

CIRCUIT-BREAKER VL 400N STANDARD BREAKING CAPACITY  
ICU=55KA / 415 V AC 3 POLE, LINE PROTECTION ELECTRONIC  
TRIP UNIT ETU22, LSIG 3PHASES/3WIRES IN=400A, RATED  
CURRENT IR=160-400A, OVERLOAD ISD=1,5TO10XIR, II=11XIN  
SHORT-CIRCUIT WITHOUT AUXILIARY RELEASE ETU  
COMMUNICATION-CAPABLE

| Model                                                                                   |         |
|-----------------------------------------------------------------------------------------|---------|
| Type of the driving mechanism / motor drive                                             | No      |
| Design of the overcurrent release                                                       | ETU22   |
| General technical data                                                                  |         |
| Number of poles                                                                         | 3       |
| Size of the circuit-breaker                                                             | 3VL4    |
| 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 according to IEC 204-2 / acc. to IEC 750 | Q       |
| Operating frequency / maximum                                                           | 120 1/s |
| Voltage                                                                                 |         |
| Rated operational voltage Ue / max.                                                     | 690 V   |
| Insulation voltage                                                                      |         |
| • rated value                                                                           | 800 V   |
| • at AC / rated value                                                                   | 800 V   |
| Surge voltage resistance / rated value                                                  | 8 kV    |
| Protection class                                                                        |         |
| Protection class IP                                                                     | IP20    |
| Protective function of the overcurrent release                                          | LSIG    |
| Dissipation                                                                             |         |
| Power loss [W]                                                                          |         |
| • maximum                                                                               | 90 W    |
| Electricity                                                                             |         |
| Continuous current / rated value                                                        | 400 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 | 400 A   |
| • of instantaneous short-circuit trip unit / initial value     | 4 400 A |
| • of instantaneous short-circuit trip unit / Full-scale value  | 4 400 A |

#### Main circuit

##### Operating frequency

|                   |       |
|-------------------|-------|
| • 1 / rated value | 50 Hz |
| • 2 / rated value | 60 Hz |

##### Operating voltage

|                                                         |       |
|---------------------------------------------------------|-------|
| • for main current circuit / at AC / at 50 Hz / maximum | 690 V |
| • for main current circuit / at AC / at 60 Hz / maximum | 690 V |
| • for main current circuit / at DC / maximum            | 500 V |

##### Operating current

|                          |       |
|--------------------------|-------|
| • at 40 °C / rated value | 400 A |
| • at 50 °C / rated value | 400 A |
| • at 55 °C / rated value | 380 A |
| • at 60 °C / rated value | 380 A |
| • at 65 °C / rated value | 320 A |
| • at 70 °C / rated value | 320 A |

#### Suitability

|                            |                             |
|----------------------------|-----------------------------|
| <b>Suitability for use</b> | system/generator protection |
|----------------------------|-----------------------------|

#### Adjustable parameters

|                                                                                                     |       |
|-----------------------------------------------------------------------------------------------------|-------|
| <b>Adjustable pick-up value current / of the current-dependent overload release / initial value</b> | 160 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       | Yes        |

- for neutral conductors / Short-circuit and overload proof
- Overload protection

No

Yes

## Short circuit

### Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value 65 kA
- at 415 V / rated value 55 kA
- at 500 V / rated value 20 kA
- at 690 V / rated value 8 kA

### Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value 65 kA
- at 415 V / rated value 55 kA
- at 440 V / rated value 35 kA
- at 480 V / acc. to NEMA / rated value 35 kA
- at 500 V / rated value 25 kA
- at 600 V / acc. to NEMA / rated value 20 kA
- at 690 V / rated value 15 kA

## Connections

Arrangement of electrical connectors / for main current circuit front side

Type of electrical connection / for main current circuit screw-type terminals

## Mechanical Design

**Height** 279.5 mm

**Width** 139 mm

**Depth** 163.5 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, standard switching capacity (N)

### Equipment marking

- acc. to DIN EN 61346-2 Q

| General Product Approval                                                          |                                                                                   | EMC                     | Declaration of<br>Conformity                                                      | Test<br>Certificates                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|
|  |  | <a href="#">sonstig</a> |  | <a href="#">spezielle<br/>Prüfbescheinigung<br/>en</a> |
| CCC                                                                               | CSA                                                                               |                         | C-Tick                                                                            | EG-Konf.                                               |

| Shipping Approval                                                                 |                                                                                   | other                             |                               |                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|-------------------------------|-------------------------|
|  |  | <a href="#">Umweltbestätigung</a> | <a href="#">Bestätigungen</a> | <a href="#">sonstig</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=3VL4740-1MG36-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL4740-1MG36-0AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL4740-1MG36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL4740-1MG36-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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