Product data sheet



CIRCUIT-BREAKER VL160X N STANDARD BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE, LINE PROTECTION OVERCURRENT RELEASE TM, LI IN=125A, RATED CURRENT IR=100-125A, OVERLOAD II=1000A, SHORT-CIRCUIT

| General technical data: | | |
|---|-----|-------------------|
| Number of poles | | 3 |
| Design of the overcurrent release | | TM |
| Acceptability for application | | system protection |
| Electrical operating cycles as operating time / typical | | 10,000 |
| Mechanical operating cycles as operating time / typical | | 20,000 |
| Active power loss / maximum | W | 70 |
| Product component | | |
| auxiliary switch | | No |
| Voltage trigger | | No |
| undervoltage release mechanism | | No |
| undervoltage release with leading contact | | No |
| Product function | | |
| of the thermal overload release | | adjustable |
| ground-fault protection | | No |
| • for zero conductors / short-circuit and overload protection | | No |
| overload protection | | Yes |
| Operating cycles / maximum | 1/s | 120 |
| Protection class IP | | IP20 |

| Protective function of the overcurrent release | | LI |
|--|----|-------|
| Impulse voltage resistance / rated value | kV | 8 |
| Ambient temperature | | |
| during operating | | |
| • minimum | °C | -25 |
| • maximum | °C | 70 |
| during storage | | |
| • minimum | °C | -40 |
| • maximum | °C | 50 |
| Main circuit: | | |
| Insulation voltage / for AC / rated value | V | 800 |
| Operating frequency | | |
| • 1 / rated value | Hz | 50 |
| • 2 / rated value | Hz | 60 |
| Item designation | | |
| according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | Q |
| according to DIN EN 61346-2 | | Q |
| Operating voltage | | |
| for main current circuit | | |
| • at 50 Hz / for AC | | |
| • maximum | V | 690 |
| • at 60 Hz / for AC | | |
| • maximum | V | 690 |
| • for DC | | |
| • maximum | V | 500 |
| Operating current | | |
| • at 40 °C / rated value | Α | 125 |
| • at 50 °C / rated value | Α | 125 |
| • at 60 °C / rated value | Α | 116.3 |
| • at 70 °C / rated value | Α | 107.5 |
| Continuous current / rated value | Α | 125 |
| Derating temperature / for the rated value of the continuous current | °C | 50 |
| Auxiliary circuit: | | |
| Number of NC contacts / for auxiliary contacts | | 0 |
| Number of NO contacts / for auxiliary contacts | | 0 |
| Short-circuit: | | |
| Adjustable response current | | |
| | | |

| of the current-dependent overload release | | |
|--|----|-------|
| • initial value | Α | 100 |
| • final value | Α | 125 |
| of the non-delayed short-circuit release | | |
| • initial value | Α | 1,000 |
| • final value | Α | 1,000 |
| Breaking capacity limit short-circuit current (lcu) / at 415 V / rated value | kA | 55 |

| Installation/mounting/dimensions: | | |
|-----------------------------------|----|----------------|
| Type of mounting | | fixed mounting |
| Height | mm | 157.5 |
| Width | mm | 104.5 |
| Depth | mm | 106.5 |

| Connections: | |
|---|---------------|
| Arrangement of electrical connectors / for main current circuit | front side |
| Design of the electrical connection / for main current circuit | box terminals |
| Type of the connectable conductor cross-section | |
| • for main contacts | |
| with flexible busbar | 12 x 10 mm |
| • solid | 2,5 95 mm² |
| • finely stranded / with conductor end processing | 2,5 50 mm² |
| • stranded | 2,5 95 mm² |
| for auxiliary contacts | |
| • solid | 0,75 1.5 mm² |
| • finely stranded / with conductor end processing | 0.75 1.0 mm² |

Certificates/approvals:

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

 $\underline{\text{http://www.siemens.com/lowvoltage/mall}}$

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

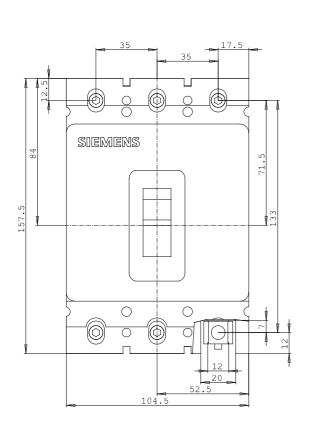
http://support.automation.siemens.com/WW/view/en/3VL1712-1DD33-0AA0/all

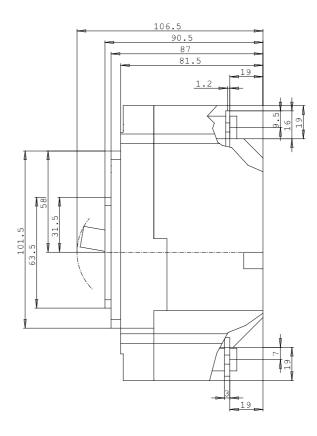
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1712-1DD33-0AA0}$

CAx-Online-Generator

http://www.siemens.com/cax





last change: Nov 6, 2012