

Siemens  
EcoTech



circuit breaker 3VA2 IEC Frame 160 breaking capacity class M Icu=55 kA @ 415 V  
3-pole, motor protection ETU350M, LSI, In=63 A overload protection Ir=25 A...63 A  
short-circuit protection Isd=3...15 x Ir, li=15 x In 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                                                                               | 4 W                         |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole            | 1.33 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                                                                                             | 2.158 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 ( $I_{cu}$ ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 440 V</li><li>• at 500 V</li><li>• at 690 V</li></ul>   | 85 kA<br>55 kA<br>55 kA<br>36 kA<br>3 kA        |
| operating short-circuit current breaking capacity ( $I_{cs}$ ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 440 V</li><li>• at 500 V</li><li>• at 690 V</li></ul> | 85 kA<br>55 kA<br>55 kA<br>36 kA<br>2.5 kA      |
| short-circuit current making capacity ( $I_{cm}$ ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 440 V</li><li>• at 500 V</li><li>• at 690 V</li></ul>             | 187 kA<br>121 kA<br>121 kA<br>75.6 kA<br>3.7 kA |

**Adjustable parameters**

|                                                                                                                                                                                |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| product feature / for L-tripping / can be switched on/off                                                                                                                      | No               |
| adjustable response value setting current ( $I_r$ ) / of the L-trip / with $I_{2t}$ characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul> | 25 A<br>63 A     |
| adjustable response value delay time ( $t_r$ ) / for L-tripping / with $I_{2t}$ characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>     | 4 s<br>17 s      |
| adjustable response value setting current ( $I_{sd}$ ) / of S-trip / with $I_{0t}$ characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>  | 75 A<br>945 A    |
| adjustable response value delay time ( $t_{sd}$ ) / for S-tripping / with $I_{0t}$ 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 ( $I_i$ ) / for I-tripping <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>                               | 945 A<br>945 A   |
| adjustable setting current ( $I_{nN}$ ) / 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 ( $T_c$ CLASS)                                                                                                                                           | 10A, 10E, 20E    |
| tripping time ( $T_p$ ) / with adjustable trip class ( $T_c$ 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 switch (N, 2, 4, 6)     | tin                          |

| 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  |

| Environmental footprint                                  |                 |
|----------------------------------------------------------|-----------------|
| 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               |

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

| General Product Approval | EMV | Test Certificates |  |  |
|--------------------------|-----|-------------------|--|--|
|--------------------------|-----|-------------------|--|--|



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)

| Maritime application | other |  |  |  |
|----------------------|-------|--|--|--|
|----------------------|-------|--|--|--|



[CCS \(China Classification Society\)](#)



[Confirmation](#)

[Miscellaneous](#)

| Dangerous goods | Environment |  |  |  |
|-----------------|-------------|--|--|--|
|-----------------|-------------|--|--|--|

[Transport Information](#)



[Environmental Confirmations](#)

[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=3VA2163-5MN32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-5MN32-0AA0>

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

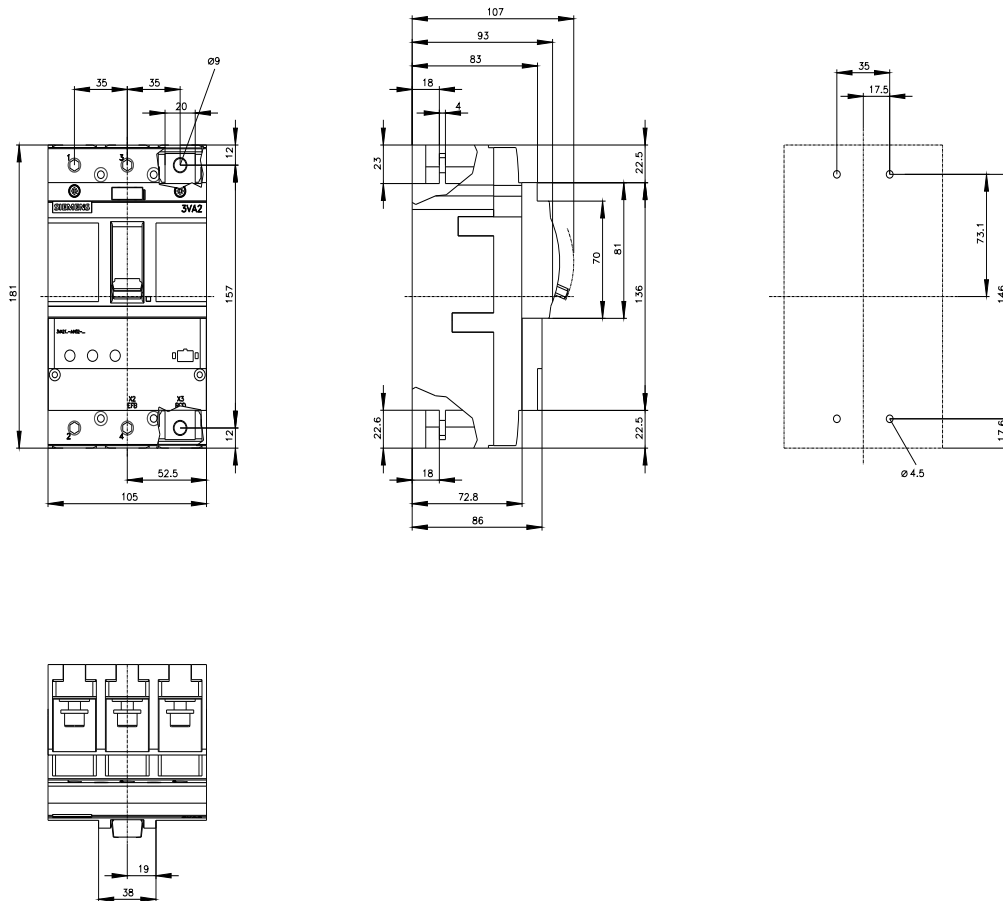
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2163-5MN32-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-5MN32-0AA0)

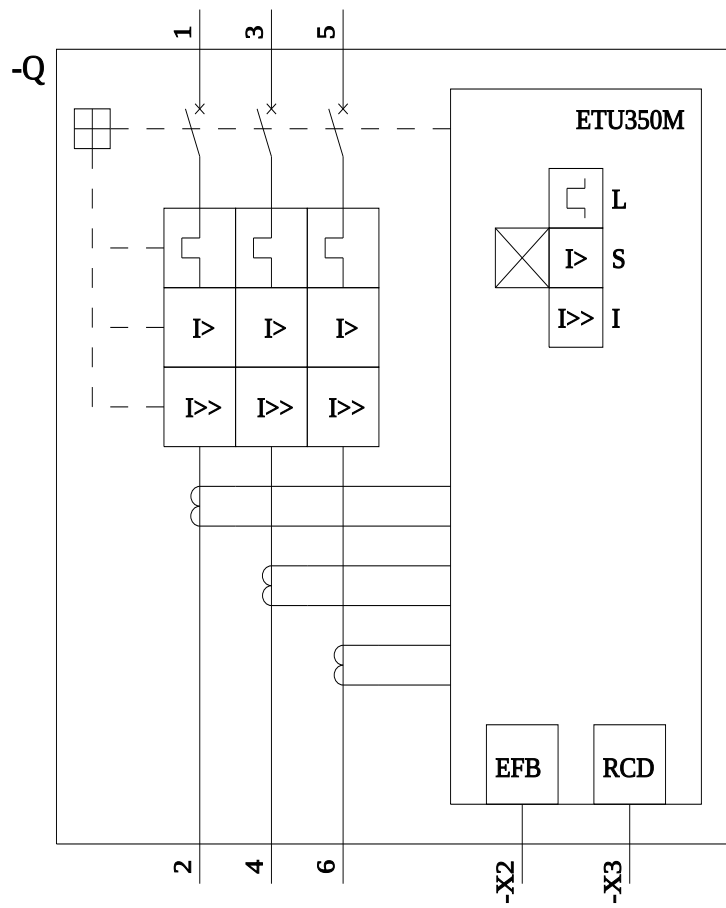
CAX-Online-Generator

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

Tender specifications

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





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