



## Main

|                                       |   |
|---------------------------------------|---|
| Range                                 | TeSys   |
| Product name                          | TeSys GV4   |
| Device short name                     | GV4L  |
| Product or component type             | Circuit breaker   |
| Device application                    | Motor protection  |
| Poles description                     | 3P  |
| Utilisation category                  | Category A  |
| Trip unit technology                  | Magnetic  |
| Protection type                       | Short-circuit   |
| [In] rated current                    | 115 A   |
| Breaking capacity                     | [Icu] : 50 kA at 220...240 V AC 50/60 Hz according to IEC 60947-2 |
| [Ics] rated service breaking capacity | 50 kA : at 220...240 V AC 50/60 Hz according to IEC 60947-2       |
| Magnetic setting range                | 690...1610 A  |
| Control type                          | Rotary handle   |

## Complementary

|  |   |
|--|---|
| [Ue] rated operational voltage         | 690 V AC 50/60 Hz conforming to IEC 60947-2                       |
| Motor power kW                         | 37 kW at 400...415 V AC 50/60 Hz                                  |
| [Uimp] rated impulse withstand voltage | 8 kV according to IEC 60947-2                                     |
| [Ui] rated insulation voltage          | 800 V according to IEC 60947-2                                    |
| Mounting mode                          | By clips<br>By screws   |
| Mounting support                       | 35 mm symmetrical DIN rail<br>75 mm symmetrical DIN rail<br>Plate |
| Suitability for isolation              | Yes according to IEC 60947-1                                      |
| Mechanical durability                  | 40000 cycles  |
| Electrical durability                  | 10000 cycles for AC-3 at 440 V In/2                               |

|                                      |   |
|--------------------------------------|---|
| Local signalling                     | Green flag for presence of auxiliary contacts                 |
| Number of slots                      | 1 slot(s) for alarm switch fault signalling contact (plug-in) |
| Toggle padlocking (with accessories) | Padlock in OFF or ON position                                 |
| Connection pitch                     | 27 mm   |
| Connections - terminals              | Lugs-ring terminals   |
| Tightening torque                    | 9 N.m for 16...95 mm <sup>2</sup>                             |
| Quality labels                       | CE  |
| Standards                            | EN/IEC 60947-2<br>EN/IEC 60947-4-1                            |
| Height                               | 155 mm  |
| Width                                | 81 mm   |
| Depth                                | 165 mm  |
| Product weight                       | 1.65 kg   |
| Colour                               | Grey RAL 7016   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Product certifications                | CCC<br>IEC<br>EAC  |
| Tropicalisation                       | 2 according to IEC 68-2  |
| IP degree of protection               | IP40 (front face) according to IEC 60529                       |
| IK degree of protection               | IK07 according to IEC 62262                                    |
| Pollution degree                      | 3 according to IEC 60947-1                                     |
| Mechanical robustness                 | Vibrations +/- 1 mm for 2...13.2 Hz according to IEC 60068-2-6 |
| Ambient air temperature for operation | -25...70 °C  |
| Ambient air temperature for storage   | -50...85 °C  |
| Operating altitude                    | 2000 m without derating  |

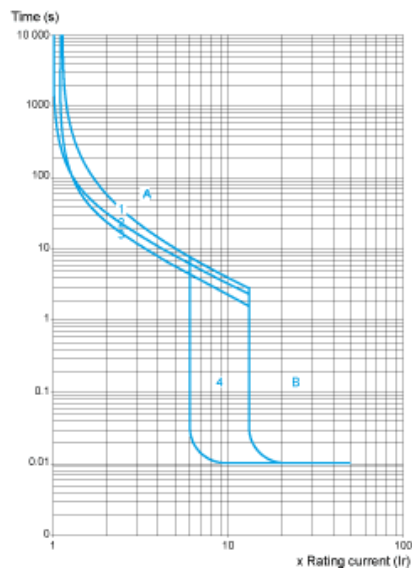
## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 1736 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">Product Environmental Profile</a>  |
| Product end of life instructions | Available<br><a href="#">End of Life Information</a>  |

## Tripping Curves for GV4L and GV4LE Combined with Thermal Overload Relay LRD or LR9

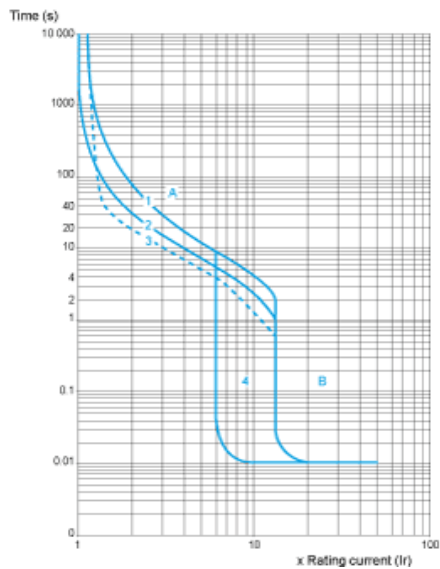
Average Operating Times at 20 °C Related to Multiples of the Setting Current

GV4L02 and GV4LE02 to 12 with LRD05 to LRD14, GV4L80 and GV4LE80 with LRD3363



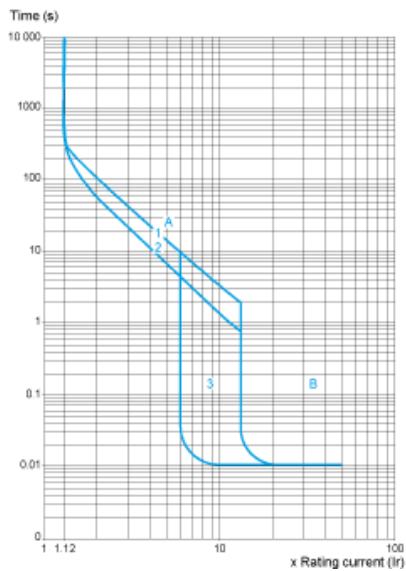
- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- 4 6...14 Ir
- A Thermal overload relay protection zone
- B GV4L protection zone

GV4L25 and GV4LE25 with LRD 318, LRD325 GV4L50 AND GV4LE50 with LRD 332, LRD 340, LRD 350



- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- 4 6...14 Ir
- A Thermal overload relay protection zone
- B GV4L protection zone

GV4L115 and GV4LE115 with Class 10 LR9F5367, LR9D5369 and Class 20 LR9D5567, LR9F5569

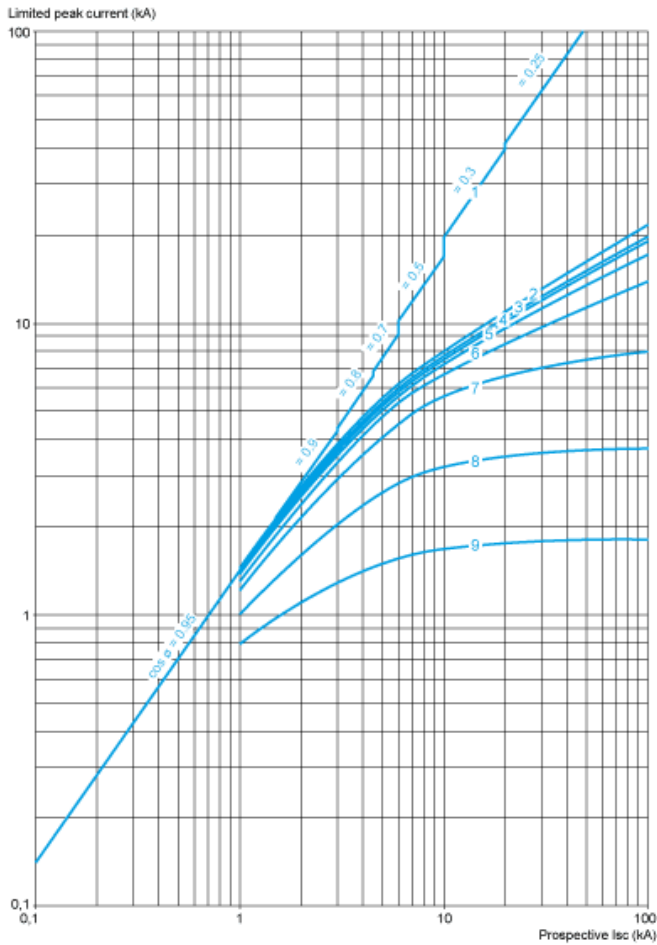


- 1 Cold state curve
- 2 Hot state curve
- 3 6...14 Ir

### Current Limitation on Short-Circuit for GV4L, GV4LE (3-Phase 400/415 V)

Dynamic Stress

$I_{peak} = f(\text{prospective } I_{sc}) \text{ at } 1.05 U_e = 435 \text{ V}$

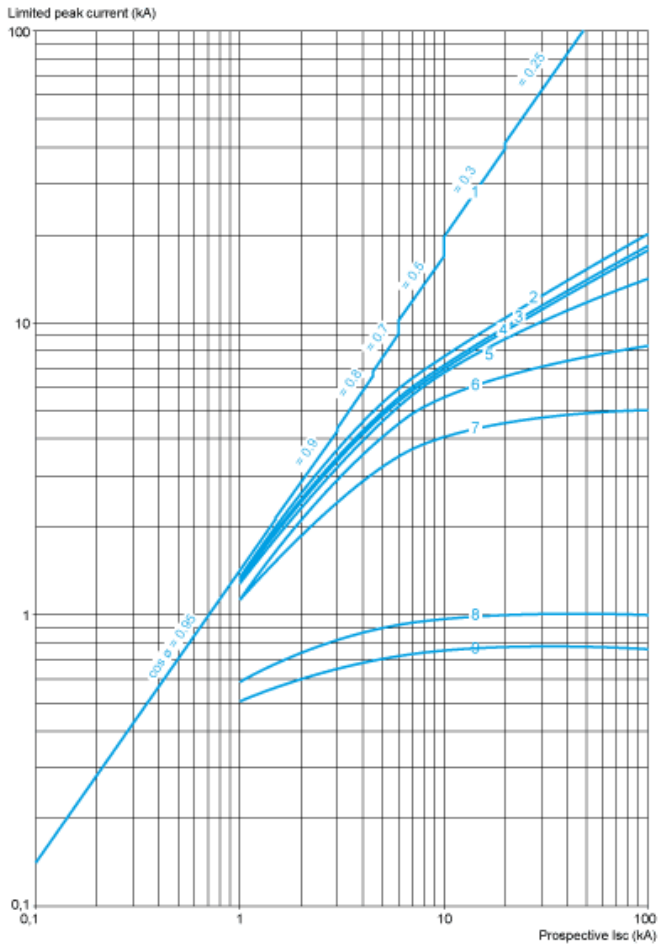


- 1 Maximum peak current
- 2 GV4L115
- 3 GV4L80
- 4 GV4L50
- 5 GV4L25
- 6 GV4L12
- 7 GV4L07
- 8 GV4L03
- 9 GV4L02

Current Limitation on Short-Circuit for GV4L, GV4LE + Thermal Overload Relay LRD or LR9 (3-Phase 400/415 V)

Dynamic Stress

$I_{peak} = f(\text{prospective } I_{sc})$  at  $1.05 U_e = 435 \text{ V}$

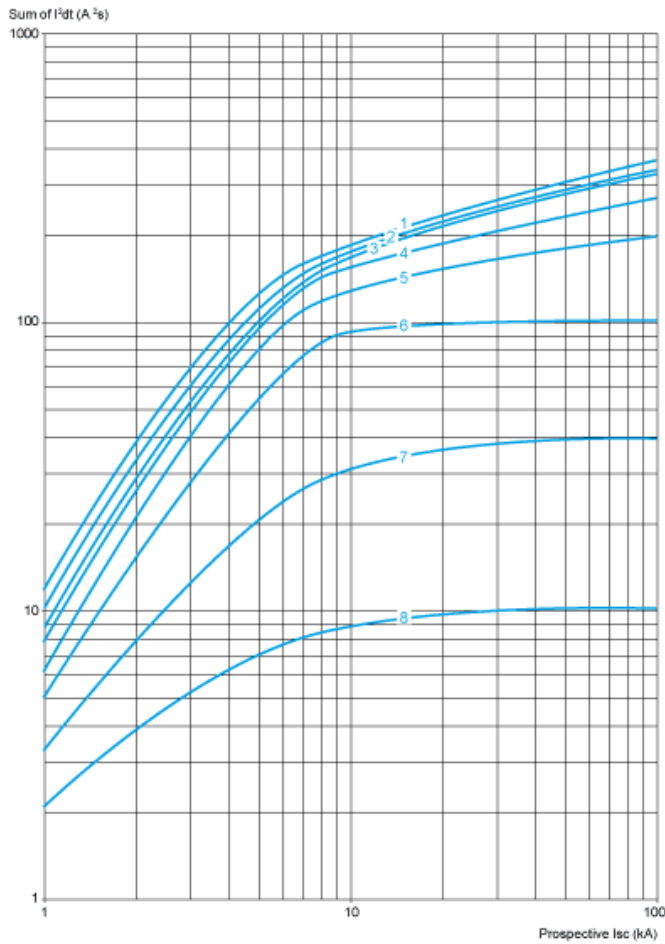


- 1 Maximum peak current
- 2 GV4L115 + LR9D5367 or LR9F5367
- 3 GV4L80 + LRD3361
- 4 GV4L50 + LRD340
- 5 GV4L25 + LRD325
- 6 GV4L12 + LRD313
- 7 GV4L07 + LRD12
- 8 GV4L03 + LRD07
- 9 GV4L02 + LRD07

### Thermal Limit on Short-Circuit for GV4L, GV4LE

Thermal Limit in  $A^2s$

Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 V$

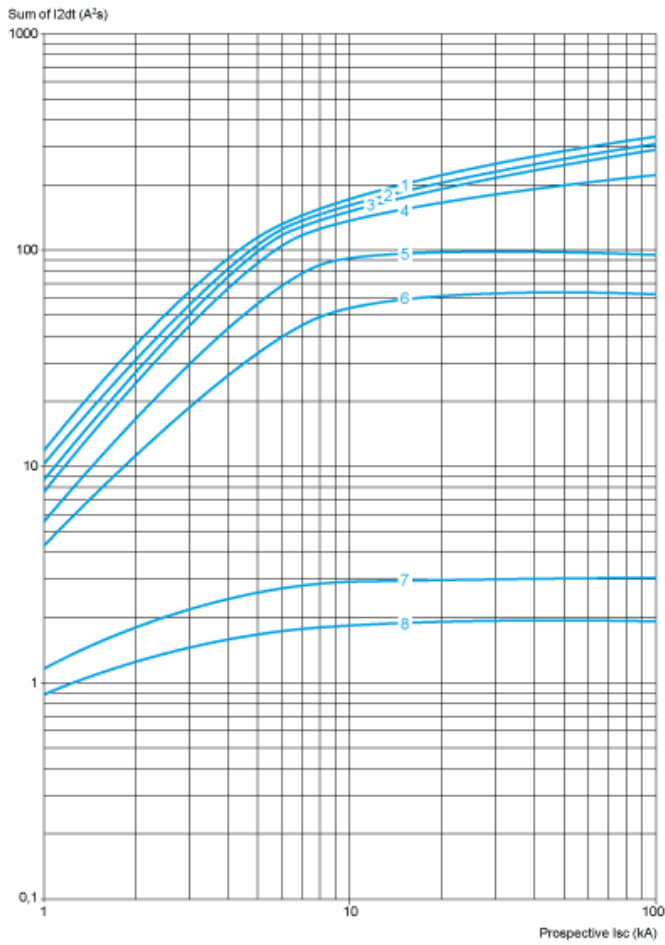


- 1 GV4L115
- 2 GV4L80
- 3 GV4L50
- 4 GV4L25
- 5 GV4L12
- 6 GV4L07
- 7 GV4L03
- 8 GV4L02

### Current Limitation on Short-Circuit for GV4L, GV4LE + Thermal Overload Relay LRD or LR9

Thermal Limit in kA in the Magnetic Operating Zone

Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 \text{ V}$

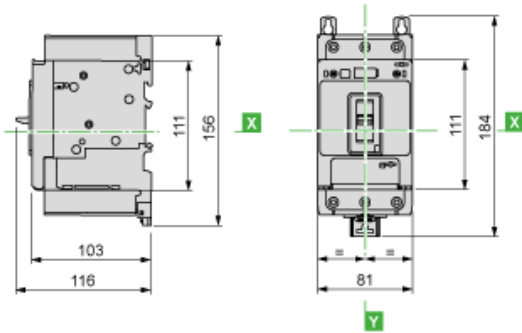


- 1 GV4L115 + LR9D5367 or LR9F5367
- 2 GV4L80 + LRD3361
- 3 GV4L50 + LRD340
- 4 GV4L25 + LRD325
- 5 GV4L12 + LRD313
- 6 GV4L07+ LRD12
- 7 GV4L03+ LRD07
- 8 GV4L02 + LRD07

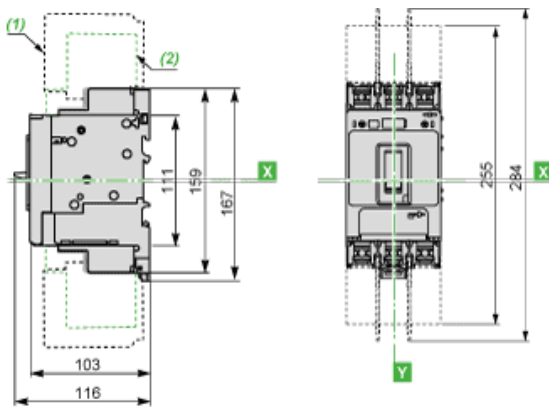


GV4 with Toggle: GV4LE, GV4PE, GV4PEM

With EverLink® Connector



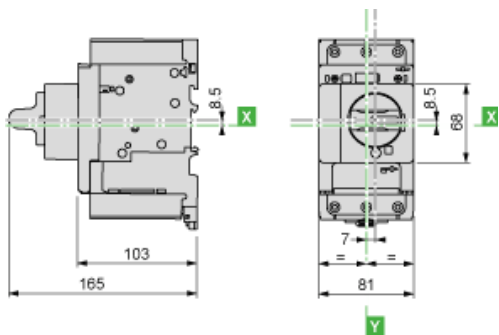
With Crimp Lug Connector



- (1) Interphases barriers
- (2) Long terminal shield

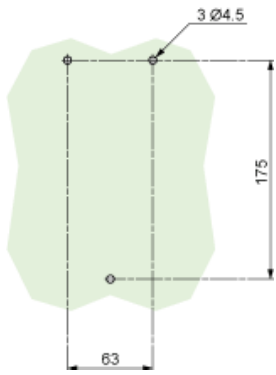
GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

Dimensions

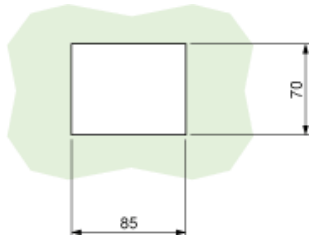


GV4L, GV4P, GV4LE, GV4PE, GV4PEM

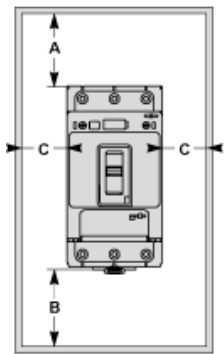
Panel Mounting with M4 Screws



Door Cut-Out for Rotary Handle



Minimum Safety Clearance



Toggle-type, rotary handle-type: identical clearance values.

| Safety Clearance (mm) |                     |   |   |                  |   |   |
|-----------------------|---------------------|---|---|------------------|---|---|
|                       | Painted Sheet Metal |   |   | Bare Sheet Metal |   |   |
|                       | A                   | B | C | A                | B | C |
| No accessory          | 30                  | 0 | 0 | 40               | 0 | 5 |
| Interphase barriers   | 0                   | 0 | 0 | 0                | 0 | 5 |
| Long terminal shield  | 0                   | 0 | 0 | 0                | 0 | 5 |

Magnetic Motor Circuit Breakers

GV4L, GV4LE

