



circuit breaker 3VA1 IEC frame 160 breaking capacity class N Icu=25kA @ 415V 4-pole, line protection TM240, ATAM, In=63A overload protection Ir=44A...63A short-circuit protection Ii=5...10 x In N conductor unprotected nut keeper kit

| Model  |                             |
|--|-----------------------------|
| product brand name   | SETRON                      |
| product designation  | Molded case circuit breaker |
| Product version  | Line protection             |
| design of the overcurrent release  | TM240                       |
| protection function of the overcurrent release   | LI                          |
| number of poles  | 4                           |
| General technical data   |                             |
| Tension assignée d'isolement Ui  | 800 V                       |
| Max. rated operational voltage Ue with AC 50/60Hz  | 690 V                       |
| Max. rated operational voltage Ue with DC  | 600 V                       |
| power loss [W] / maximum   | 17.3 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 5.77 W                      |
| mechanical service life (switching cycles) / typical   | 20 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 8 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 8 000                       |
| Neutral conductors / upgradeable/retrofitable  | No                          |
| ground-fault monitoring version  | Without                     |
| product function   |                             |
| • communication function   | No                          |
| • other measurement function   | No                          |
| net weight   | 1.2 kg                      |
| Current  |                             |
| Max. rated operational current of the frame size   | 160 A                       |
| Courant permanent assigné Iu   | 63 A                        |
| operational current  |                             |
| • at 40 °C   | 63 A                        |
| • at 45 °C   | 63 A                        |
| • at 50 °C   | 63 A                        |
| • at 55 °C   | 62 A                        |
| • at 60 °C   | 61 A                        |
| • at 65 °C   | 60 A                        |
| • at 70 °C   | 58 A                        |
| Switching capacity according to IEC 60947  |                             |
| switching capacity class of the circuit breaker  | N                           |

|  |  |
|--|--|
| breaking capacity maximum short-circuit current (I <sub>cu</sub> )   |  |
| <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>   | 36 kA<br>25 kA<br>16 kA<br>7 kA<br>7 kA  |
| breaking capacity operating short-circuit current (I <sub>cs</sub> )   |  |
| <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>   | 36 kA<br>25 kA<br>16 kA<br>5 kA<br>5 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 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>   | 76 kA<br>53 kA<br>32 kA<br>11.9 kA<br>11.9 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 |
| <b>Adjustable parameters</b>   |  |
| Adjustable response value current / I <sub>g</sub> min.  | 44 A   |
| Adjustable response value current / I <sub>g</sub> min.  | 63 A   |
| Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF   | No   |
| Adjustable response value current / I <sub>i</sub> min.  | 315 A  |
| Adjustable response value current / I <sub>i</sub> max.  | 630 A  |
| design of the N-conductor protection   | Without  |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF  | No   |
| <b>Mechanical Design</b>   |  |
| height [in]  | 5.1 in   |
| Height   | 130 mm   |
| width [in]   | 4 in   |
| Width  | 101.6 mm   |
| depth [in]   | 2.8 in   |
| depth  | 70 mm  |
| <b>Connections</b>   |  |
| arrangement of electrical connectors / for main current circuit  | Front terminal   |
| Type of connectable conductor cross-section, connection screw, width x thickness , min.  | 12 x 0 mm  |
| Type of connectable conductor cross-section, connection screw, width x thickness , max.  | 17 x 6.5 mm  |
| <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  |  |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C   |
| <b>Certificates</b>  |  |
| reference code / acc. to IEC 81346-2   | Q  |
| <b>General Product Approval</b>  | <b>EMC</b>   |



[Miscellaneous](#)



| Declaration of Conformity | Test Certificates | Shipping Approval |
|---------------------------|-------------------|-------------------|
|---------------------------|-------------------|-------------------|



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Miscellaneous](#)



ABS



ABS

| Shipping Approval | other |
|-------------------|-------|
|-------------------|-------|



BUREAU VERITAS



LRS



RMRS

[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)

### Further information

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=3VA1163-3EF42-0AA0>

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

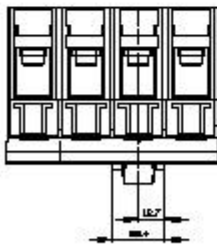
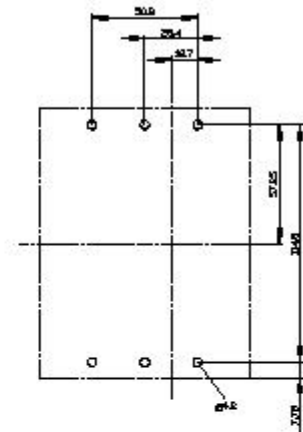
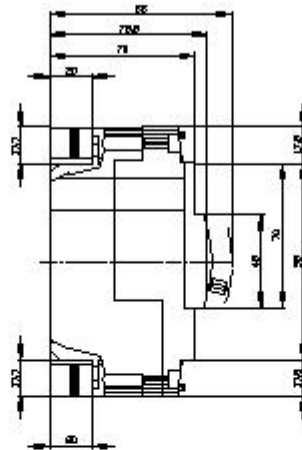
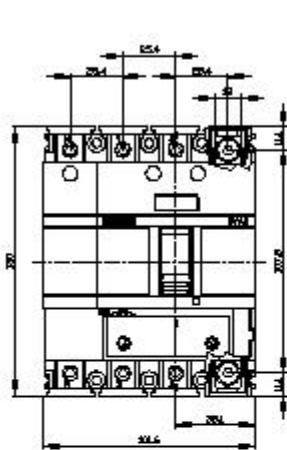
<https://support.industry.siemens.com/cs/ww/en/ps/3VA1163-3EF42-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1163-3EF42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1163-3EF42-0AA0)

Tender specifications

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





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