

circuit breaker VL800 UL; type MG (cat no. NMX3T800) non-interchangeable frame, with circuit breaker approval acc. to UL 489 standard breaking capacity 3-pole, NEMA rating 35kA/480V, (molded case circuit breaker) trip unit ETU, LSI TA=40°C In=800A, rated current ISD=1.5 to 7 xIR, II=8 xIN short-circuit protection IR=300-800A ETU for line protection without connection accessories without auxiliary release without auxiliary/alarm switch



| Model   |         |
|---|---------|
| Type of the driving mechanism / motor drive       | No      |
| Design of the overcurrent release                 | ETU545  |
| General technical data                            |         |
| Number of poles                                   | 3       |
| Size of the circuit-breaker                       | 3VL6 UL |
| Electrical endurance (switching cycles) / typical | 3 000   |

|  |        |
|--|--------|
| Usage category   | A      |
| Performance class for circuit breaker  | N      |
| Mechanical service life (switching cycles) / typical                                 | 10 000 |
| Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 | Q      |
| Operating frequency / maximum  | 60 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 / acc. to UL 489 / maximum | 600 V |
| • for main current circuit / at AC / at 50 Hz / maximum                  | 690 V |
| • for main current circuit / at AC / at 60 Hz / acc. to UL 489 / maximum | 600 V |
| • for main current circuit / at AC / at 60 Hz / maximum                  | 690 V |

### Protection class

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

### Current

|  |       |
|--|-------|
| Operating current / at 45 °C / rated value                           | 760 A |
| Continuous current / rated value                                     | 800 A |
| Derating temperature / for the rated value of the continuous current |       |
| • acc. to UL 489   | 40 °C |

### Main circuit

|                          |       |
|--------------------------|-------|
| Operating frequency      |       |
| • 1 / rated value        | 50 Hz |
| • 2 / rated value        | 60 Hz |
| Operating current        |       |
| • at 40 °C / rated value | 800 A |
| • at 50 °C / rated value | 760 A |
| • at 55 °C / rated value | 640 A |
| • at 60 °C / rated value | 640 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 | system/generator protection |
|---------------------|-----------------------------|

### 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> | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> |
| Product extension / optional / motor drive   | Yes   |

### Product function

|  |  |
|--|--|
| Product function   |  |
| <ul style="list-style-type: none"> <li>• of thermal overload trip unit</li> <li>• Ground fault protection</li> <li>• for neutral conductors / Short-circuit and overload proof</li> <li>• Overload protection</li> </ul> | <p>adjustable</p> <p>No</p> <p>No</p> <p>Yes</p> |

### Short circuit





|  |  |
|--|--|
| Operational short-circuit current breaking capacity (Ics)  |  |
| <ul style="list-style-type: none"> <li>• at 240 V / rated value</li> <li>• at 415 V / rated value</li> <li>• at 690 V / rated value</li> </ul>   | <p>65 kA</p> <p>50 kA</p> <p>10 kA</p>                           |
| Maximum short-circuit current breaking capacity (Icu)  |  |
| <ul style="list-style-type: none"> <li>• at 240 V / rated value</li> <li>• at 415 V / rated value</li> <li>• at 480 V / acc. to NEMA / rated value</li> <li>• at 600 V / acc. to NEMA / rated value</li> <li>• at 690 V / rated value</li> </ul> | <p>65 kA</p> <p>50 kA</p> <p>35 kA</p> <p>25 kA</p> <p>20 kA</p> |


### Connections

|   |   |
|---|---|
| Arrangement of electrical connectors / for main current circuit   | front side  |
| <b>Type of connectable conductor cross-sections</b>   |   |
| <ul style="list-style-type: none"> <li>• for main contacts / with flexible busbar</li> <li>• for auxiliary contacts / solid</li> <li>• for auxiliary contacts / finely stranded / with core end processing</li> </ul> | <p>2 x 40 x 10 mm</p> <p>0.75 ... 1.5 mm<sup>2</sup></p> <p>0,75 ... 1.0 mm<sup>2</sup></p> |
| Type of electrical connection / for main current circuit  | without connection accessoires  |

| Mechanical Design  |                                  |
|--|----------------------------------|
| Height   | 406.5 mm                         |
| Width  | 190 mm                           |
| Depth  | 176.5 mm                         |
| Mounting type  | fixed mounting                   |
| <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul> | -25 ... +70 °C<br>-40 ... +80 °C |

| Certificates   |   |
|--|---|
| Certificate of suitability   | UL standard switching capacity (N), non-interchangeable |
| Reference code   | Q   |
| <ul style="list-style-type: none"> <li>acc. to DIN EN 61346-2</li> </ul> |   |

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

| Shipping Approval   | other   |
|---|---|
| <br>RMRS | <a href="#">Environmental Conformations</a> <a href="#">Miscellaneous</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=3VL6180-1PE30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6180-1PE30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL6180-1PE30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6180-1PE30-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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