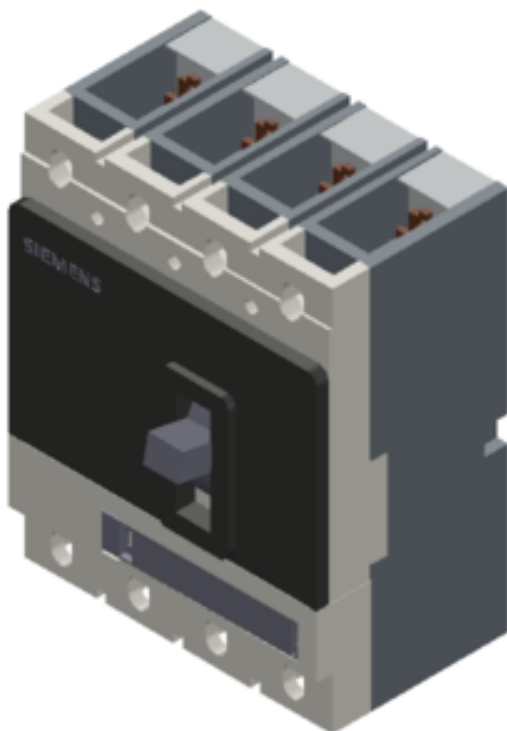




CIRCUIT-BREAKER VL 160N STANDARD BREAKING  
CAPACITY ICU=55KA / 415 V AC 4 POLE, LINE  
PROTECTION OVERCURRENT RELEASE TM, LI  
IN=63A, RATED CURRENT IR=50-63A, OVERLOAD  
II=300-600A, SHORT CIRCUIT N NOT PROTECTED  
WITH SCREW CONNECTION

| Model                                                                                      |     |        |
|--------------------------------------------------------------------------------------------|-----|--------|
| Type of the driving mechanism / motor drive                                                |     | No     |
| Design of the overcurrent release                                                          |     | TM     |
| General technical data                                                                     |     |        |
| Number of poles                                                                            |     | 4      |
| Size of the circuit-breaker                                                                |     | 3VL2   |
| Electrical endurance (switching cycles) / typical                                          |     | 10 000 |
| Usage category                                                                             |     | A      |
| Performance class for circuit breaker                                                      |     | N      |
| Mechanical service life (switching cycles) / typical                                       |     | 20 000 |
| Equipment marking / acc. to DIN 40719 extended<br>according to IEC 204-2 / acc. to IEC 750 |     | Q      |
| Operating frequency / maximum                                                              | 1/s | 120    |
| 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                                                |    | LI                |
| <b>Electricity</b>                                                                            |    |                   |
| Continuous current / rated value                                                              | A  | 63                |
| Derating temperature / for the rated value of the continuous current                          | °C | 50                |
| <b>Adjustable response value current</b>                                                      |    |                   |
| • of the current-dependent overload release / Full-scale value                                | A  | 63                |
| • of the instantaneous short-circuit release / initial value                                  | A  | 315               |
| • of the instantaneous short-circuit release / Full-scale value                               | A  | 630               |
| <b>Main circuit</b>                                                                           |    |                   |
| <b>Operating frequency</b>                                                                    |    |                   |
| • 1 / rated value                                                                             | Hz | 50                |
| • 2 / rated value                                                                             | Hz | 60                |
| <b>Operating voltage</b>                                                                      |    |                   |
| • 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               |
| <b>Operating current</b>                                                                      |    |                   |
| • at 40 °C / rated value                                                                      | A  | 63                |
| • at 50 °C / rated value                                                                      | A  | 63                |
| • at 55 °C / rated value                                                                      | A  | 58.6              |
| • at 60 °C / rated value                                                                      | A  | 58.6              |
| • at 65 °C / rated value                                                                      | A  | 54.2              |
| • at 70 °C / rated value                                                                      | A  | 54.2              |
| <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 protection |
| <b>Adjustable parameters</b>                                                                  |    |                   |
| Adjustable response value current / of the current-dependent overload release / initial value | A  | 50                |

## Product details

|                                             |  |     |
|---------------------------------------------|--|-----|
| <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                           |  | adjustable |
| • Ground fault protection                                   |  | No         |
| • for neutral conductors / Short-circuit and overload proof |  | No         |
| • Overload protection                                       |  | Yes        |

## Short circuit

|                                                                  |    |    |
|------------------------------------------------------------------|----|----|
| <b>Operational short-circuit current breaking capacity (Ics)</b> |    |    |
| • at 240 V / rated value                                         | kA | 65 |
| • at 415 V / rated value                                         | kA | 55 |
| • at 500 V / rated value                                         | kA | 20 |
| • at 690 V / rated value                                         | kA | 6  |
| <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 | 25 |
| • 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 | 12 |
| • at 690 V / rated value                                         | kA | 12 |

## Connections

|                                                                 |  |                              |
|-----------------------------------------------------------------|--|------------------------------|
| Arrangement of electrical connectors / for main current circuit |  | front side                   |
| Type of connectable conductor cross-sections                    |  |                              |
| • for main contacts                                             |  |                              |
| — with flexible busbar                                          |  | 12 x 10 mm                   |
| — solid                                                         |  | 2.5 ... 95 mm <sup>2</sup>   |
| — finely stranded / with core end processing                    |  | 2.5 ... 50 mm <sup>2</sup>   |
| — stranded                                                      |  | 2.5 ... 95 mm <sup>2</sup>   |
| • 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

|               |    |                |
|---------------|----|----------------|
| Height        | mm | 174.5          |
| Width         | mm | 139.5          |
| Depth         | mm | 106.5          |
| 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>          |  |                                      |
| • acc. to DIN EN 61346-2          |  | Q                                    |

|                                                                                            |                                                                                            |                                                                                                 |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>General Product Approval</b>                                                            | <b>EMC</b>                                                                                 | <b>Declaration of Conformity</b>                                                                |
| <br>CCC | <br>EAC | <br>C-TICK |

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|                                                  |                                                                                            |
|--------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Test Certificates</b>                         | <b>Shipping Approval</b>                                                                   |
| <a href="#">spezielle Prüfbescheinigung</a><br>n | <br>ABS |



|                                                                                            |                         |
|--------------------------------------------------------------------------------------------|-------------------------|
| <b>Shipping Approval</b>                                                                   | <b>other</b>            |
| <br>PRS | <a href="#">sonstig</a> |



[Umweltbestätigung](#)

[Bestätigungen](#)

### 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/3VL27061EJ460AA0>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3VL27061EJ460AA0/all>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL27061EJ460AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL27061EJ460AA0)

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

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

**last modified:**

02.02.2016