

circuit breaker VL160X H high breaking capacity Icu=70kA, 415V AC 3-pole, line protection Trip Unit TM, LI In=160A, rated current Ir=125...160A, overload prot. II=1500A, short-circuit prot. with screw terminals 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   | 3                                |
| size of the circuit-breaker   | 3VL1                             |
| 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 according to IEC 204-2 according to IEC 750  | Q                                |
| operating frequency maximum   | 120 1/s                          |
| Voltage   |                                  |
| Rated operational voltage Ue max.   | 690 V                            |
| <ul style="list-style-type: none"> <li>insulation voltage rated value</li> <li>insulation voltage (Ui) 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                               |
| 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                                |
| Suitability   |                                  |
| suitability for use   | system protection                |
| Adjustable parameters   |                                  |
| adjustable current response value current of the current-dependent overload release initial value   | 128 A                            |
| Product details   |                                  |
| product component <ul style="list-style-type: none"> <li>trip indicator</li> <li>auxiliary switch</li> <li>voltage trigger</li> <li>undervoltage release</li> <li>undervoltage release with leading contact</li> </ul>                                    | No<br>No<br>No<br>No<br>No       |
| product extension optional motor drive  | Yes                              |
| Product function  |                                  |
| product function  |                                  |

|   |                               |
|---|-------------------------------|
| <ul style="list-style-type: none"> <li>• of thermal overload trip unit</li> <li>• grounding protection</li> <li>• for neutral conductors short-circuit and overload proof</li> <li>• overload protection</li> </ul> | adjustable<br>No<br>No<br>Yes |
|---|-------------------------------|

### Short circuit

|  |  |
|--|--|
| operating short-circuit current breaking capacity (Ics)  |  |
| <ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 415 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>   | 75 kA<br>70 kA<br>23 kA<br>6 kA                              |
| maximum short-circuit current breaking capacity (Icu)  |  |
| <ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 415 V rated value</li> <li>• at 440 V rated value</li> <li>• at 480 V according to NEMA rated value</li> <li>• at 500 V rated value</li> <li>• at 600 V according to NEMA rated value</li> <li>• at 690 V rated value</li> </ul> | 100 kA<br>70 kA<br>42 kA<br>42 kA<br>30 kA<br>12 kA<br>12 kA |

### Connections

|   |  |
|---|--|
| arrangement of electrical connectors for main current circuit   | front side   |
| type of connectable conductor cross-sections for main contacts  |  |
| <ul style="list-style-type: none"> <li>• with flexible busbar</li> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul> | 12 x 10 mm<br>2.5 ... 95 mm <sup>2</sup><br>2.5 ... 50 mm <sup>2</sup><br>2.5 ... 95 mm <sup>2</sup> |
| type of connectable conductor cross-sections for auxiliary contacts   |  |
| <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>   | 0.75 ... 1.5 mm <sup>2</sup><br>0,75 ... 1.0 mm <sup>2</sup>   |
| type of electrical connection for main current circuit  | screw-type terminals   |

### Mechanical Design

|                  |                |
|------------------|----------------|
| height           | 157.5 mm       |
| width            | 104.5 mm       |
| depth            | 106.5 mm       |
| fastening method | fixed mounting |

### Environmental conditions

|  |                 |
|--|-----------------|
| ambient temperature during operation   |                 |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | 0 °C<br>70 °C   |
| ambient temperature during storage   |                 |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -40 °C<br>80 °C |

### Approvals Certificates

#### General Product Approval



[Confirmation](#)



|                          |     |                   |                   |
|--------------------------|-----|-------------------|-------------------|
| General Product Approval | EMV | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|



[KC](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



|                   |       |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



[Confirmation](#)

#### Further information

##### Information on the packaging

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

##### 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=3VL1716-2DD36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1716-2DD36-0AA0>

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

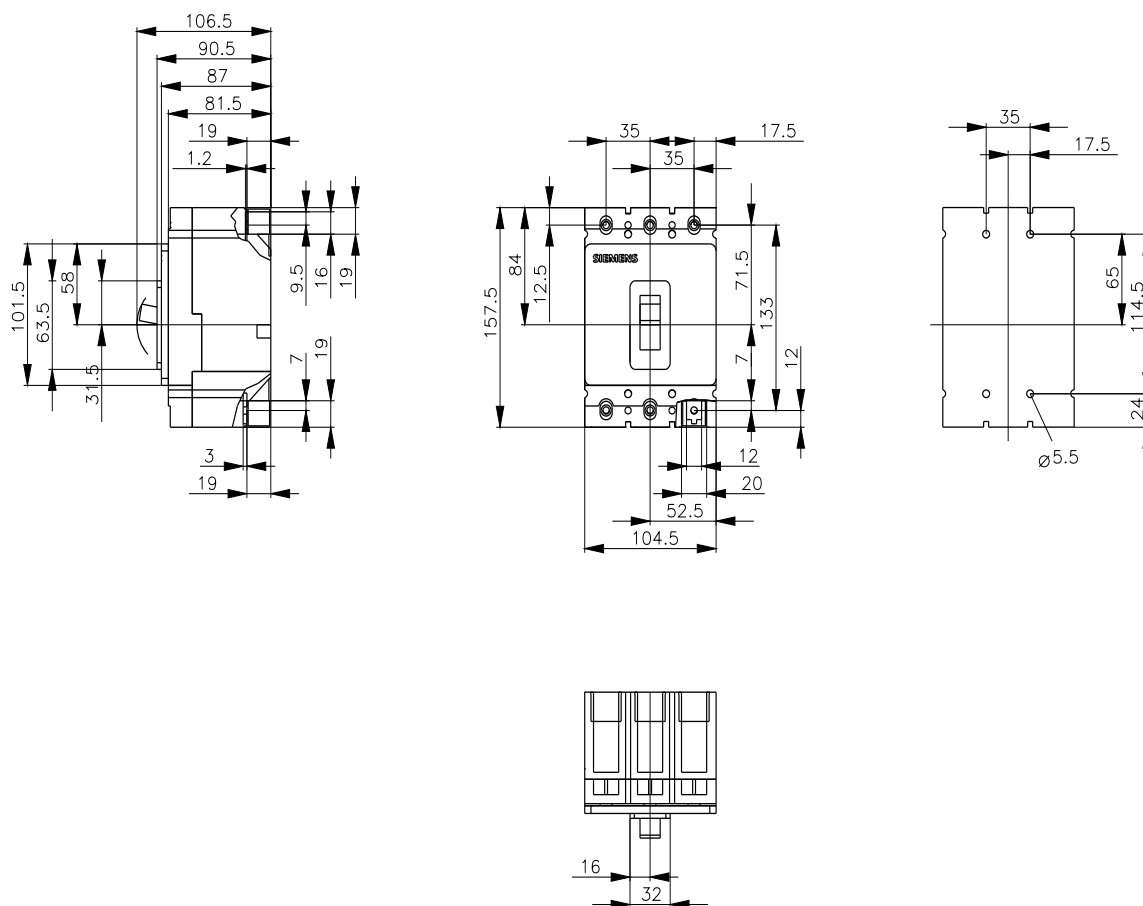
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL1716-2DD36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1716-2DD36-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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



last modified:

6/17/2023

