

# Bảng thông số sản phẩm

Thông số kỹ thuật



## Motor circuit breaker, TeSys Deca frame 2, 3P, 18A, magnetic, toggle control, screw clamp terminals

GV2LE20

### Main

|                           |                       |
|---------------------------|-----------------------|
| Range                     | TeSys Deca            |
| Product name              | TeSys GV2             |
| Product or component type | Motor circuit breaker |
| Device short name         | GV2LE                 |
| Device application        | Motor protection      |
| Trip unit technology      | Magnetic              |

### Complementary

|                                                     |                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Poles description                                   | 3P                                                                                                                                                                                                                                                                                                             |
| Network type                                        | AC                                                                                                                                                                                                                                                                                                             |
| Utilisation category                                | Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1<br>AC-3e conforming to IEC 60947-4-1                                                                                                                                                                                                  |
| Network frequency                                   | 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                             |
| Motor power kW                                      | 7.5 kW at 400/415 V AC 50/60 Hz<br>9 kW at 500 V AC 50/60 Hz<br>15 kW at 690 V AC 50/60 Hz                                                                                                                                                                                                                     |
| Breaking capacity                                   | 100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>15 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>8 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>6 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>3 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>75 % at 690 V AC 50/60 Hz conforming to IEC 60947-2                       |
| Control type                                        | Toggle                                                                                                                                                                                                                                                                                                         |
| [In] rated current                                  | 18 A                                                                                                                                                                                                                                                                                                           |
| Magnetic tripping current                           | 341 A                                                                                                                                                                                                                                                                                                          |
| [Ith] conventional free air thermal current         | 18 A conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                               |
| [Ue] rated operational voltage                      | 690 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                    |
| [Ui] rated insulation voltage                       | 690 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                    |
| [Uimp] rated impulse withstand voltage              | 6 kV conforming to IEC 60947-2                                                                                                                                                                                                                                                                                 |
| Suitability for isolation                           | Yes conforming to IEC 60947-1                                                                                                                                                                                                                                                                                  |
| Power dissipation per pole                          | 1.8 W                                                                                                                                                                                                                                                                                                          |
| Mechanical durability                               | 100000 cycles                                                                                                                                                                                                                                                                                                  |

|                              |                                                                            |
|------------------------------|----------------------------------------------------------------------------|
| <b>Electrical durability</b> | 100000 cycles for AC-3 at 415 V In<br>100000 cycles for AC-3e at 415 V In  |
| <b>Rated duty</b>            | Continuous conforming to IEC 60947-4-1                                     |
| <b>Tightening torque</b>     | 1.7 N.m - on screw clamp terminal                                          |
| <b>Fixing mode</b>           | 35 mm symmetrical DIN rail: clipped<br>Panel: screwed (with adaptor plate) |
| <b>Mounting position</b>     | Horizontal<br>Vertical                                                     |
| <b>Width</b>                 | 45 mm                                                                      |
| <b>Height</b>                | 89 mm                                                                      |
| <b>Depth</b>                 | 78.5 mm                                                                    |
| <b>Net weight</b>            | 0.33 kg                                                                    |
| <b>Colour</b>                | Dark grey                                                                  |

## Environment

|                                              |                                                                                                            |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Standards</b>                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>IEC/EN 60335-2-40:Annex JJ |
| <b>Product certifications</b>                | CCC<br>UL<br>EAC<br>BV<br>RINA<br>UKCA                                                                     |
| <b>IK degree of protection</b>               | IK04                                                                                                       |
| <b>IP degree of protection</b>               | IP20 conforming to IEC 60529                                                                               |
| <b>Climatic withstand</b>                    | conforming to IACS E10                                                                                     |
| <b>Ambient air temperature for storage</b>   | -40...80 °C                                                                                                |
| <b>Fire resistance</b>                       | 960 °C conforming to IEC 60695-2-11                                                                        |
| <b>Ambient air temperature for operation</b> | -20...60 °C                                                                                                |
| <b>Mechanical robustness</b>                 | Shocks: 30 Gn for 11 ms<br>Vibrations: 5 Gn, 5...150 Hz                                                    |
| <b>Operating altitude</b>                    | 2000 m                                                                                                     |

## Packing Units

|                                     |           |
|-------------------------------------|-----------|
| <b>Unit Type of Package 1</b>       | PCE       |
| <b>Number of Units in Package 1</b> | 1         |
| <b>Package 1 Height</b>             | 8.500 cm  |
| <b>Package 1 Width</b>              | 9.300 cm  |
| <b>Package 1 Length</b>             | 4.600 cm  |
| <b>Package 1 Weight</b>             | 283.000 g |
| <b>Unit Type of Package 2</b>       | S02       |
| <b>Number of Units in Package 2</b> | 24        |
| <b>Package 2 Height</b>             | 15.000 cm |
| <b>Package 2 Width</b>              | 30.000 cm |

|                              |            |
|------------------------------|------------|
| Package 2 Length             | 40.000 cm  |
| Package 2 Weight             | 6.980 kg   |
| Unit Type of Package 3       | P06        |
| Number of Units in Package 3 | 384        |
| Package 3 Height             | 75.000 cm  |
| Package 3 Width              | 60.000 cm  |
| Package 3 Length             | 80.000 cm  |
| Package 3 Weight             | 127.908 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Environmental Data

Schneider Electric nhắm đến việc đạt được vị trí Net Zero vào năm 2050 thông qua các quan hệ đối tác chuỗi cung ứng, giảm vật liệu tác động và sự tuần hoàn thông qua chiến dịch "Use Better, Use Longer, Use Again" đang diễn ra của chúng tôi để kéo dài tuổi thọ sản phẩm và khả năng tái chế.

[Dữ liệu môi trường đã giải thích >](#)

[Cách chúng tôi đánh giá tính bền vững của sản phẩm >](#)

### Ảnh hưởng môi trường

|                                                       |    |
|-------------------------------------------------------|----|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | 43 |
|-------------------------------------------------------|----|

|                          |                                               |
|--------------------------|-----------------------------------------------|
| Environmental Disclosure | <a href="#">Product Environmental Profile</a> |
|--------------------------|-----------------------------------------------|

## Use Better

### Vật liệu và Bao bì

|                                        |     |
|----------------------------------------|-----|
| Packaging made with recycled cardboard | Yes |
|----------------------------------------|-----|

|                                      |     |
|--------------------------------------|-----|
| Packaging without single use plastic | Yes |
|--------------------------------------|-----|

|                   |                           |
|-------------------|---------------------------|
| EU RoHS Directive | Compliant with Exemptions |
|-------------------|---------------------------|

|             |                                      |
|-------------|--------------------------------------|
| SCIP Number | 04104e70-ba29-493c-b2cc-b5837d1f879b |
|-------------|--------------------------------------|

|                  |                                   |
|------------------|-----------------------------------|
| REACH Regulation | <a href="#">REACH Declaration</a> |
|------------------|-----------------------------------|

|                       |                                        |
|-----------------------|----------------------------------------|
| China RoHS Regulation | <a href="#">China RoHS declaration</a> |
|-----------------------|----------------------------------------|

## Use Again

### Đóng gói lại và tái sản xuất

|                     |                                         |
|---------------------|-----------------------------------------|
| Circularity Profile | <a href="#">End of Life Information</a> |
|---------------------|-----------------------------------------|

WEEE



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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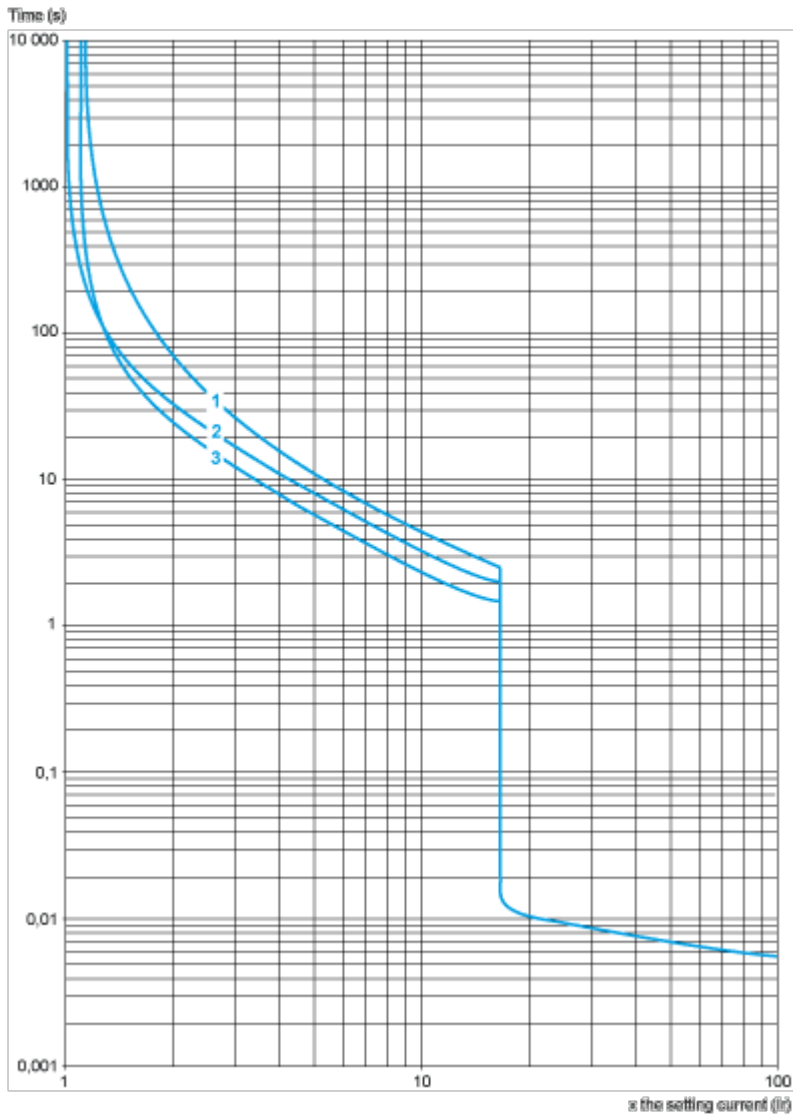
Take-back

No

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## Performance Curves

### Tripping Curves for GV2L or LE Combined with Thermal Overload Relay LRD or LR2K Average Operating Times at 20 °C Related to Multiples of the Setting Current

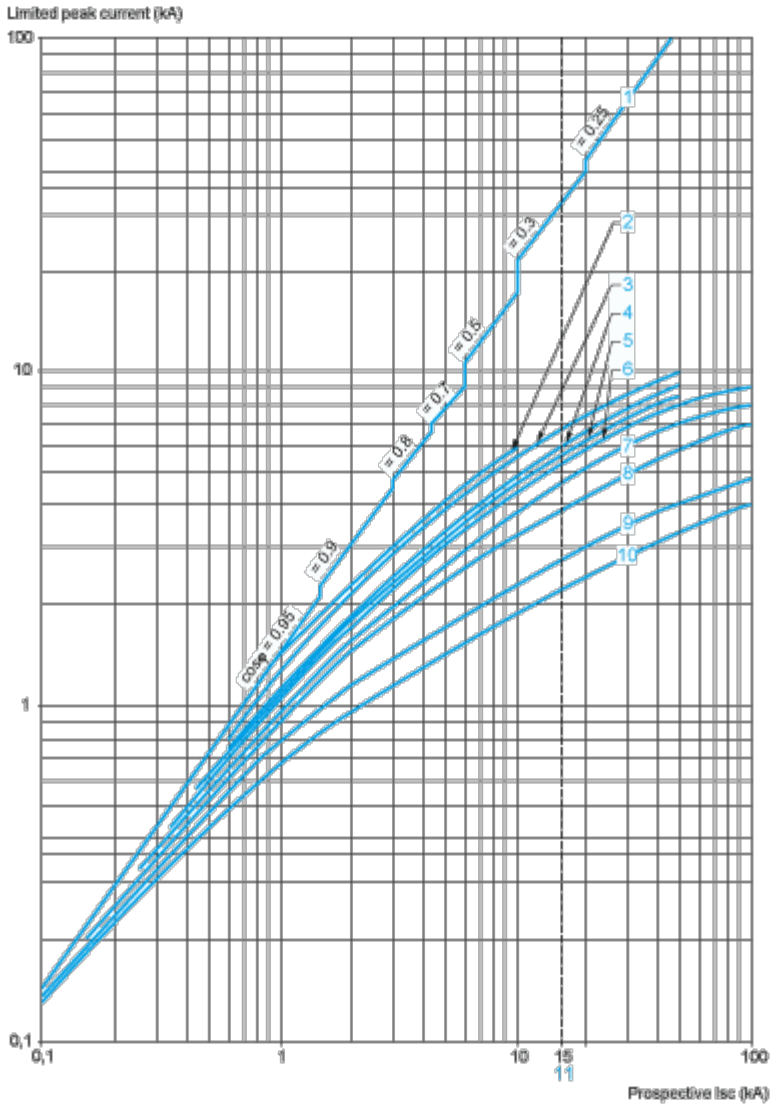


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

### Current Limitation on Short-Circuit for GV2L and GV2LE Only (3-Phase 400/415 V)

#### Dynamic Stress

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

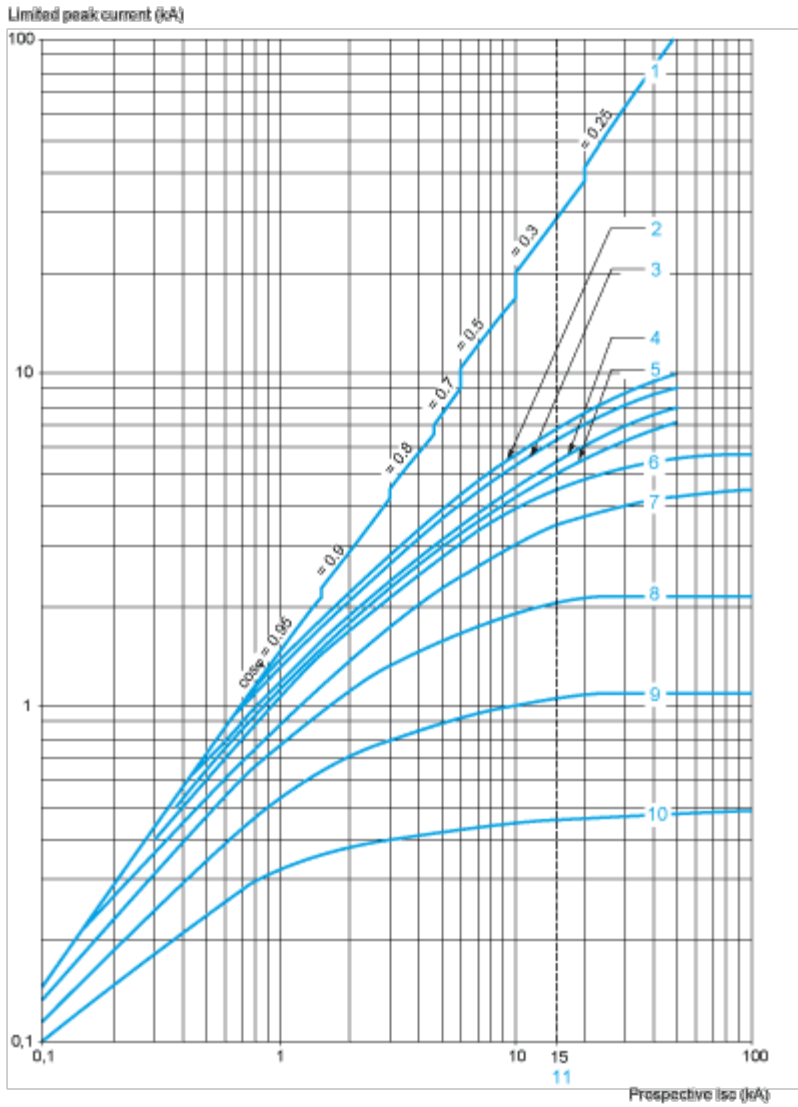


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

**Current Limitation on Short-Circuit for GV2L and GV2LE + Thermal Overload Relay LRD or LR2K (3-Phase 400/415 V)**

**Dynamic Stress**

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



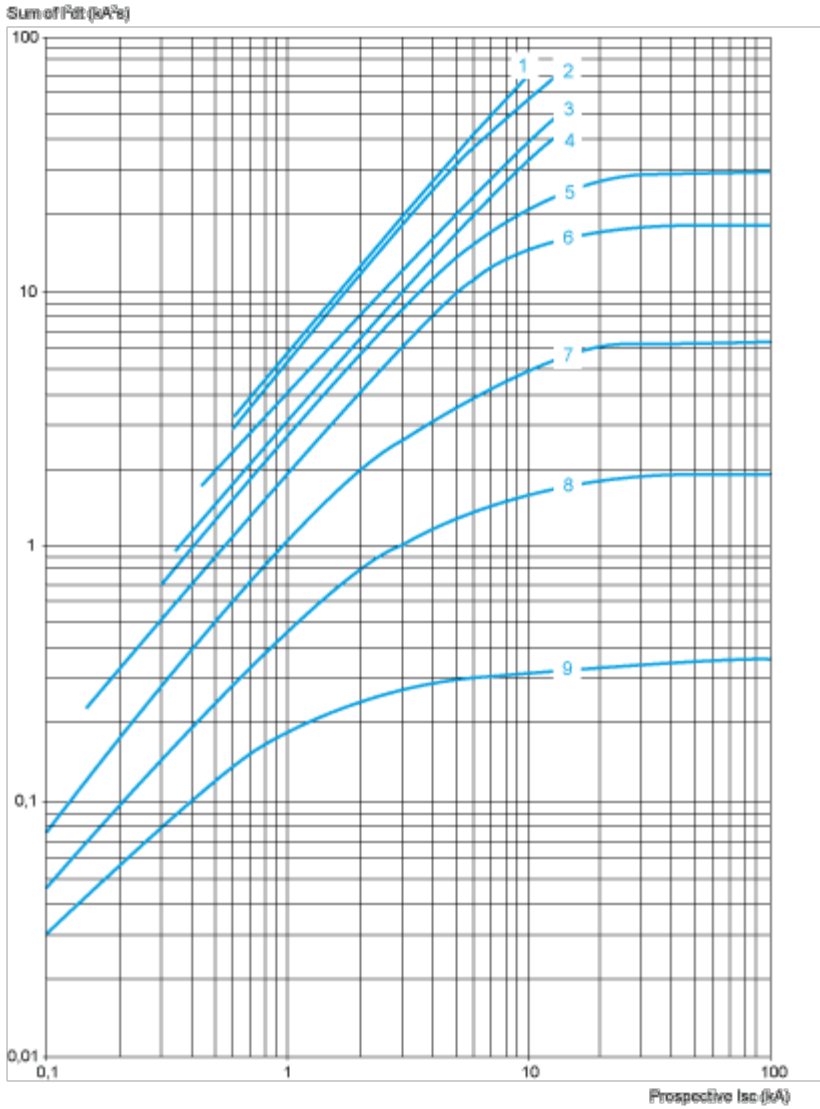
- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

**Thermal Limit on Short-Circuit for GV2LE Only**

Thermal Limit in  $kA^2s$  in the Magnetic Operating Zone

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



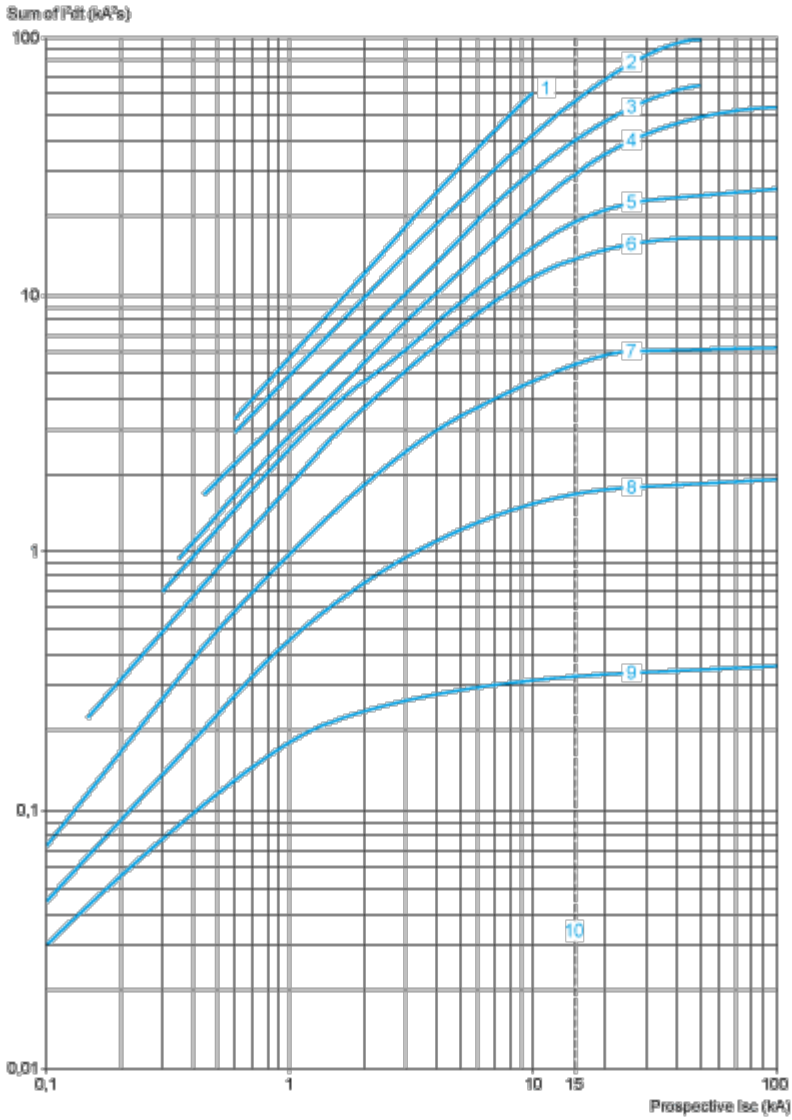


- 1 32 A
- 2 25 A
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A

**Thermal Limit on Short-Circuit for GV2L and GV2LE + Thermal Overload Relay LRD or LR2K**

**Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone**

Sum of  $I^2dt = f$  (prospective  $I_{sc}$ ) at 1.05  $U_e = 435$  V

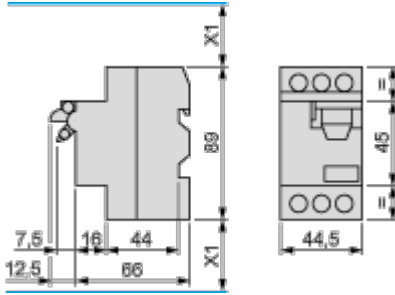


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).

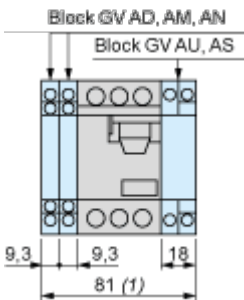
## Dimensions Drawings

### GV2LE

#### Dimensions

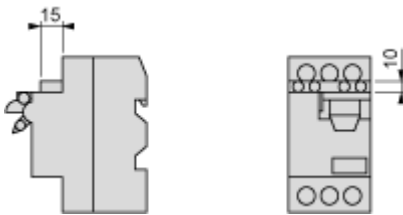


X1 Electrical clearance = 40 mm for  $U_e \leq 690$  V.  
**GVAD, AM, AN, AU, AS**



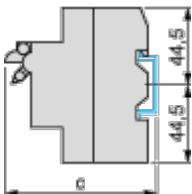
1 Maximum

### GVAE



### Mounting

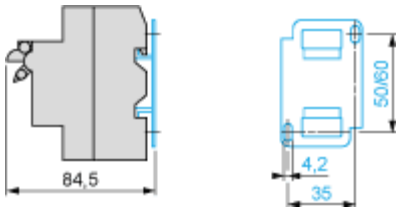
On 35 mm rail



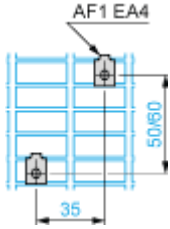
c = 80 on AM1 DP200 (35 x 7.5) and 88 on AM1 DE200, ED200 (35 x15)  
 On panel with adapter plate GV2 AF02

# Bảng thông số sản phẩm

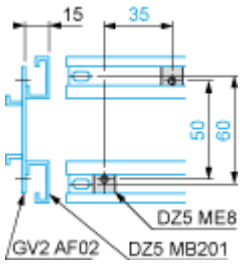
# GV2LE20



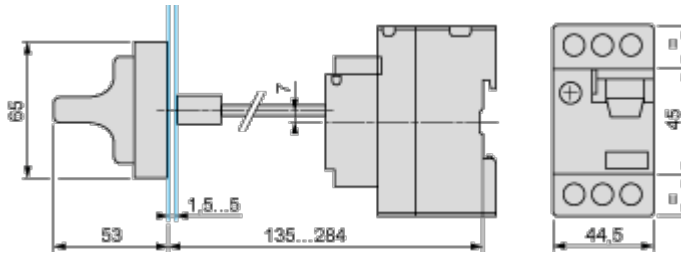
On pre-slotted plate AM1 PA



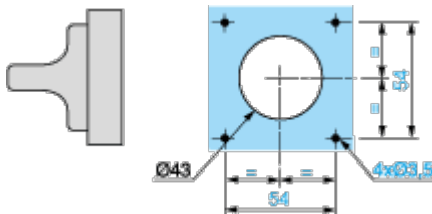
On rails DZ5 MB201



Mounting of External Operator GV2AP03 for GV2LE

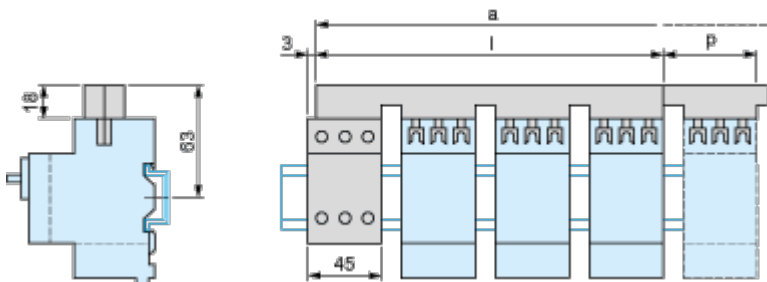


Door cut-out



GV2L and GV2LE

Sets of busbars GV2G445, GV2G454, GV2G472, with terminal block GV2G05



# Bảng thông số sản phẩm

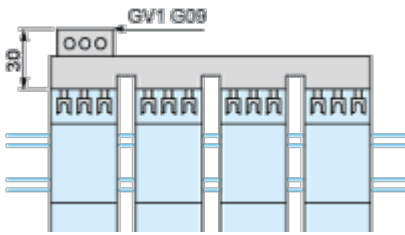
# GV2LE20

|                     | l   | p  |
|---------------------|-----|----|
| GV2G445 (4 x 45 mm) | 179 | 45 |
| GV2G454 (4 x 54 mm) | 206 | 54 |
| GV2G472 (4 x 72 mm) | 260 | 72 |

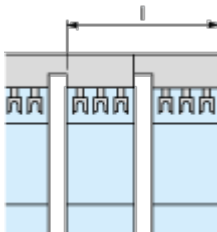
| Number of tap-offs | a   |     |     |     |
|--------------------|-----|-----|-----|-----|
|                    | 5   | 6   | 7   | 8   |
| GV2G445            | 224 | 269 | 314 | 359 |
| GV2G454            | 260 | 314 | 368 | 422 |
| GV2G472            | 332 | 404 | 476 | 548 |

### Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

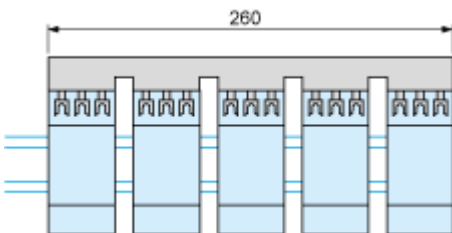


Sets of busbars GV2G245, GV2G254, GV2GR272



|                     | l   |
|---------------------|-----|
| GV2G245 (2 x 45 mm) | 89  |
| GV2G254 (2 x 54 mm) | 98  |
| GV2G272 (2 x 72 mm) | 116 |

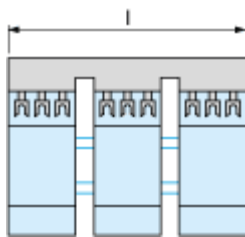
Set of busbars GV2G554



Sets of busbars GV2G345 and GV2G354

# Bảng thông số sản phẩm

## GV2LE20



|                     | l   |
|---------------------|-----|
| GV2G345 (3 x 45 mm) | 134 |
| GV2G354 (3 x 54 mm) | 152 |

GV2LE••

