |
| product extension / optional / motor drive               | Yes             |
| <b>Environmental conditions</b>                          |                 |
| 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           |
| <b>Environmental footprint</b>                           |                 |
| global warming potential [CO2 eq] / total                | 61.814 kg       |
| global warming potential [CO2 eq] / during manufacturing | 14.6 kg         |
| global warming potential [CO2 eq] / during operation     | 48.9 kg         |
| global warming potential [CO2 eq] / after end of life    | -2.2 kg         |
| Siemens Eco Profile (SEP)                                | Siemens EcoTech |
| reference code / according to IEC 81346-2                | Q               |
| <b>Approvals / Certificates</b>                          |                 |
| <b>General Product Approval</b>                          |                 |



[Miscellaneous](#)



| General Product Approval                                                            | EMV                                                                                 | Test Certificates             |                                          |                                                    | Maritime application                                                                  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  | <a href="#">Miscellaneous</a> | <a href="#">Special Test Certificate</a> | <a href="#">Type Test Certificates/Test Report</a> |  |

| Maritime application                                                                | other                                              |                                                                                     |                              | Dangerous goods               |                                       |
|-------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-------------------------------|---------------------------------------|
|  | <a href="#">CCS (China Classification Society)</a> |  | <a href="#">Confirmation</a> | <a href="#">Miscellaneous</a> | <a href="#">Transport Information</a> |

|                                                                                     |                                                                                     |                                             |                                                                                     |                                             |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------|--|
| <b>Environment</b>                                                                  |                                                                                     |                                             |                                                                                     |                                             |  |
|  |  | <a href="#">Environmental Confirmations</a> |  | <a href="#">Environmental Confirmations</a> |  |

|                                                                                                                                                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Further information</b>                                                                                                                                                                                                                                                   |  |
| Information on the packaging<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>                                                                                                      |  |
| Information for data generation and storage<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a>                                                                                       |  |
| Information- and Downloadcenter (Catalogs, Brochures,...)<br><a href="https://www.siemens.com/lowvoltage/catalogs">https://www.siemens.com/lowvoltage/catalogs</a>                                                                                                           |  |
| Industry Mall (Online ordering system)<br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2163-0MN32-0AA0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2163-0MN32-0AA0</a>                                            |  |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,...)<br><a href="https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-0MN32-0AA0">https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-0MN32-0AA0</a>                                                  |  |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)<br><a href="https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-0MN32-0AA0">https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-0MN32-0AA0</a> |  |





