



circuit breaker VL1250H high breaking capacity  $I_{cu}=70\text{kA}$ , 415V AC  
3-pole, line protection trip unit ETU20, LSI  $I_n=1000\text{A}$ , rated current  
 $I_R=400\ldots 1000\text{A}$ , overload protection,  $ISD=1.5$  to  $10 \times I_R$ ,  $II=11 \times I_N$   
short-circuit protection without auxiliary release without  
auxiliary/alarm switch

| Model                                                                                   |        |
|-----------------------------------------------------------------------------------------|--------|
| Type of the driving mechanism / motor drive                                             | No     |
| Design of the overcurrent release                                                       | ETU20  |
| General technical data                                                                  |        |
| Number of poles                                                                         | 3      |
| Size of the circuit-breaker                                                             | 3VL7   |
| 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<br>according to IEC 204-2 / acc. to IEC 750 | Q      |
| Operating frequency / maximum                                                           | 30 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                        |
| <b>Protection class</b>                                              |                             |
| Protection class IP                                                  | IP20                        |
| Protective function of the overcurrent release                       | LSI                         |
| <b>Electricity</b>                                                   |                             |
| Operating current / at 45 °C / rated value                           | 1 000 A                     |
| Continuous current / rated value                                     | 1 000 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       | 1 000 A                     |
| • of instantaneous short-circuit trip unit / initial value           | 11 000 A                    |
| • of instantaneous short-circuit trip unit / Full-scale value        | 11 000 A                    |
| <b>Main circuit</b>                                                  |                             |
| Operating frequency                                                  |                             |
| • 1 / rated value                                                    | 50 Hz                       |
| • 2 / rated value                                                    | 60 Hz                       |
| 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                       |
| Operating current                                                    |                             |
| • at 40 °C / rated value                                             | 1 000 A                     |
| • at 50 °C / rated value                                             | 1 000 A                     |
| • at 55 °C / rated value                                             | 950 A                       |
| • at 60 °C / rated value                                             | 950 A                       |
| • at 65 °C / rated value                                             | 800 A                       |
| • at 70 °C / rated value                                             | 800 A                       |
| <b>Auxiliary circuit</b>                                             |                             |
| 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/generator protection |
| <b>Adjustable parameters</b>                                         |                             |

|                                                                                                       |          |
|-------------------------------------------------------------------------------------------------------|----------|
| Adjustable pick-up value current / of the short-time delayed short-circuit release / Full-scale value | 10 000 A |
| Adjustable pick-up value current / of the current-dependent overload release / initial value          | 40 A     |

## 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                             | 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                                  | 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 connectable conductor cross-sections                          |                              |
| • 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        | 406.5 mm       |
| Width         | 228.5 mm       |
| Depth         | 333.5 mm       |
| Mounting type | fixed mounting |

## Environmental conditions

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

## Certificates

|                            |                                  |
|----------------------------|----------------------------------|
| Certificate of suitability | IEC, high switching capacity (H) |
|----------------------------|----------------------------------|

|                          |   |
|--------------------------|---|
| Reference code           |   |
| • acc. to DIN EN 61346-2 | Q |

|                                                                                                                                                                                                                                  |                                                                                     |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| Waste electronic equipment must not be disposed as unsorted municipal waste, e.g. household waste. For disposing the waste electronic equipment it is necessary to observe the current local national/international regulations. |                                                                                     |  |
|                                                                                                                                                                                                                                  |  |  |

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

| Shipping Approval                                                                 |                                                                                   | other                                       |                               |                              |                                          |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------------|------------------------------|------------------------------------------|
|  |  | <a href="#">Environmental Conformations</a> | <a href="#">Miscellaneous</a> | <a href="#">Confirmation</a> | <a href="#">Manufacturer Declaration</a> |
| RINA                                                                              | RMRS                                                                              |                                             |                               |                              |                                          |

#### 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=3VL7710-2SE36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL7710-2SE36-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL7710-2SE36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL7710-2SE36-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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