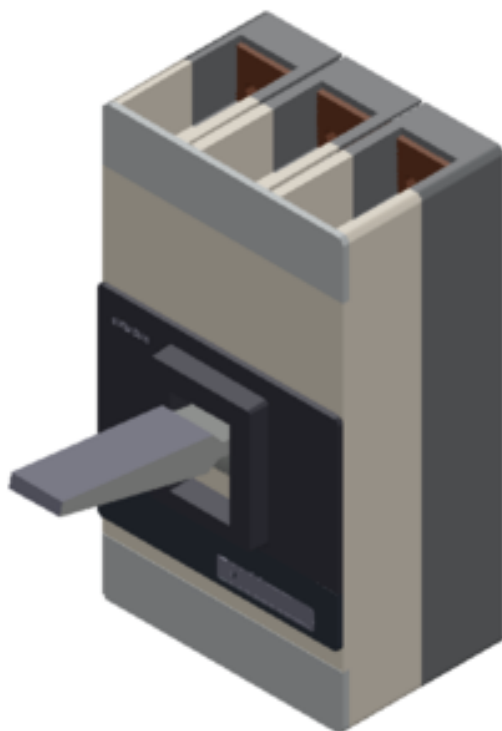




CIRCUIT-BREAKER VL 1250N STANDARD  
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,  
 NON-AUTOMATIC OVERCURRENT RELEASE  
 MAGNETIC IN=1250A, RATED CURRENT II=12000A,  
 SHORT-CIRCUIT II=12000A, SHORT-CIRCUIT

| 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                                                             |     | 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 |
| Equipment marking / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 |     | Q     |
| Operating frequency / maximum                                                           | 1/s | 30    |
| Voltage                                                                                 |     |       |
| Rated operational voltage Ue / max.                                                     | V   | 690   |
| Insulation voltage                                                                      |     |       |
| • Rated value                                                                           | V   | 800   |
| • at AC / Rated value                                                                   | V   | 800   |

|                                                                      |    |                                |
|----------------------------------------------------------------------|----|--------------------------------|
| Surge voltage resistance / Rated value                               | kV | 8                              |
| <b>Protection class</b>                                              |    |                                |
| Protection class IP                                                  |    | IP20                           |
| Protective function of the overcurrent release                       |    | I                              |
| <b>Dissipation</b>                                                   |    |                                |
| Active power loss                                                    |    |                                |
| • maximum                                                            | W  | 210                            |
| <b>Electricity</b>                                                   |    |                                |
| Continuous current / Rated value                                     | A  | 1 250                          |
| Derating temperature / for the rated value of the continuous current | °C | 50                             |
| Adjustable response value current                                    |    |                                |
| • of the instantaneous short-circuit release / initial value         | A  | 12 000                         |
| • of the instantaneous short-circuit release / Full-scale value      | A  | 12 000                         |
| <b>Main circuit</b>                                                  |    |                                |
| Operating frequency                                                  |    |                                |
| • 1 / Rated value                                                    | Hz | 50                             |
| • 2 / Rated value                                                    | Hz | 60                             |
| Operating voltage                                                    |    |                                |
| • for main current circuit / at AC / at 50 Hz / maximum              | V  | 690                            |
| • for main current circuit / at AC / at 60 Hz / maximum              | V  | 690                            |
| • for main current circuit / at DC / maximum                         | V  | 500                            |
| Operating current                                                    |    |                                |
| • at 40 °C / Rated value                                             | A  | 1 250                          |
| • at 50 °C / Rated value                                             | A  | 1 250                          |
| • at 55 °C / Rated value                                             | A  | 1 162                          |
| • at 60 °C / Rated value                                             | A  | 1 162                          |
| • at 65 °C / Rated value                                             | A  | 1 075                          |
| • at 70 °C / Rated value                                             | A  | 1 075                          |
| <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                                                  |    | non-automatic circuit-breakers |
| <b>Product details</b>                                               |    |                                |

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

## Product function

|                                                             |  |         |
|-------------------------------------------------------------|--|---------|
| <b>Product function</b>                                     |  |         |
| • of the thermal overload release                           |  | without |
| • Ground fault protection                                   |  | No      |
| • for neutral conductors / Short-circuit and overload proof |  | No      |
| • overload protection                                       |  | No      |

## Short circuit

|                                                                  |    |    |
|------------------------------------------------------------------|----|----|
| <b>Operational short-circuit current breaking capacity (Ics)</b> |    |    |
| • at 240 V / Rated value                                         | kA | 35 |
| • at 415 V / Rated value                                         | kA | 28 |
| • at 500 V / Rated value                                         | kA | 20 |
| • at 690 V / Rated value                                         | kA | 10 |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>     |    |    |
| • at 240 V / Rated value                                         | kA | 65 |
| • at 415 V / Rated value                                         | kA | 55 |
| • at 440 V / Rated value                                         | kA | 35 |
| • at 480 V / acc. to NEMA / Rated value                          | kA | 25 |
| • at 500 V / Rated value                                         | kA | 25 |
| • at 600 V / acc. to NEMA / Rated value                          | kA | 20 |
| • at 690 V / Rated value                                         | kA | 20 |

## Connections

|                                                                 |  |                              |
|-----------------------------------------------------------------|--|------------------------------|
| Arrangement of electrical connectors / for main current circuit |  | front side                   |
| Type of connectable conductor cross-section                     |  |                              |
| • 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

|               |    |       |
|---------------|----|-------|
| <b>Height</b> | mm | 406.5 |
| <b>Width</b>  | mm | 228.5 |
| <b>Depth</b>  | mm | 333.5 |

|               |                |
|---------------|----------------|
| Mounting type | fixed mounting |
|---------------|----------------|

## Environmental conditions

|                              |    |     |
|------------------------------|----|-----|
| <b>Ambient temperature</b>   |    |     |
| • during operation / minimum | °C | 0   |
| • during operation / maximum | °C | 70  |
| • during storage / minimum   | °C | -40 |
| • during storage / maximum   | °C | 80  |

## Certificates

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| <b>Certificate of suitability</b> | IEC, standard switching capacity (N) |
| <b>Equipment marking</b>          | Q                                    |
| • acc. to DIN EN 61346-2          |                                      |

| General Product Approval                                                                 |                                                                                          |                         |                                                                                          | EMC                 |                                                                                               |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------|
| <br>CCC | <br>CSA | <a href="#">sonstig</a> | <br>EAC | <a href="#">TSE</a> | <br>C-TICK |

| Declaration of<br>Conformity                                                                   | Test<br>Certificates                                  | Shipping Approval                                                                                       |                                                                                           |                                                                                             |                                                                                              |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <br>EG-Konf. | <a href="#">spezielle<br/>Prüfbescheinigung<br/>n</a> | <br>BUREAU<br>VERITAS | <br>DNV | <br>GL | <br>LRS |

| Shipping Approval                                                                          |                                                                                             |                                                                                             | other                         |                                   |                         |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------|-------------------------|
| <br>PRS | <br>RINA | <br>RMRS | <a href="#">Bestätigungen</a> | <a href="#">Umweltbestätigung</a> | <a href="#">sonstig</a> |

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**  
<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VL77121DE360AA0>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3VL77121DE360AA0/all>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL77121DE360AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL77121DE360AA0)

**CAX-Online-Generator**  
<http://www.siemens.com/cax>

**Tender specifications**  
<http://ausschreibungstexte.siemens.com/tiplv>

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11.09.2015