## **SIEMENS**

## **Data sheet**



circuit breaker 3VA2 IEC frame 160 breaking capacity class C Icu=110kA @ 415V 4-pole, line protection ETU860, LSIG, In=63A overload protection Ir=25A...63A short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In N conductor protection adjustable (OFF, up to 160%) gr.-fault prot., can be sw. off Ig=0.25...1 x In= tg=0.05-0.8s clamp connection

| Model  |   |
|--|---|
| product brand name   | SENTRON                                     |
| product designation  | Molded case circuit breaker                 |
| design of the product  | Line protection                             |
| design of the overcurrent release  | ETU860                                      |
| protection function of the overcurrent release   | LSIG  |
| number of poles  | 4   |
| General technical data   |   |
| insulation voltage / rated value   | 800 V                                       |
| operating voltage / at AC / rated value  | 690 V                                       |
| 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                                       |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No  |
| ground-fault monitoring version  | Summation current formation L + N conductor |
| product function   |   |
| <ul> <li>communication function</li> </ul>   | Yes   |
| other measurement function   | Yes   |
| Net Weight   | 3.2 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  | С   |
| maximum short-circuit current breaking capacity (Icu)  |   |
| ● at 240 V   | 150 kA                                      |
| ● at 415 V   | 110 kA                                      |
| • at 440 V   | 110 kA                                      |
| ● at 500 V   | 85 kA                                       |
| • at 690 V   | 2.5 kA                                      |
| operating short-circuit current breaking capacity (Ics)  |   |

| • at 240 V  | 150 kA                          |
|---|---------------------------------|
| • at 415 V  | 110 kA                          |
| • at 440 V  | 110 kA                          |
| ● at 500 V  | 85 kA                           |
| • at 690 V  | 2.5 kA                          |
| short-circuit current making capacity (Icm)   |                                 |
| • at 240 V  | 330 kA                          |
| • at 415 V  | 242 kA                          |
| • at 440 V  | 242 kA                          |
| ● at 500 V  | 187 kA                          |
| • at 690 V  | 3.7 kA                          |
| Adjustable parameters   |                                 |
| product feature / for L-tripping / can be switched on/off                                 | No                              |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic  |                                 |
| • minimum   | 25 A                            |
| maximum   | 63 A                            |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic      |                                 |
| • minimum   | 0.5 s                           |
| maximum   | 25 s                            |
| adjustable response value setting current (lsd) / of S-trip / with l0t characteristic     |                                 |
| • minimum   | 38 A                            |
| • maximum   | 630 A                           |
| adjustable response value setting current (lsd) / of S-trip / with l2t characteristic     |                                 |
| • minimum   | 38 A                            |
| maximum   | 630 A                           |
| adjustable response value delay time (tsd) / for S-tripping / with<br>l0t characteristic  |                                 |
| minimum   | 0.05 s                          |
| maximum   | 0.5 s                           |
| adjustable response value delay time (tsd) / for S-tripping / with l2t characteristic     |                                 |
| • minimum   | 0.05 s                          |
| • maximum   | 0.5 s                           |
| adjustable response value setting current (li) / for I-tripping                           |                                 |
| • minimum   | 95 A                            |
| • maximum   | 756 A                           |
| adjustable current response value current / for G-tripping / with standard characteristic |                                 |
| • initial value   | 16 A                            |
| full-scale value  | 63 A                            |
| adjustable response value delay time (tg) / for G-tripping / with l0t characteristic      |                                 |
| maximum   | 0.8 s                           |
| adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic |                                 |
| • minimum   | 16 A                            |
| maximum  adjustable response value delay time (tg) / for G-tripping / with                | 63 A                            |
| 12t characteristic  | 0.05 -                          |
| • minimum   | 0.05 s                          |
| maximum  adjustable setting current (InN) / for N tripping                                | 0.8 s                           |
| adjustable setting current (InN) / for N-tripping  • minimum                              | 25 A                            |
| mınımum     maximum   | 25 A<br>101 A                   |
|   |                                 |
| design of the N-conductor protection  | adjustable OFF; 40% to 160% Yes |
| product function / grounding protection  Mechanical Design                                | 165                             |
| product component   |                                 |
| undervoltage release  | No                              |
| voltage trigger   | No                              |
| ■ voltage trigger   | 140                             |

| trip indicator  | No                        |     |
|---|---------------------------|-----|
| height [in]   | 7.13 in                   |     |
| height  | 181 mm                    |     |
| width [in]  | 5.51 in                   |     |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded | 1 x (6-120 mm²)           |     |
| width   | 140 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                                  | double-sided box terminal |     |
| 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                     |     |
| Certificates  |                           |     |
| reference code / according to IEC 81346-2   | Q                         |     |
| General Product Approval  |                           | EMC |

Confirmation





Miscellaneous





**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report

Special Test Certificate Miscellaneous



Marine / Shipping





CCS / China Classification Society

Miscellaneous

other

Confirmation

other

**Dangerous Good** 

**Environment** 

<u>Miscellaneous</u>

**Transport Information** 

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an

EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2163-7KQ46-0AA0

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

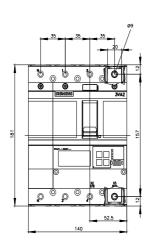
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA2163-7KQ46-0AA0">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA2163-7KQ46-0AA0</a>

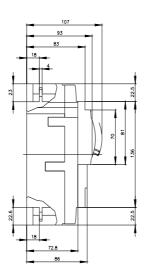
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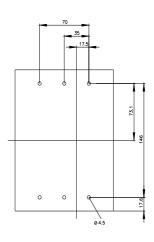
http://www.siemens.com/cax

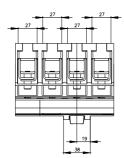
**Tender specifications** 

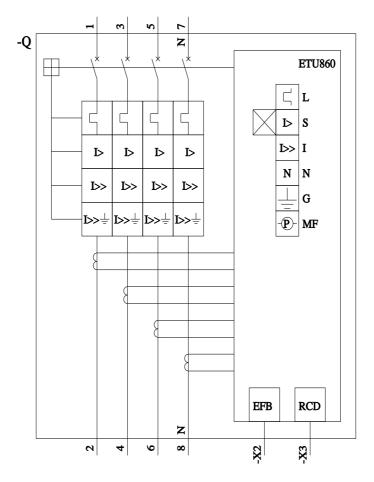
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last modified: 7/19/2022 🖸

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