



## Main

|                                                     |                                                                                                                                                                                                                                                              |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                               | TeSys                                                                                                                                                                                                                                                        |
| Product name                                        | TeSys GV2                                                                                                                                                                                                                                                    |
| Device short name                                   | GV2L                                                                                                                                                                                                                                                         |
| Device application                                  | Motor                                                                                                                                                                                                                                                        |
| Poles description                                   | 3P                                                                                                                                                                                                                                                           |
| Network type                                        | AC                                                                                                                                                                                                                                                           |
| Utilisation category                                | Category A IEC 60947-2<br>AC-3 IEC 60947-4-1                                                                                                                                                                                                                 |
| Network frequency                                   | 50/60 Hz IEC 60947-2                                                                                                                                                                                                                                         |
| Breaking capacity                                   | 4 KA Icu 690 V AC 50/60 Hz IEC 60947-2<br>10 KA Icu 500 V AC 50/60 Hz IEC 60947-2<br>20 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % 690 V AC 50/60 Hz IEC 60947-2<br>100 % 230/240 V AC 50/60 Hz IEC 60947-2<br>75 % 440 V AC 50/60 Hz IEC 60947-2<br>75 % at 500 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                       |
| Trip unit technology                                | Magnetic                                                                                                                                                                                                                                                     |
| Magnetic tripping current                           | 327 A                                                                                                                                                                                                                                                        |

## Complementary

|                                        |                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixing mode                            | 35 mm symmetrical DIN rail clipped<br>Panel screwed with 2 x M4 screws)                                                                                                                                                                                                                                 |
| Operating position                     | Any position                                                                                                                                                                                                                                                                                            |
| Motor power kW                         | 9 KW 400/415 V AC 50/60 Hz<br>11 KW 400/415 V AC 50/60 Hz<br>11 KW 500 V AC 50/60 Hz<br>15 KW 500 V AC 50/60 Hz<br>18.5 kW 690 V AC 50/60 Hz                                                                                                                                                            |
| Control type                           | Rotary knob                                                                                                                                                                                                                                                                                             |
| [Ue] rated operational voltage         | 690 V AC 50/60 Hz IEC 60947-2                                                                                                                                                                                                                                                                           |
| [Ui] rated insulation voltage          | 690 V AC 50/60 Hz IEC 60947-2                                                                                                                                                                                                                                                                           |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947-2                                                                                                                                                                                                                                                                                        |
| Power dissipation per pole             | 1.8 W                                                                                                                                                                                                                                                                                                   |
| Mechanical durability                  | 100000 cycles                                                                                                                                                                                                                                                                                           |
| Electrical durability                  | 100000 cycles AC-3 415 V                                                                                                                                                                                                                                                                                |
| Maximum operating rate                 | 40 cyc/h                                                                                                                                                                                                                                                                                                |
| Rated duty                             | Continuous IEC 60947-4-1                                                                                                                                                                                                                                                                                |
| Connections - terminals                | Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) solid<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) flexible without cable end<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end |
| Tightening torque                      | 15.05 lbf.in (1.7 N.m) screw clamp terminals                                                                                                                                                                                                                                                            |
| Mechanical robustness                  | Shocks 30 Gn IEC 60068-2-27<br>Vibrations 5 Gn, 5...150 Hz IEC 60068-2-6                                                                                                                                                                                                                                |
| Suitability for isolation              | Yes IEC 60947-1                                                                                                                                                                                                                                                                                         |
| Height                                 | 3.50 in (89 mm)                                                                                                                                                                                                                                                                                         |

|               |                       |
|---------------|-----------------------|
| Maximum Width | 1.77 in (45 mm)       |
| Depth         | 3.82 in (97 mm)       |
| Net Weight    | 0.73 lb(US) (0.33 kg) |

## Environment

|                                       |                                                                                                          |
|---------------------------------------|----------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>CSA C22.2 No 60947-4-1<br>UL 60947-4-1                             |
| Product certifications                | IECEE CB Scheme<br>UL<br>CSA<br>CCC<br>EAC<br>RINA<br>LROS (Lloyds register of shipping)<br>DNV-GL<br>BV |
| Protective treatment                  | TH                                                                                                       |
| IP degree of protection               | IP20 IEC 60529                                                                                           |
| IK degree of protection               | IK04                                                                                                     |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C)                                                                                |
| Ambient air temperature for storage   | -40...176 °F (-40...80 °C)                                                                               |
| Fire resistance                       | 1760 °F (960 °C) IEC 60695-2-1                                                                           |
| Operating altitude                    | 0...6561.68 ft (0...2000 m)                                                                              |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22367 - MANUAL STR PROTECTOR - GV2 |
| Discount Schedule     | I11                                |
| GTIN                  | 00785901076872                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 0.76 lb(US) (0.34 kg)              |
| Returnability         | Yes                                |
| Country of origin     | FR                                 |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Package 1 Height             | 4.13 in (10.5 cm)        |
| Package 1 width              | 3.70 in (9.4 cm)         |
| Package 1 Length             | 1.97 in (5 cm)           |
| Unit Type of Package 2       | S02                      |
| Number of Units in Package 2 | 20                       |
| Package 2 Weight             | 15.59 lb(US) (7.07 kg)   |
| Package 2 Height             | 5.91 in (15 cm)          |
| Package 2 width              | 11.81 in (30 cm)         |
| Package 2 Length             | 15.75 in (40 cm)         |
| Unit Type of Package 3       | P06                      |
| Number of Units in Package 3 | 320                      |
| Package 3 Weight             | 268.30 lb(US) (121.7 kg) |
| Package 3 Height             | 31.50 in (80 cm)         |
| Package 3 width              | 31.50 in (80 cm)         |
| Package 3 Length             | 23.62 in (60 cm)         |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                     |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                         |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                             |
| Mercury free               | Yes                                                                                                                                                                                                                                                       |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                       |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                    |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                             |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                              |

## Contractual warranty

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

### 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

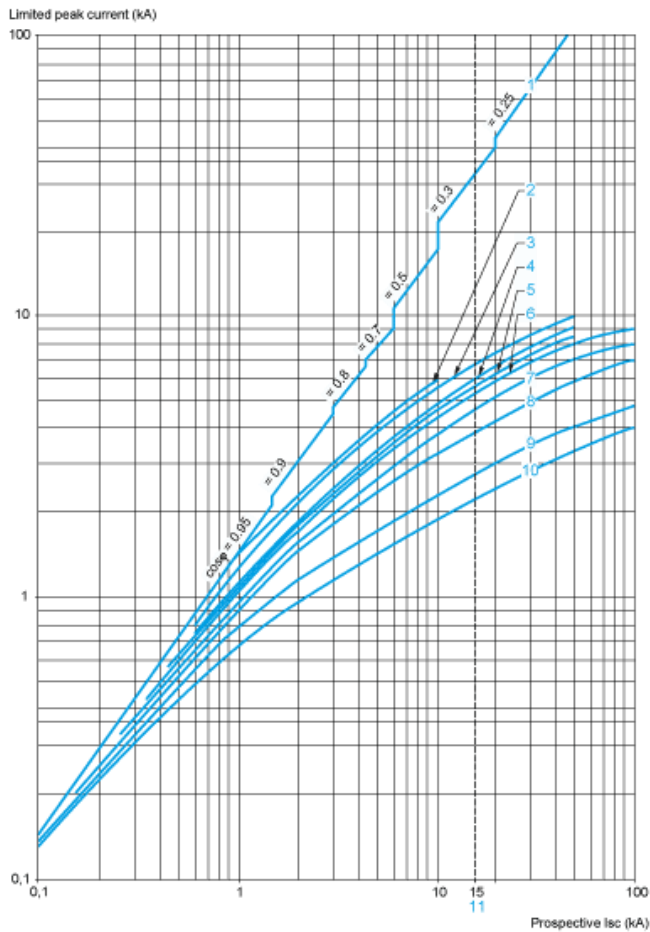


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

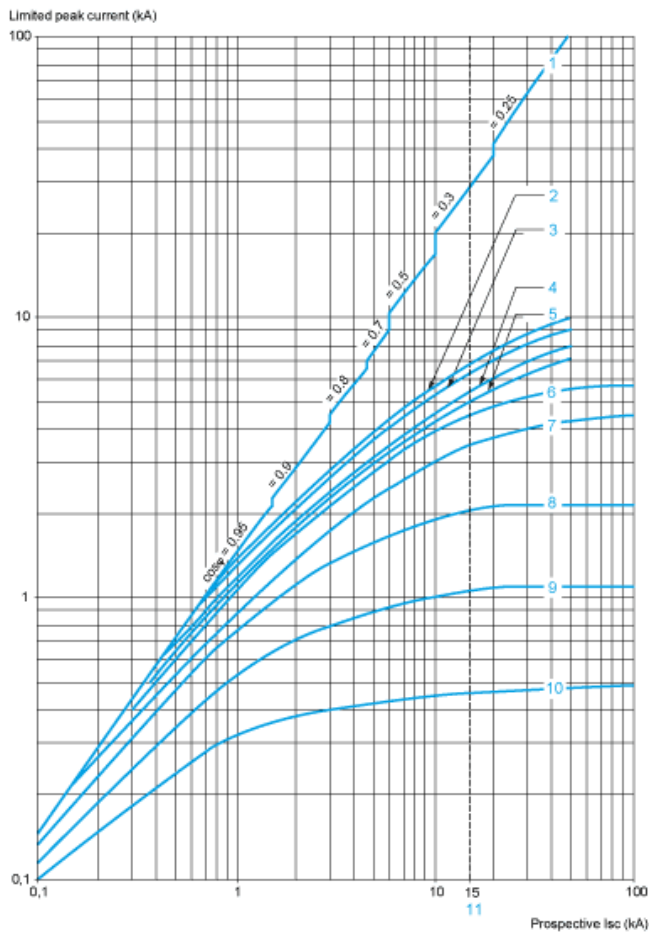


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

Dynamic Stress

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

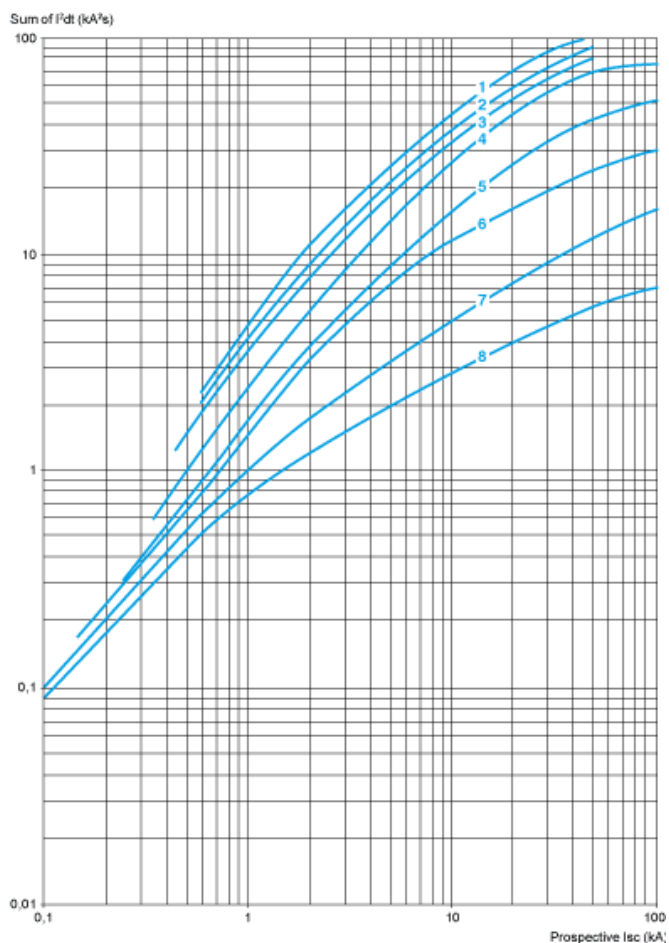


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2L Only

Thermal Limit in  $\text{kA}^2\text{s}$  in the Magnetic Operating Zone

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

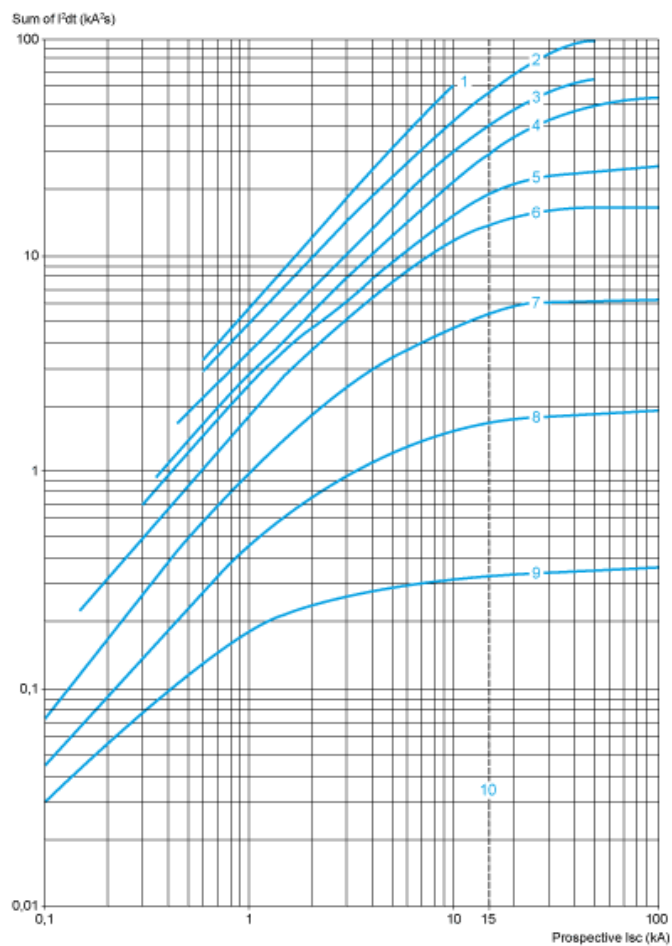


- 1 25 A and 32 A
- 2 18 A
- 3 14 A
- 4 10 A
- 5 6.3 A
- 6 4 A
- 7 2.5 A
- 8 1.6 A

### 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

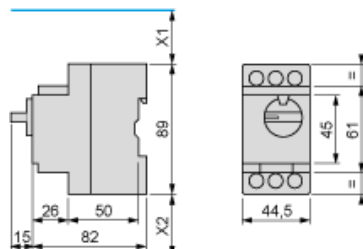
Sum of  $I^2dt = f$  (prospective  $I_{sc}$ ) at 1.05  $U_e = 435$  V



- 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).

## GV2L

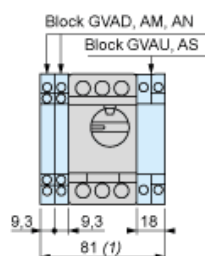
### Dimensions



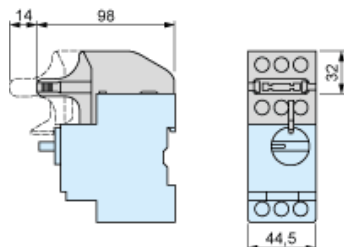
X1 Electrical clearance = 40 mm for  $U_e \leq 415$  V, or 80 mm for  $U_e = 440$  V, or 120 mm for  $U_e = 500$  and 690 V.

X2 = 40 mm.

GVAD, AM, AN, AU, AS



1 Maximum  
GV2AK00

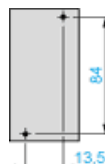


### Mounting

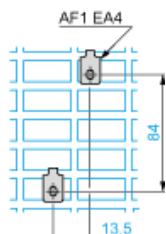
On rail AM1 DE200, AM1 ED200 (35 x 15)



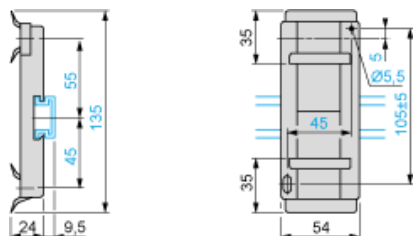
Panel mounted



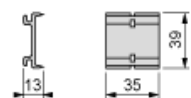
On pre-slotted mounting plate AM1 PA



## Adapter Plate GK2AF01

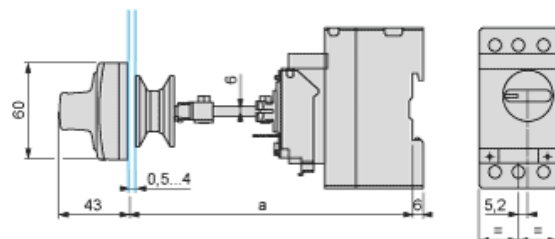


## 7.5 mm Height Compensation Plate GV1F03

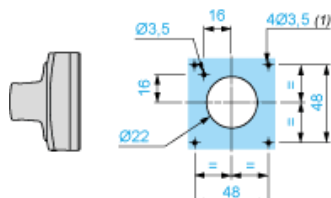


## Mounting

Mounting of External Operator GV2APN01, GV2APN02 or GV2APN04 for Motor Circuit Breakers GV2L

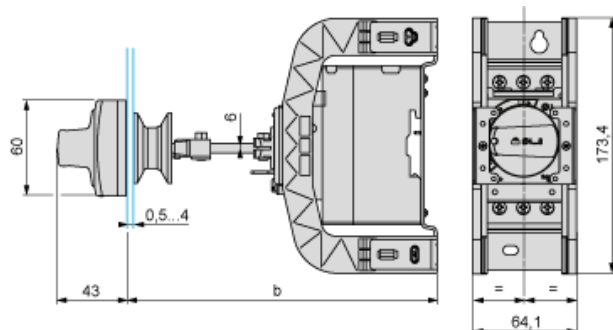


## Door cut-out



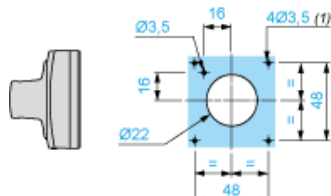
(1) For IP65 only.

Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2L



|                                  | b       |         |
|----------------------------------|---------|---------|
|                                  | Minimum | Maximum |
| GV2 APN... + GV APH02            | 151     | 250     |
| GV2 APN... + GV APH02 + GV APK11 | 250     | 445     |

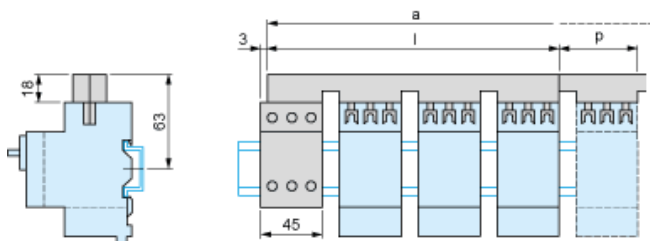
## Door cut-out



(1) For IP65 only.

## GV2L and GV2LE

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

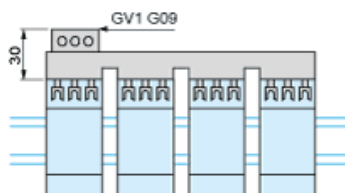


|                     | l   | p  |
|---------------------|-----|----|
| GV2G445 (4 x 45 mm) | 179 | 45 |
| GV2G454 (4 x 54 mm) | 206 | 54 |
| GV2G472 (4 x 72 mm) | 260 | 72 |

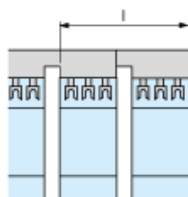
| Number of tap-offs | a   |     |     |     |
|--------------------|-----|-----|-----|-----|
|                    | 5   | 6   | 7   | 8   |
| GV2G445            | 224 | 269 | 314 | 359 |
| GV2G454            | 260 | 314 | 368 | 422 |
| GV2G472            | 332 | 404 | 476 | 548 |

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

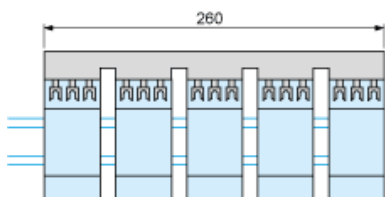


Sets of busbars GV2G245, GV2G254, GV2GR272

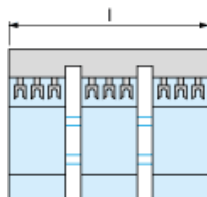


|                     | l   |
|---------------------|-----|
| GV2G245 (2 x 45 mm) | 89  |
| GV2G254 (2 x 54 mm) | 98  |
| GV2G272 (2 x 72 mm) | 116 |

Set of busbars GV2G554



Sets of busbars GV2G345 and GV2G354



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

GV2L••

