

circuit breaker VL800L very high breaking capacity Icu=100kA, 415V AC 3-pole, line protection trip unit ETU20, LSI In=800A, rated current IR=320...800A, overload protection, ISD=1.5 to 7 xIR, II=8 xIN 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                                                                                                                                                                                                                                              | 3VL6   |
| mechanical service life (switching cycles) / typical                                                                                                                                                                                                                     | 10 000 |
| electrical endurance (switching cycles) / typical                                                                                                                                                                                                                        | 3 000  |
| utilization category                                                                                                                                                                                                                                                     | A      |
| performance class for circuit breaker                                                                                                                                                                                                                                    | N      |
| reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750                                                                                                                                                                           | Q      |
| operating frequency / maximum                                                                                                                                                                                                                                            | 60 1/s |
| Voltage                                                                                                                                                                                                                                                                  |        |
| Rated operational voltage Ue / max.                                                                                                                                                                                                                                      | 690 V  |
| <ul style="list-style-type: none"> <li>insulation voltage / rated value</li> <li>insulation voltage (Ui) / at AC / rated value</li> </ul>                                                                                                                                | 800 V  |
| surge voltage resistance / rated value                                                                                                                                                                                                                                   | 8 kV   |
| operating voltage                                                                                                                                                                                                                                                        |        |
| <ul style="list-style-type: none"> <li>rated value / maximum</li> <li>for main current circuit / at AC / at 50 Hz / maximum</li> <li>for main current circuit / at AC / at 60 Hz / maximum</li> </ul>                                                                    | 690 V  |
| Protection class                                                                                                                                                                                                                                                         |        |
| protection class IP                                                                                                                                                                                                                                                      | IP20   |
| protection function of the overcurrent release                                                                                                                                                                                                                           | LSI    |
| Current                                                                                                                                                                                                                                                                  |        |
| operational current                                                                                                                                                                                                                                                      |        |
| <ul style="list-style-type: none"> <li>at 40 °C / rated value</li> <li>at 45 °C / rated value</li> <li>at 50 °C / rated value</li> <li>at 55 °C / rated value</li> <li>at 60 °C / rated value</li> <li>at 65 °C / rated value</li> <li>at 70 °C / rated value</li> </ul> | 800 A  |
| continuous current / rated value                                                                                                                                                                                                                                         | 800 A  |
| derating temperature / for the rated value of the continuous current                                                                                                                                                                                                     | 50 °C  |
| adjustable current response value current                                                                                                                                                                                                                                |        |
| <ul style="list-style-type: none"> <li>of the current-dependent overload release / full-scale value</li> <li>of instantaneous short-circuit trip unit / minimum</li> <li>of instantaneous short-circuit trip unit / maximum</li> </ul>                                   | 800 A  |
| Main circuit                                                                                                                                                                                                                                                             |        |
| operating frequency                                                                                                                                                                                                                                                      |        |
| <ul style="list-style-type: none"> <li>1 / rated value</li> <li>2 / rated value</li> </ul>                                                                                                                                                                               | 50 Hz  |
| 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                            |
| <b>Suitability</b>                                                                                             |                              |
| suitability for use                                                                                            | system/generator protection  |
| <b>Adjustable parameters</b>                                                                                   |                              |
| adjustable current response value current / of the short-time delayed short-circuit release / full-scale value | 5 600 A                      |
| adjustable current response value current / of the current-dependent overload release / initial value          | 320 A                        |
| <b>Product details</b>                                                                                         |                              |
| 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                          |
| <b>Product function</b>                                                                                        |                              |
| product function                                                                                               |                              |
| • of thermal overload trip unit                                                                                | adjustable                   |
| • grounding protection                                                                                         | No                           |
| • for neutral conductors / short-circuit and overload proof                                                    | No                           |
| • overload protection                                                                                          | Yes                          |
| <b>Short circuit</b>                                                                                           |                              |
| breaking capacity operating short-circuit current (Ics)                                                        |                              |
| • at 240 V / rated value                                                                                       | 150 kA                       |
| • at 415 V / rated value                                                                                       | 75 kA                        |
| • at 500 V / rated value                                                                                       | 38 kA                        |
| • at 690 V / rated value                                                                                       | 10 kA                        |
| breaking capacity maximum short-circuit current (Icu)                                                          |                              |
| • at 240 V / rated value                                                                                       | 200 kA                       |
| • at 415 V / rated value                                                                                       | 100 kA                       |
| • at 440 V / rated value                                                                                       | 75 kA                        |
| • at 480 V / according to NEMA / rated value                                                                   | 65 kA                        |
| • at 500 V / rated value                                                                                       | 50 kA                        |
| • at 600 V / according to NEMA / rated value                                                                   | 35 kA                        |
| • at 690 V / rated value                                                                                       | 20 kA                        |
| <b>Connections</b>                                                                                             |                              |
| 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> |
| • 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         |
| <b>Mechanical Design</b>                                                                                       |                              |
| height                                                                                                         | 406.5 mm                     |
| width                                                                                                          | 190 mm                       |
| depth                                                                                                          | 176.5 mm                     |
| fastening method                                                                                               | fixed mounting               |
| <b>Environmental conditions</b>                                                                                |                              |
| ambient temperature / during operation                                                                         |                              |
| • minimum                                                                                                      | -25 °C                       |
| • maximum                                                                                                      | 70 °C                        |
| ambient temperature / during storage                                                                           |                              |
| • minimum                                                                                                      | -40 °C                       |
| • maximum                                                                                                      | 80 °C                        |
| <b>General Product Approval</b>                                                                                |                              |

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