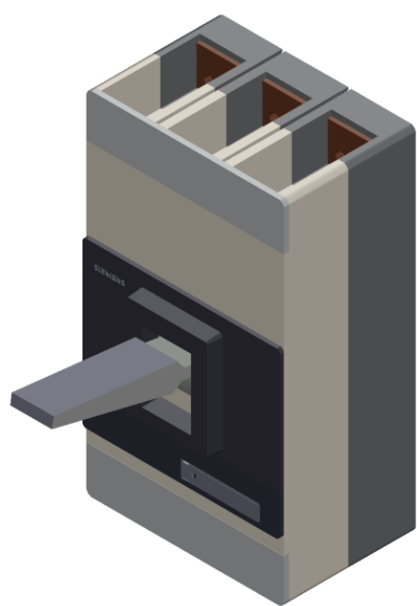


circuit breaker VL1600H high breaking capacity Icu=70kA, 415V AC  
3-pole, non-auto. air circ. br. trip unit magnetic In=1600A, rated  
current II=14400A, short-circuit protection without auxiliary release  
without auxiliary/alarm switch



| Model                                             |       |
|---------------------------------------------------|-------|
| Type of the driving mechanism / motor drive       | No    |
| Design of the overcurrent release                 | M     |
| General technical data                            |       |
| Number of poles                                   | 3     |
| Size of the circuit-breaker                       | 3VL8  |
| Electrical endurance (switching cycles) / typical | 1 500 |

|                                                                                      |        |
|--------------------------------------------------------------------------------------|--------|
| Usage category                                                                       | A      |
| Performance class for circuit breaker                                                | N      |
| Mechanical service life (switching cycles) / typical                                 | 3 000  |
| Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 | Q      |
| Operating frequency / maximum                                                        | 30 1/s |

## Voltage

|                                                         |       |
|---------------------------------------------------------|-------|
| Rated operational voltage U <sub>e</sub> / max.         | 690 V |
| Insulation voltage / 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 | I    |

## Current

|                                                                      |          |
|----------------------------------------------------------------------|----------|
| Operating current / at 45 °C / rated value                           | 1 600 A  |
| Continuous current / rated value                                     | 1 600 A  |
| Derating temperature / for the rated value of the continuous current | 50 °C    |
| Adjustable pick-up value current                                     |          |
| • of instantaneous short-circuit trip unit / initial value           | 14 400 A |
| • of instantaneous short-circuit trip unit / Full-scale value        | 14 400 A |

## Main circuit

|                          |         |
|--------------------------|---------|
| Operating frequency      |         |
| • 1 / rated value        | 50 Hz   |
| • 2 / rated value        | 60 Hz   |
| Operating current        |         |
| • at 40 °C / rated value | 1 600 A |
| • at 50 °C / rated value | 1 600 A |
| • at 55 °C / rated value | 1 488 A |
| • at 60 °C / rated value | 1 488 A |
| • at 65 °C / rated value | 1 376 A |
| • at 70 °C / rated value | 1 376 A |

|                                                                 |                                |
|-----------------------------------------------------------------|--------------------------------|
| 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                                             | non-automatic circuit-breakers |
| Product details                                                 |                                |
| 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                            |
| Product function                                                |                                |
| Product function                                                |                                |
| • of thermal overload trip unit                                 | without                        |
| • Ground fault protection                                       | No                             |
| • for neutral conductors / Short-circuit and overload proof     | No                             |
| • Overload protection                                           | No                             |
| Short circuit                                                   |                                |
| Operational short-circuit current breaking capacity (Ics)       |                                |
| • at 240 V / rated value                                        | 50 kA                          |
| • at 415 V / rated value                                        | 35 kA                          |
| • at 500 V / rated value                                        | 30 kA                          |
| • at 690 V / rated value                                        | 15 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 / acc. to NEMA / rated value                         | 50 kA                          |
| • at 500 V / rated value                                        | 40 kA                          |
| • at 600 V / acc. to NEMA / rated value                         | 30 kA                          |
| • at 690 V / rated value                                        | 30 kA                          |
| Connections                                                     |                                |
| Arrangement of electrical connectors / for main current circuit | front side                     |
| Type of electrical connection / for main current circuit        | without connection accessoires |

## Mechanical Design

|               |                |
|---------------|----------------|
| Height        | 406.5 mm       |
| Width         | 228.5 mm       |
| Depth         | 333.5 mm       |
| Mounting type | fixed mounting |

## Certificates

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

| General Product Approval                                                                 | EMC                                                                                         | Test Certificates                        | Shipping Approval                                                                          |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CCC | <br>C-Tick | <a href="#">Special Test Certificate</a> | <br>ABS |

| Shipping Approval                                                                                    | other                         |
|------------------------------------------------------------------------------------------------------|-------------------------------|
| <br>BUREAU VERITAS | <a href="#">Miscellaneous</a> |

| other                                       |
|---------------------------------------------|
| <a href="#">Environmental Conformations</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=3VL8716-2DE30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8716-2DE30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL8716-2DE30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8716-2DE30-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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