

circuit breaker VL160H high breaking capacity Icu=70kA, 415V AC 4-pole, line protection Electronic Trip Unit ETU10, LIN In=100A, rated current IR=40...100A, overload protection, II=1.25 to 11xIN, short-circuit protection N protected with screw terminals without auxiliary release without auxiliary/alarm switch

| Model   |                                  |
|---|----------------------------------|
| type of the driving mechanism motor drive   | No                               |
| design of the overcurrent release   | ETU10                            |
| General technical data  |                                  |
| number of poles   | 4                                |
| size of the circuit-breaker   | 3VL2                             |
| 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  | LIN                              |
| 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   | 40 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  |                                  |

|   |            |
|---|------------|
| • of thermal overload trip unit                           | adjustable |
| • grounding protection                                    | No         |
| • for neutral conductors short-circuit and overload proof | Yes        |
| • overload protection                                     | Yes        |

#### Short circuit

|   |        |
|---|--------|
| operating short-circuit current breaking capacity (Ics) |        |
| • at 240 V rated value                                  | 75 kA  |
| • at 415 V rated value                                  | 70 kA  |
| • at 500 V rated value                                  | 30 kA  |
| • at 690 V rated value                                  | 6 kA   |
| maximum short-circuit current breaking capacity (Icu)   |        |
| • at 240 V rated value                                  | 100 kA |
| • at 415 V rated value                                  | 70 kA  |
| • at 440 V rated value                                  | 50 kA  |
| • at 480 V according to NEMA rated value                | 50 kA  |
| • at 500 V rated value                                  | 40 kA  |
| • at 600 V according to NEMA rated value                | 12 kA  |
| • at 690 V rated value                                  | 12 kA  |

#### Connections

|   |                              |
|---|------------------------------|
| arrangement of electrical connectors for main current circuit       | front side                   |
| type of connectable conductor cross-sections for main contacts      |                              |
| • with flexible busbar  | 12 x 10 mm                   |
| • solid   | 2.5 ... 95 mm <sup>2</sup>   |
| • finely stranded with core end processing                          | 2.5 ... 50 mm <sup>2</sup>   |
| • stranded  | 2.5 ... 95 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         |

#### Mechanical Design

|                  |                |
|------------------|----------------|
| height           | 174.5 mm       |
| width            | 139.5 mm       |
| depth            | 106.5 mm       |
| fastening method | fixed mounting |

#### Environmental conditions

|                                      |        |
|--------------------------------------|--------|
| ambient temperature during operation |        |
| • minimum                            | -25 °C |
| • maximum                            | 70 °C  |
| ambient temperature during storage   |        |
| • minimum                            | -40 °C |
| • maximum                            | 80 °C  |

#### Approvals Certificates

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

[Confirmation](#)



[Special Test Certificate](#)

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



[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

|                |             |
|----------------|-------------|
| Dangerous Good | Environment |
|----------------|-------------|

[Transport Information](#)

[Environmental Con-](#)

[Environmental Con-](#)

#### 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=3VL2710-2TA46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2710-2TA46-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2710-2TA46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2710-2TA46-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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

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