

circuit breaker VL250N standard breaking capacity  $I_{cu}=55kA$ , 415V AC 4-pole, line protection Electronic Trip Unit TM, LI  $I_n=200A$ , rated current  $I_R=160\dots200A$ , overload protection,  $I_l=1000\dots2000A$ , short-circuit protection N unprotected without auxiliary release without auxiliary/alarm switch

| Model  |   |
|--|---|
| type of the driving mechanism motor drive  | No  |
| design of the overcurrent release  | TM  |
| General technical data   |   |
| number of poles  | 4   |
| size of the circuit-breaker  | 3VL3  |
| mechanical service life (operating cycles) typical   | 20 000  |
| electrical endurance (operating cycles) typical  | 10 000  |
| utilization category   | A   |
| performance class for circuit breaker  | N   |
| reference code according to DIN 40719 extended   | Q   |
| according to IEC 204-2 according to IEC 750  |   |
| operating frequency maximum  | 120 1/s   |
| Voltage  |   |
| Rated operational voltage $U_e$ max.   | 690 V   |
| <ul style="list-style-type: none"> <li>insulation voltage rated value</li> <li>insulation voltage (<math>U_i</math>) at AC rated value</li> </ul>  | 800 V   |
| surge voltage resistance rated value   | 8 kV  |
| operating voltage  |   |
| <ul style="list-style-type: none"> <li>rated value maximum</li> <li>for main current circuit at AC at 50 Hz maximum</li> <li>for main current circuit at AC at 60 Hz maximum</li> <li>for main current circuit at DC maximum</li> </ul>                    | 690 V<br>690 V<br>690 V<br>500 V                            |
| Protection class   |   |
| protection class IP  | IP20  |
| protection function of the overcurrent release   | LI  |
| Current  |   |
| operational current  |   |
| <ul style="list-style-type: none"> <li>at 40 °C rated value</li> <li>at 45 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 60 °C rated value</li> <li>at 65 °C rated value</li> <li>at 70 °C rated value</li> </ul> | 200 A<br>200 A<br>200 A<br>186 A<br>186 A<br>172 A<br>172 A |
| continuous current rated value   | 200 A   |
| derating temperature for the rated value of the continuous current   | 50 °C   |
| adjustable current response value current  |   |
| <ul style="list-style-type: none"> <li>of the current-dependent overload release full-scale value</li> <li>of instantaneous short-circuit trip unit minimum</li> <li>of instantaneous short-circuit trip unit maximum</li> </ul>                           | 200 A<br>1 000 A<br>2 000 A                                 |
| Main circuit   |   |
| operating frequency  |   |
| <ul style="list-style-type: none"> <li>1 rated value</li> <li>2 rated value</li> </ul>   | 50 Hz<br>60 Hz  |
| Auxiliary circuit  |   |
| number of CO contacts for auxiliary contacts   | 0   |
| number of NC contacts for auxiliary contacts   | 0   |

|   |                              |
|---|------------------------------|
| number of NO contacts for auxiliary contacts  | 0                            |
| <b>Suitability</b>  |                              |
| suitability for use   | system protection            |
| <b>Adjustable parameters</b>  |                              |
| adjustable current response value current of the current-dependent overload release initial value | 160 A                        |
| <b>Product details</b>  |                              |
| product component   |                              |
| • trip indicator  | No                           |
| • auxiliary switch  | No                           |
| • voltage trigger   | No                           |
| • undervoltage release  | No                           |
| • undervoltage release with leading contact   | No                           |
| product extension optional motor drive  | Yes                          |
| <b>Product function</b>   |                              |
| product function  |                              |
| • of thermal overload trip unit   | adjustable                   |
| • grounding protection  | No                           |
| • for neutral conductors short-circuit and overload proof   | No                           |
| • overload protection   | Yes                          |
| <b>Short circuit</b>  |                              |
| operating short-circuit current breaking capacity (Ics)   |                              |
| • at 240 V rated value  | 65 kA                        |
| • at 415 V rated value  | 55 kA                        |
| • at 500 V rated value  | 20 kA                        |
| • at 690 V rated value  | 6 kA                         |
| maximum short-circuit current breaking capacity (Icu)   |                              |
| • at 240 V rated value  | 65 kA                        |
| • at 415 V rated value  | 55 kA                        |
| • at 440 V rated value  | 25 kA                        |
| • at 480 V according to NEMA rated value  | 25 kA                        |
| • at 500 V rated value  | 25 kA                        |
| • at 600 V according to NEMA rated value  | 12 kA                        |
| • at 690 V rated value  | 12 kA                        |
| <b>Connections</b>  |                              |
| arrangement of electrical connectors for main current circuit                                     | front side                   |
| type of connectable conductor cross-sections for main contacts                                    |                              |
| • with flexible busbar  | 17 x 10 mm                   |
| • solid   | 25 ... 185 mm <sup>2</sup>   |
| • finely stranded with core end processing  | 25 ... 120 mm <sup>2</sup>   |
| • stranded  | 25 ... 185 mm <sup>2</sup>   |
| type of connectable conductor cross-sections for auxiliary contacts                               |                              |
| • solid   | 0.75 ... 1.5 mm <sup>2</sup> |
| • finely stranded with core end processing  | 0,75 ... 1.0 mm <sup>2</sup> |
| type of electrical connection for main current circuit  | screw-type terminals         |
| <b>Mechanical Design</b>  |                              |
| height  | 185.5 mm                     |
| width   | 139.5 mm                     |
| depth   | 106.5 mm                     |
| fastening method  | fixed mounting               |
| <b>Environmental conditions</b>   |                              |
| ambient temperature during operation  |                              |
| • minimum   | 0 °C                         |
| • maximum   | 70 °C                        |
| ambient temperature during storage  |                              |
| • minimum   | -40 °C                       |
| • maximum   | 80 °C                        |
| <b>General Product Approval</b>   |                              |



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**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=3VL3720-1EJ46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL3720-1EJ46-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL3720-1EJ46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL3720-1EJ46-0AA0)

CAx-Online-Generator

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

Tender specifications

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



