

## Product data sheet

### Characteristics

## GV2L07

Motor circuit breaker, TeSys

Deca, 3P, 2.5A, magnetic, rotary handle, screw clamp terminals



### Main

|                           |                          |
|---------------------------|--------------------------|
| Range of product          | TeSys GV2<br>TeSys Deca  |
| Range                     | TeSys Deca<br>TeSys Deca |
| Device short name         | GV2L                     |
| Product name              | TeSys GV2<br>TeSys Deca  |
| Product or component type | Motor circuit breaker    |
| 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                                                                                                                                                                                                                                            |
| Network frequency                                   | 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                  |
| Fixing mode                                         | 35 mm symmetrical DIN rail: clipped<br>Panel: screwed (with 2 x M4 screws)                                                                                                                                                                                                                                          |
| Operating position                                  | Any position                                                                                                                                                                                                                                                                                                        |
| Motor power kW                                      | 0.75 kW at 400/415 V AC 50/60 Hz<br>1.1 kW at 500 V AC 50/60 Hz<br>1.5 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>100 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>4 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2                        |
| Control type                                        | Rotary handle                                                                                                                                                                                                                                                                                                       |
| [In] rated current                                  | 2.5 A                                                                                                                                                                                                                                                                                                               |
| Magnetic tripping current                           | 33.5 A                                                                                                                                                                                                                                                                                                              |
| [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                                                                                                                                                                                                                                                                         |
| [Ith] conventional free air thermal current         | 2.5 A conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                   |
| [Uimp] rated impulse withstand voltage              | 6 kV conforming to IEC 60947-2                                                                                                                                                                                                                                                                                      |
| Power dissipation per pole                          | 1.8 W                                                                                                                                                                                                                                                                                                               |
| Mechanical durability                               | 100000 cycles                                                                                                                                                                                                                                                                                                       |
| Electrical durability                               | 100000 cycles for AC-3 at 415 V                                                                                                                                                                                                                                                                                     |
| Maximum operating rate                              | 40 cyc/h                                                                                                                                                                                                                                                                                                            |
| Rated duty                                          | Continuous conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                              |
| Tightening torque                                   | 1.7 N.m on screw clamp terminals                                                                                                                                                                                                                                                                                    |

|                           |                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------|
| Mechanical robustness     | Shocks: 30 Gn conforming to IEC 60068-2-27<br>Vibrations: 5 Gn, 5...150 Hz conforming to IEC 60068-2-6 |
| Height                    | 89 mm                                                                                                  |
| Width                     | 45 mm                                                                                                  |
| Depth                     | 97 mm                                                                                                  |
| Net weight                | 0.33 kg                                                                                                |
| Suitability for isolation | Yes conforming to IEC 60947-1 § 7-1-6                                                                  |

## 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<br>UKCA |
| Climatic withstand                    | Conforming to IACS E10                                                                                           |
| IK degree of protection               | IK04                                                                                                             |
| IP degree of protection               | IP20 conforming to IEC 60529                                                                                     |
| Ambient air temperature for storage   | -40...80 °C                                                                                                      |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-11                                                                              |
| Operating altitude                    | 2000 m                                                                                                           |
| Ambient air temperature for operation | -20...60 °C                                                                                                      |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 327.0 g  |
| Package 1 Height             | 9.3 cm   |
| Package 1 width              | 4.6 cm   |
| Package 1 Length             | 10.0 cm  |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 20       |
| Package 2 Weight             | 6.746 kg |
| Package 2 Height             | 15.0 cm  |
| Package 2 width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 240      |
| Package 3 Weight             | 92.44 kg |
| Package 3 Height             | 77.0 cm  |
| Package 3 width              | 60.0 cm  |
| Package 3 Length             | 80.0 cm  |

## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| 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>        |

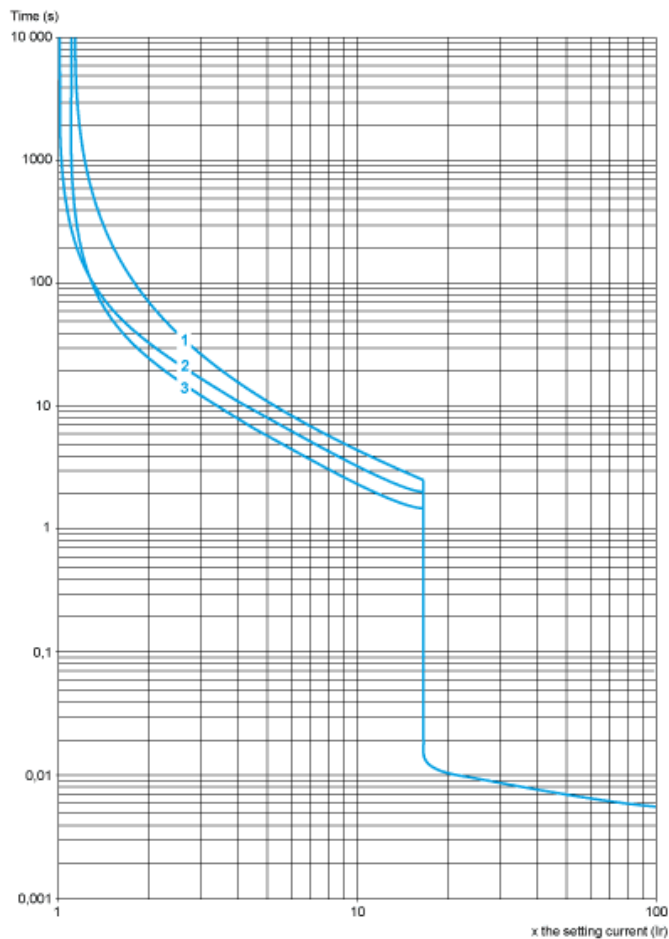
|                          |                                                                                                                                |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|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

### 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

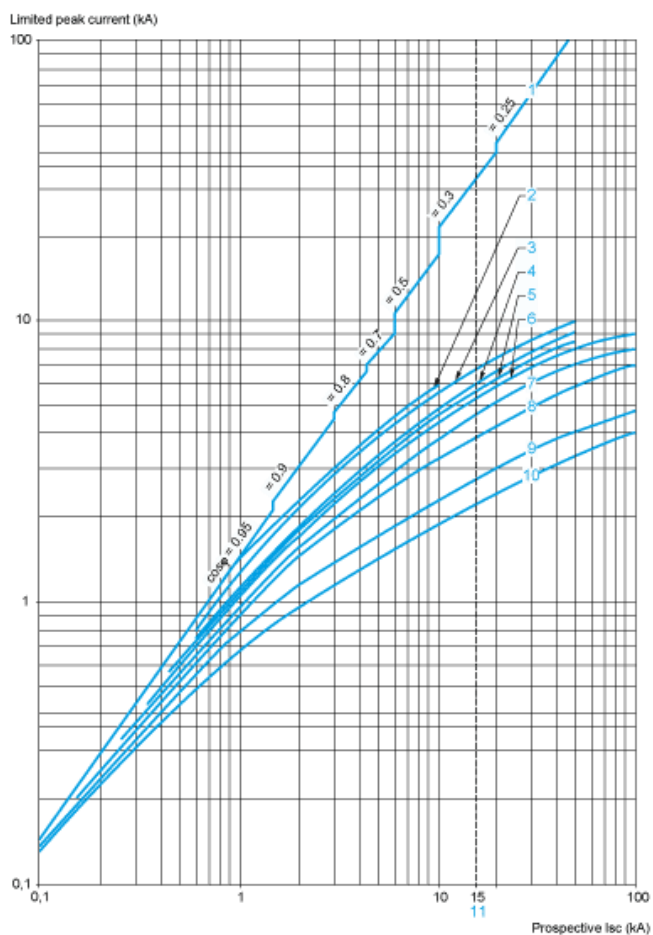


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

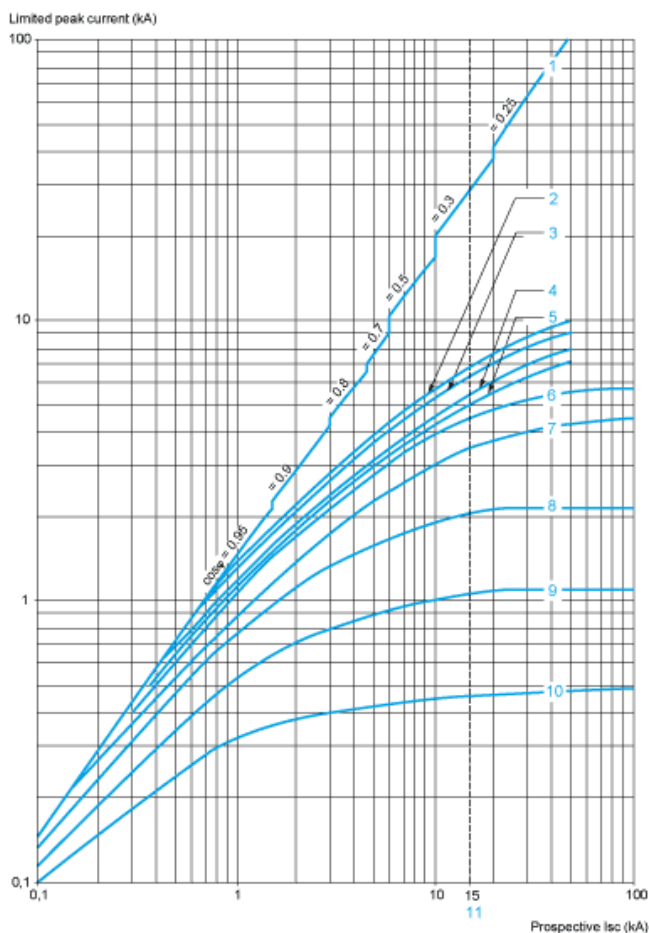


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

Dynamic Stress

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

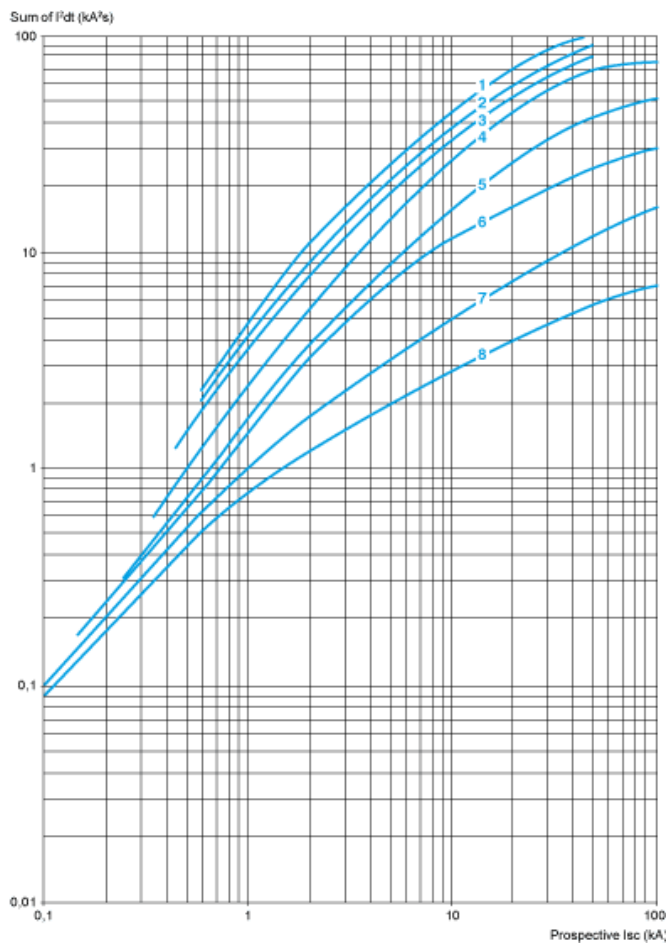


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

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

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

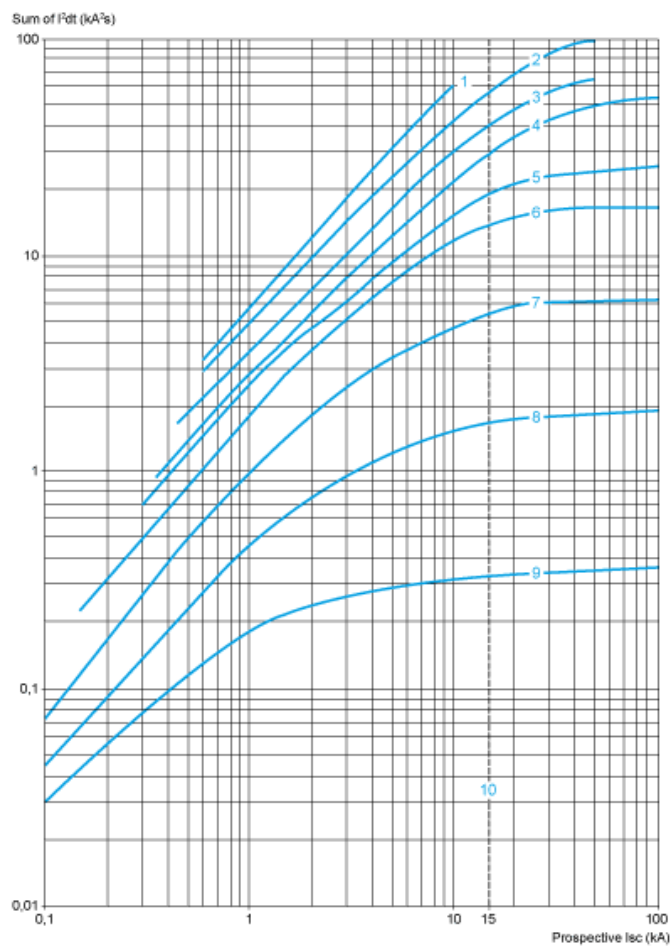


- 1 25 A and 32 A
- 2 18 A
- 3 14 A
- 4 10 A
- 5 6.3 A
- 6 4 A
- 7 2.5 A
- 8 1.6 A

### 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  $I^2dt = f(\text{prospective } I_{sc})$  at  $1.05 U_e = 435 V$

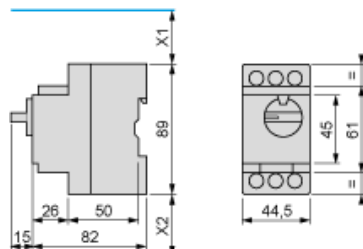


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).



## GV2L

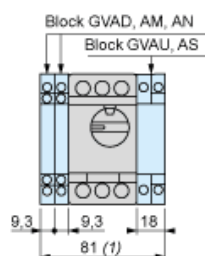
### Dimensions



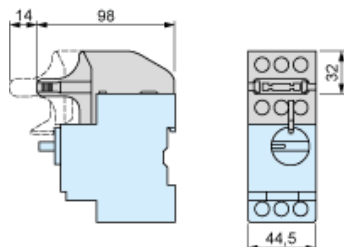
X1 Electrical clearance = 40 mm for  $U_e \leq 415$  V, or 80 mm for  $U_e = 440$  V, or 120 mm for  $U_e = 500$  and 690 V.

X2 = 40 mm.

GVAD, AM, AN, AU, AS



1 Maximum  
GV2AK00

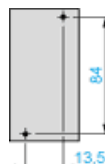


### Mounting

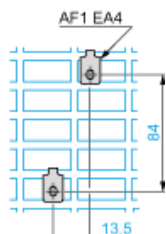
On rail AM1 DE200, AM1 ED200 (35 x 15)



Panel mounted



On pre-slotted mounting plate AM1 PA

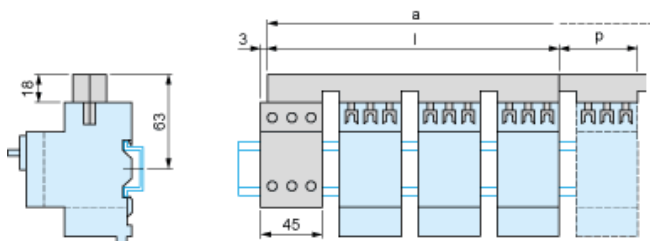


Technical drawing of a rectangular plate. The left view shows a profile with a width of 13. The right view shows a top-down view with a width of 35 and a height of 39.

Technical drawing of the 1000 series piezo actuator. The side view shows a total height of 60 mm, a base diameter of 43 mm, and a central shaft diameter of 6 mm. The distance from the base to the start of the shaft is 0.5 mm, and the distance from the end of the shaft to the mounting bracket is 4 mm. The total length of the actuator is denoted as 'a'. The front view shows a square mounting bracket with a central circular hole and four mounting holes at the corners. The distance from the center of the central hole to the center of each corner hole is 5.2 mm.

[illegible]

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by Schneider Electric

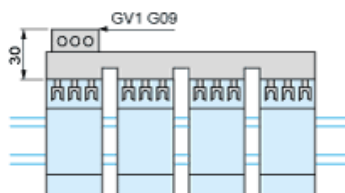


|                     | l   | p  |
|---------------------|-----|----|
| GV2G445 (4 x 45 mm) | 179 | 45 |
| GV2G454 (4 x 54 mm) | 206 | 54 |
| GV2G472 (4 x 72 mm) | 260 | 72 |

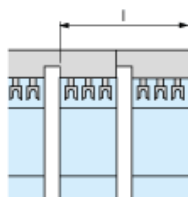
| Number of tap-offs | a   |     |     |     |
|--------------------|-----|-----|-----|-----|
|                    | 5   | 6   | 7   | 8   |
| GV2G445            | 224 | 269 | 314 | 359 |
| GV2G454            | 260 | 314 | 368 | 422 |
| GV2G472            | 332 | 404 | 476 | 548 |

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

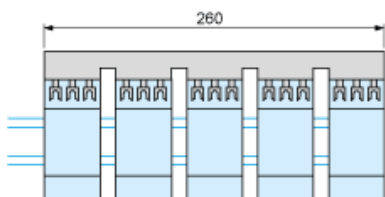


Sets of busbars GV2G245, GV2G254, GV2GR272

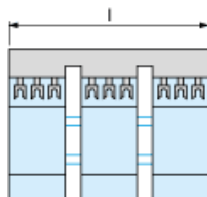


|                     | l   |
|---------------------|-----|
| GV2G245 (2 x 45 mm) | 89  |
| GV2G254 (2 x 54 mm) | 98  |
| GV2G272 (2 x 72 mm) | 116 |

Set of busbars GV2G554



Sets of busbars GV2G345 and GV2G354



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

GV2L••

