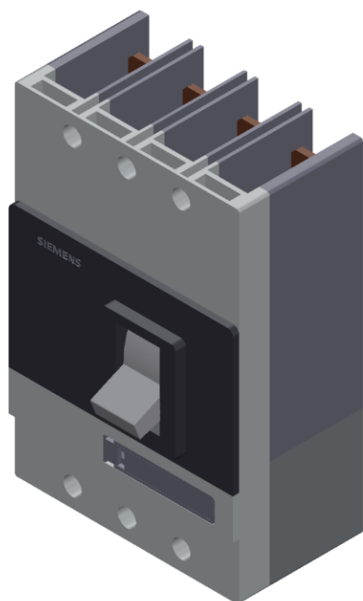


circuit breaker VL400N standard breaking capacity  $I_{cu}=55kA$ , 415V AC 4-pole, line protection trip unit TM,  $I_n=400A$ , rated current  $I_R=320...400A$ , overload protection,  $I_l=2000...4000A$ , short-circuit protection N unprotected Undervoltage release 24 V DC Auxiliary switch mounting kit 2 AUX (1 NO + 1 NC)



| 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                       | 3VL4   |
| Electrical endurance (switching cycles) / typical | 10 000 |

|  |         |
|--|---------|
| Usage category   | A       |
| Performance class for circuit breaker  | N       |
| Mechanical service life (switching cycles) / typical                                 | 20 000  |
| Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 | Q       |
| Operating frequency / maximum  | 120 1/s |

### Voltage

|   |       |
|---|-------|
| Rated operational voltage $U_e$ / max.                  | 690 V |
| Insulation voltage                                      |       |
| • rated value   | 800 V |
| • at AC / rated value                                   | 800 V |
| Surge voltage resistance / rated value                  | 8 kV  |
| Operating voltage                                       |       |
| • rated value / maximum                                 | 690 V |
| • for main current circuit / at AC / at 50 Hz / maximum | 690 V |
| • for main current circuit / at AC / at 60 Hz / maximum | 690 V |
| • for main current circuit / at DC / maximum            | 500 V |

### Protection class

|  |      |
|--|------|
| Protection class IP                            | IP20 |
| Protective function of the overcurrent release | LI   |

### Current

|  |         |
|--|---------|
| Operating current / at 45 °C / rated value                           | 400 A   |
| Continuous current / rated value                                     | 400 A   |
| Derating temperature / for the rated value of the continuous current | 50 °C   |
| Adjustable pick-up value current                                     |         |
| • of the current-dependent overload release / Full-scale value       | 400 A   |
| • of instantaneous short-circuit trip unit / initial value           | 2 000 A |
| • of instantaneous short-circuit trip unit / Full-scale value        | 4 000 A |

### Main circuit

|                          |       |
|--------------------------|-------|
| Operating frequency      |       |
| • 1 / rated value        | 50 Hz |
| • 2 / rated value        | 60 Hz |
| Operating current        |       |
| • at 40 °C / rated value | 400 A |
| • at 50 °C / rated value | 400 A |
| • at 55 °C / rated value | 372 A |

|                          |       |
|--------------------------|-------|
| • at 60 °C / rated value | 372 A |
| • at 65 °C / rated value | 344 A |
| • at 70 °C / rated value | 344 A |

#### Auxiliary circuit

|  |   |
|--|---|
| Number of CO contacts / for auxiliary contacts | 0 |
| Number of NC contacts / for auxiliary contacts | 1 |
| Number of NO contacts / for auxiliary contacts | 1 |

#### Suitability

|                     |                   |
|---------------------|-------------------|
| Suitability for use | system protection |
|---------------------|-------------------|

#### Adjustable parameters

|  |       |
|--|-------|
| Adjustable pick-up value current / of the current-dependent overload release / initial value | 320 A |
|--|-------|

#### Product details

|   |     |
|---|-----|
| Product component                           |     |
| • Trip indicator                            | No  |
| • Auxiliary switch                          | Yes |
| • Voltage trigger                           | No  |
| • undervoltage release                      | Yes |
| • undervoltage release with leading contact | No  |
| Product extension / optional / motor drive  | Yes |

#### Product function

|   |            |
|---|------------|
| Product function  |            |
| • of thermal overload trip unit                             | adjustable |
| • Ground fault protection                                   | No         |
| • for neutral conductors / Short-circuit and overload proof | No         |
| • Overload protection                                       | Yes        |

#### Short circuit

|   |       |
|---|-------|
| Operational 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                                  | 8 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                                  | 35 kA |
| • at 480 V / acc. to NEMA / rated value                   | 35 kA |
| • at 500 V / rated value                                  | 25 kA |

- at 600 V / acc. to NEMA / rated value 20 kA
- at 690 V / rated value 15 kA

## Connections




|   |                              |
|---|------------------------------|
| Arrangement of electrical connectors / for main current circuit       | front side                   |
| <b>Type of connectable conductor cross-sections</b>                   |                              |
| • for main contacts / with flexible busbar                            | 25 x 10                      |
| • for main contacts / solid   | 50 ... 300 mm <sup>2</sup>   |
| • for main contacts / finely stranded / with core end processing      | 50 ... 240 mm <sup>2</sup>   |
| • for main contacts / stranded  | 50 ... 300 mm <sup>2</sup>   |
| • for auxiliary contacts / solid                                      | 0.75 ... 1.5 mm <sup>2</sup> |
| • for auxiliary contacts / 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             | 279.5 mm       |
| Width              | 183.5 mm       |
| Depth              | 163.5 mm       |
| Mounting type      | fixed mounting |
| • during operation | 0 ... 70 °C    |
| • during storage   | -40 ... +80 °C |

## Certificates

|                            |                                      |
|----------------------------|--------------------------------------|
| Certificate of suitability | IEC, standard switching capacity (N) |
| Reference code             |                                      |
| • acc. to DIN EN 61346-2   | Q                                    |

| General Product Approval   |                               | EMC                | Declaration of Conformity   | Test Certificates   |
|--|-------------------------------|--------------------|---|---|
| <br>CCC | <a href="#">Miscellaneous</a> | <a href="#">KC</a> | <br>C-Tick | <br>EG-Konf. |
|  |                               |                    |   | <a href="#">Special Test Certificate</a>  |

| Shipping Approval  |  |  |  |   |   |
|--|--|--|--|---|---|
| <br>ABS | <br>BUREAU<br>VERITAS | <br>LRS | <br>PRS | <br>RINA | <br>RMRS |

| other                         |   |                              |  |
|-------------------------------|---|------------------------------|--|
| <a href="#">Miscellaneous</a> | <a href="#">Environmental Confirmations</a> | <a href="#">Confirmation</a> | <a href="#">Manufacturer Declaration</a> |

### 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=3VL4740-1EJ46-2PB1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL4740-1EJ46-2PB1>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL4740-1EJ46-2PB1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL4740-1EJ46-2PB1)

**CAX-Online-Generator**

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

**Tender specifications**

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