# Product data sheet

Specifications

## TeSys Deca Manual Starter and Protector, magnetic circuit protector, rotary handle, 10 A, screw clamp terminals

GV2L14

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range** | TeSys Deca |
| **Product name** | TeSys GV2 |
| **Product or Component Type** | Motor circuit breaker |
| **Device short name** | GV2L |
| **Device Application** | Motor protection |
| **Trip unit technology** | Magnetic |

## Complementary

| | |
|---|---|
| **Poles description** | 3P |
| **Network type** | AC |
| **Utilisation category** | Category A IEC 60947-2<br>AC-3 IEC 60947-4-1<br>AC-3e IEC 60947-4-1 |
| **Network frequency** | 50/60 Hz IEC 60947-2 |
| **Motor power kW** | 3 kW 400/415 V AC 50/60 Hz<br>4 kW 400/415 V AC 50/60 Hz<br>4 kW 500 V AC 50/60 Hz<br>5.5 kW 690 V AC 50/60 Hz<br>7.5 kW 690 V AC 50/60 Hz |
| **Breaking capacity** | 100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2<br>20 kA Icu 440 V AC 50/60 Hz IEC 60947-2<br>10 kA Icu 500 V AC 50/60 Hz IEC 60947-2<br>4 kA Icu 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ics] rated service short-circuit breaking capacity** | 100 % 230/240 V AC 50/60 Hz IEC 60947-2<br>100 % 400/415 V AC 50/60 Hz IEC 60947-2<br>75 % 440 V AC 50/60 Hz IEC 60947-2<br>100 % 500 V AC 50/60 Hz IEC 60947-2<br>100 % 690 V AC 50/60 Hz IEC 60947-2 |
| **Control Type** | Rotary handle |
| **Line Rated Current** | 10 A |
| **Magnetic tripping current** | 149 A |
| **[Ith] conventional free air thermal current** | 14 A IEC 60947-2 |
| **[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 |
| **Suitability for isolation** | Yes IEC 60947-1 |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| **Power dissipation per pole** | 1.8 W |
| **Mechanical durability** | 100000 cycles |
| **Electrical durability** | 100000 cycles AC-3 415 V In<br>100000 cycles AC-3e 415 V In |
| **Rated duty** | Uninterrupted IEC 60947-4-1 |
| **Connections - terminals** | Power circuit screw clamp terminal 2 0.002…0.009 in² (1…6 mm²)solid<br>Power circuit screw clamp terminal 2 0.002…0.009 in² (1.5…6 mm²)flexible without cable end<br>Power circuit screw clamp terminal 2 0.002…0.006 in² (1…4 mm²)flexible with cable end |
| **Tightening torque** | 15.05 lbf.in (1.7 N.m) screw clamp terminal |
| **Fixing mode** | 35 mm symmetrical DIN rail clipped<br>Panel screwed with 2 x M4 screws) |
| **Mounting position** | Horizontal<br>Vertical |
| **Width** | 1.8 in (45 mm) |
| **Height** | 3.5 in (89 mm) |
| **Depth** | 3.8 in (97 mm) |
| **Net Weight** | 0.73 lb(US) (0.33 kg) |
| **color** | Dark grey |

## Environment

| | |
|---|---|
| **Standards** | 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 |
| **Product Certifications** | CCC<br>UL<br>CSA<br>EAC<br>LROS (Lloyds register of shipping)<br>BV<br>RINA<br>DNV-GL<br>UKCA<br>IECEE CB Scheme |
| **IK degree of protection** | IK04 |
| **IP degree of protection** | IP20 IEC 60529 |
| **Climatic withstand** | IACS E10 |
| **Ambient Air Temperature for Storage** | -40…176 °F (-40…80 °C) |
| **Fire resistance** | 1760 °F (960 °C) IEC 60695-2-11 |
| **Ambient air temperature for operation** | -4…140 °F (-20…60 °C) |
| **Mechanical robustness** | Shocks 30 Gn for 11 ms<br>Vibrations 5 Gn, 5...150 Hz |
| **Operating altitude** | <= 6561.68 ft (2000 m) |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US10I1122367 |
| **Discount Schedule** | 0I11 |
| **GTIN** | 3389110213270 |

| | |
|---|---|
| **Returnability** | Yes |
| **Country of origin** | TH |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 3.661 in (9.300 cm) |
| **Package 1 Width** | 1.811 in (4.600 cm) |
| **Package 1 Length** | 3.937 in (10.000 cm) |
| **Package weight(Lbs)** | 11.393 oz (323.000 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 20 |
| **Package 2 Height** | 5.906 in (15.000 cm) |
| **Package 2 Width** | 11.811 in (30.000 cm) |
| **Package 2 Length** | 15.748 in (40.000 cm) |
| **Package 2 Weight** | 14.921 lb(US) (6.768 kg) |

## Contractual warranty

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

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Carbon footprint (kg CO2 eq, Total Life cycle) | 8 |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| EU RoHS Directive | Compliant with Exemptions |
| SCIP Number | 04104e70-ba29-493c-b2cc-b5837d1f902b |
| REACh Regulation | REACh Declaration |
| 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 www.P65Warnings.ca.gov |

## Use Again

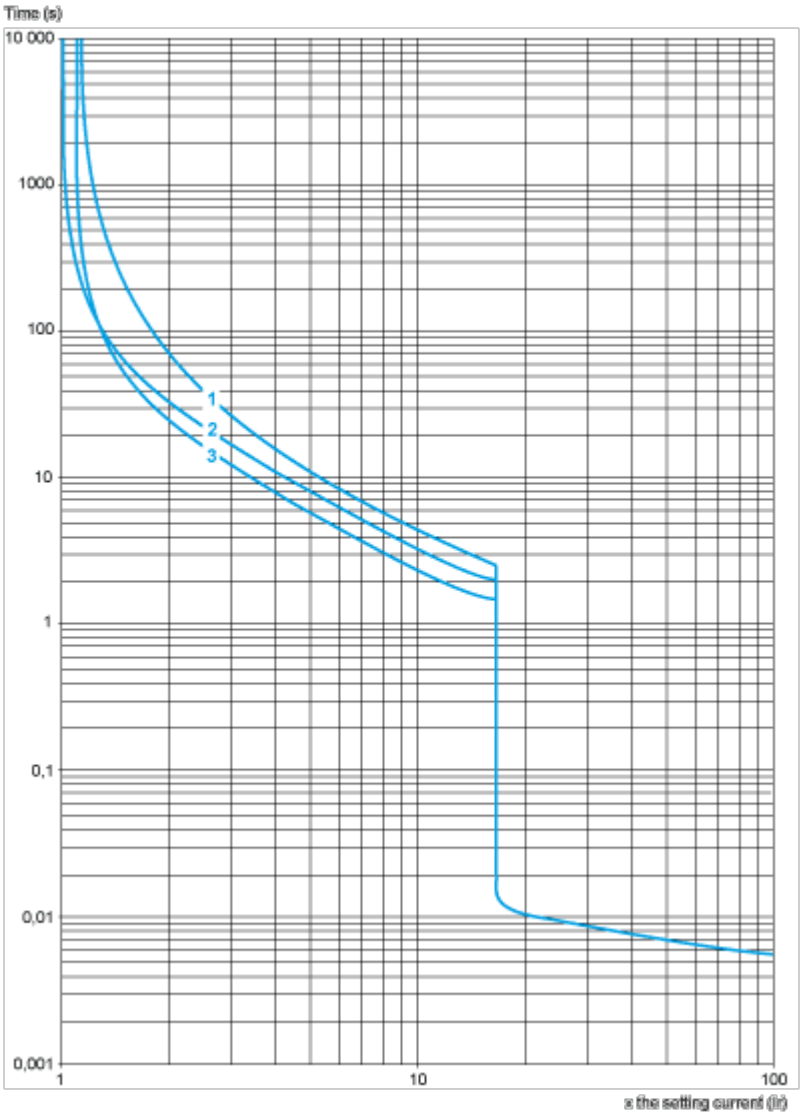
### Repack and remanufacture

| | |
|---|---|
| Circularity Profile | End of Life Information |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

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

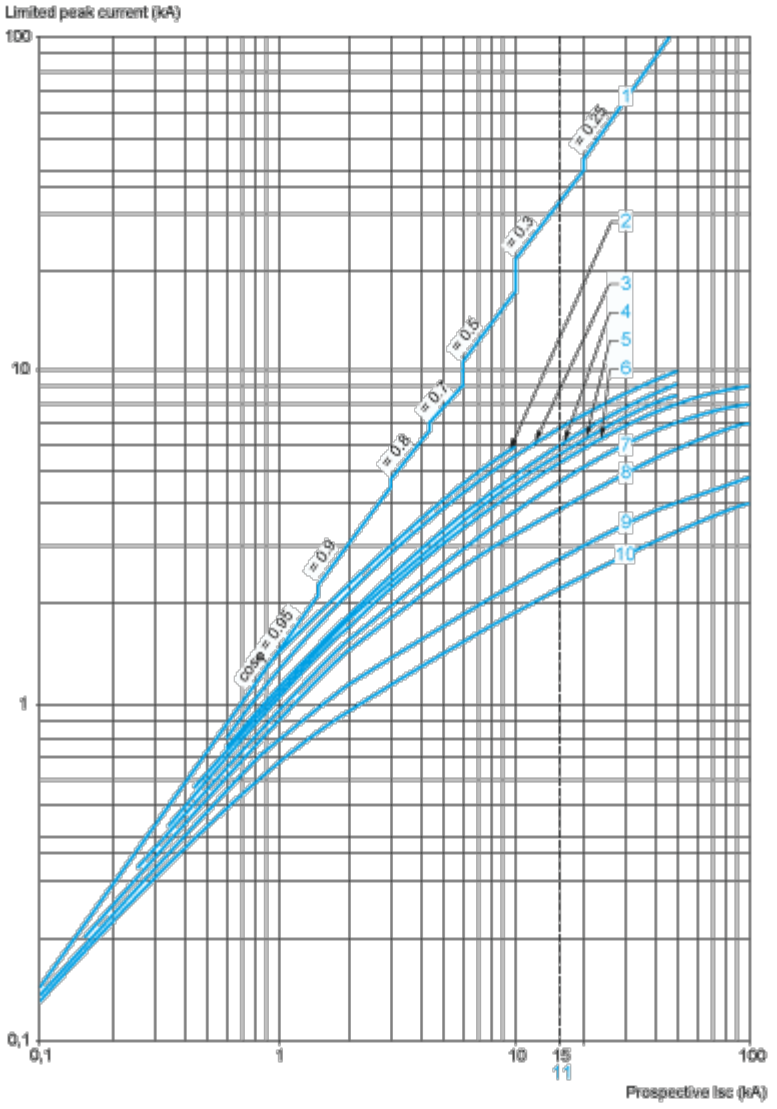
2 2 poles from cold state

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 (prospective Isc) at 1.05 Ue = 435 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

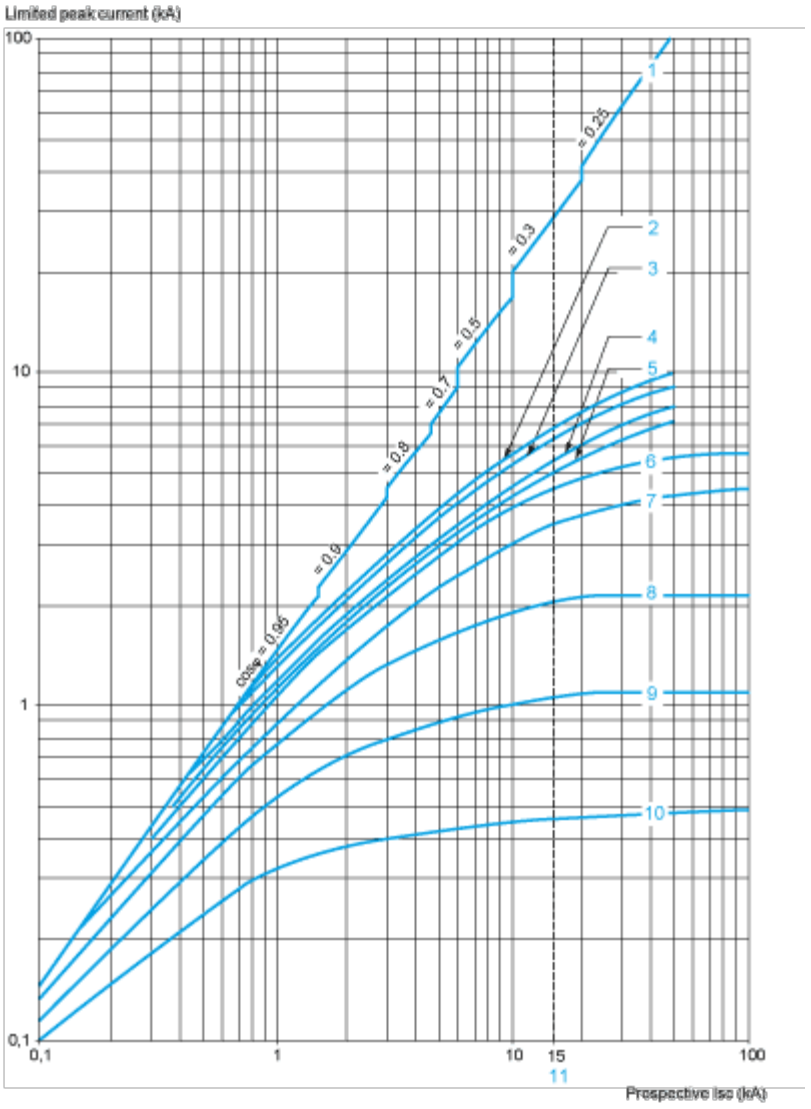
10 1.6 A

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 (prospective Isc) at 1.05 Ue = 435 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

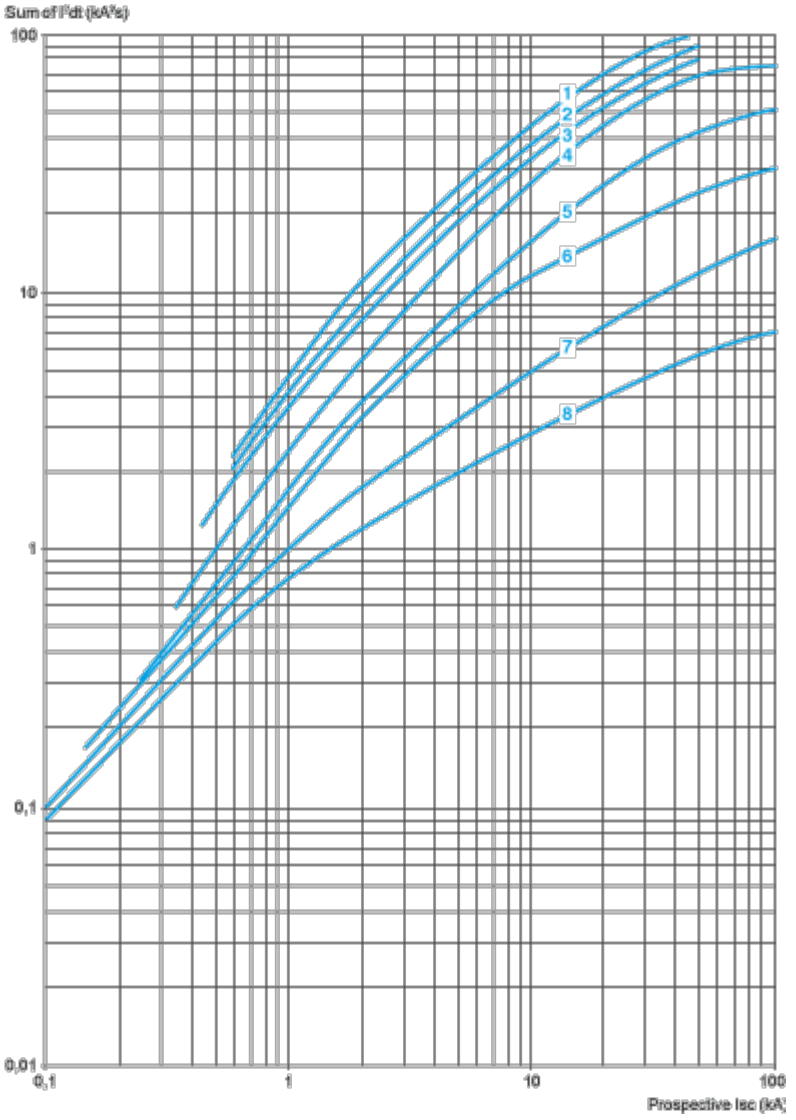
10 1.6 A

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 $kA^2s$ in the Magnetic Operating Zone

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




1 25 A and 32 A

2 18 A

3 14 A

4 10 A

5 6.3 A

6 4 A

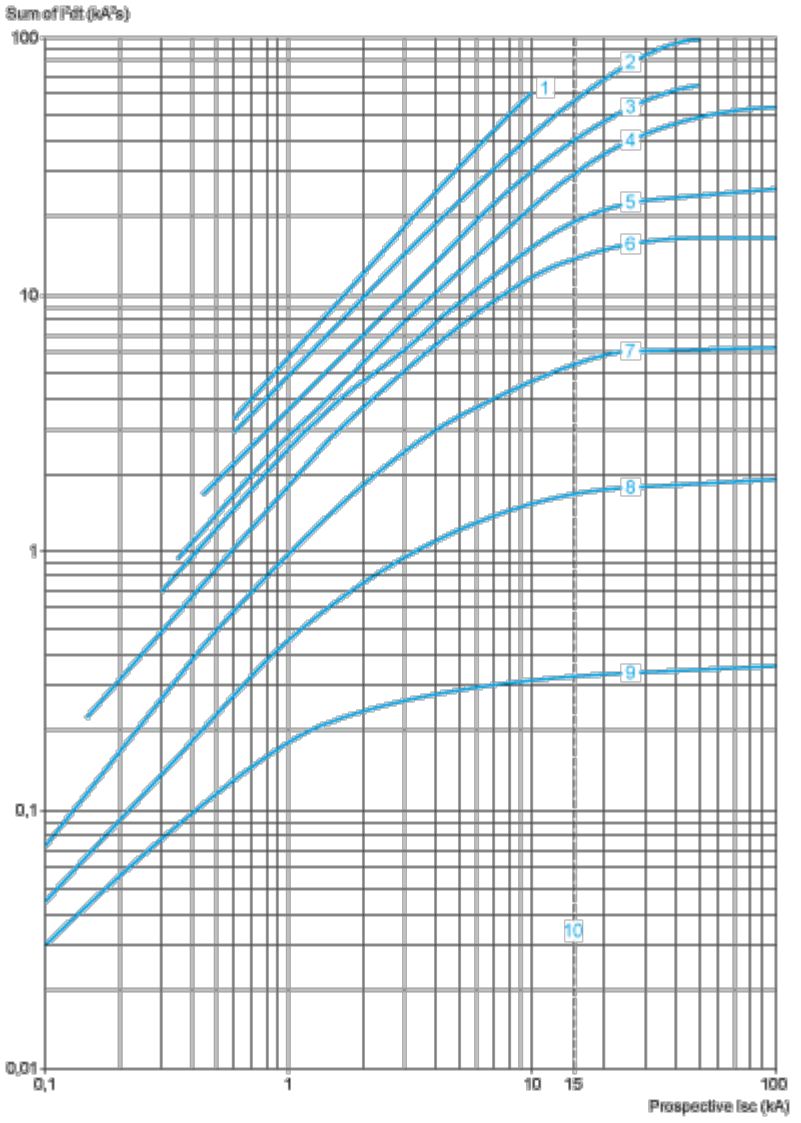
7 2.5 A

8 1.6 A

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

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

Sum of $I^2dt$ = f (prospective Isc) at 1.05 Ue = 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

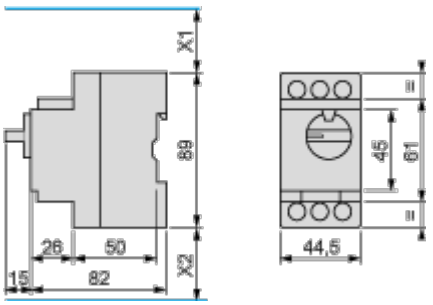
9 1.6 A

10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).

## Dimensions Drawings

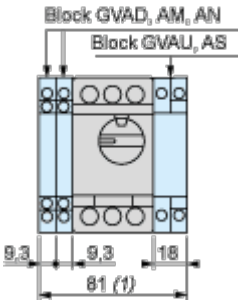
### GV2L

**Dimensions**



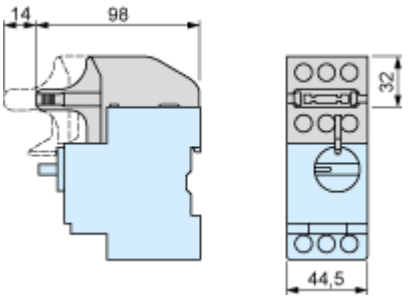

X1 Electrical clearance = 40 mm for Ue ≤ 415 V, or 80 mm for Ue = 440 V, or 120 mm for Ue = 500 and 690 V.
X2 = 40 mm.

**GVAD, AM, AN, AU, AS**

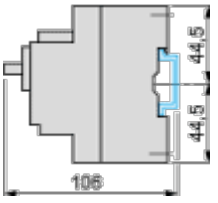



1 Maximum

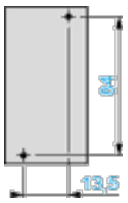
**GV2AK00**



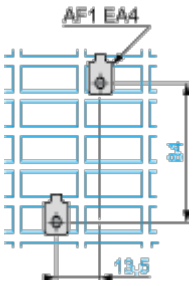

**Mounting**
On rail AM1 DE200, AM1 ED200 (35 x 15)



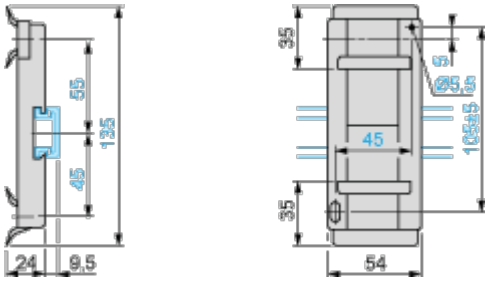

Panel mounted



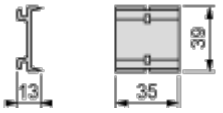

On pre-slotted mounting plate AM1 PA




**Adapter Plate GK2AF01**

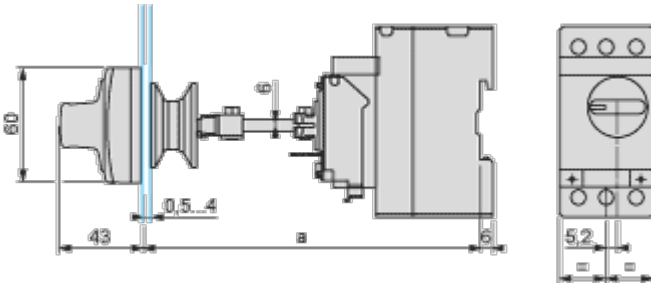



**7.5 mm Height Compensation Plate GV1F03**

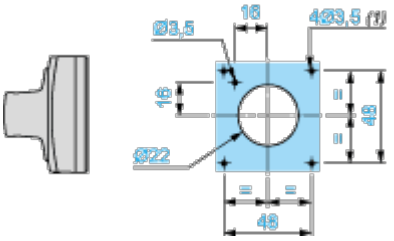



## Mounting

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

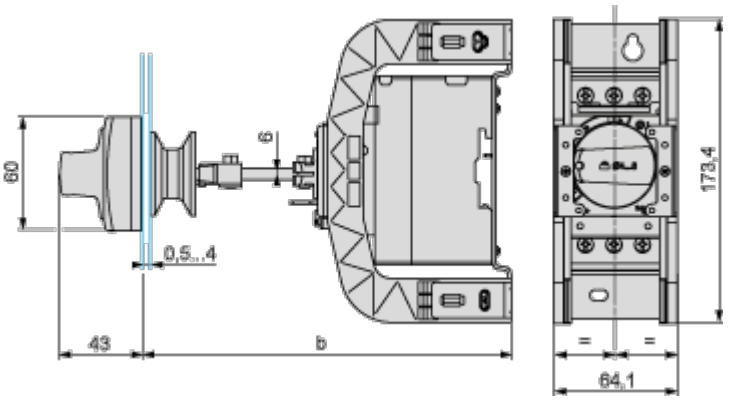



Door cut-out



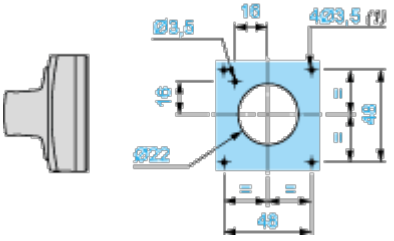
(1) For IP65 only.

**Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2L**



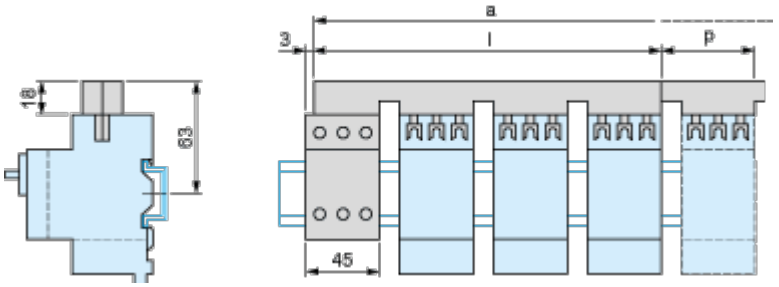

| | b | |
|---|---|---|
| | Minimum | Maximum |
| GV2 APN•• + GV APH02 | 151 | 250 |
| GV2 APN•• + GV APH02 + GV APK11 | 250 | 445 |

Door cut-out




(1) For IP65 only.

**GV2L and GV2LE**
Sets of busbars GV2G445, GV2G454, GV2G472, with terminal block GV2G05

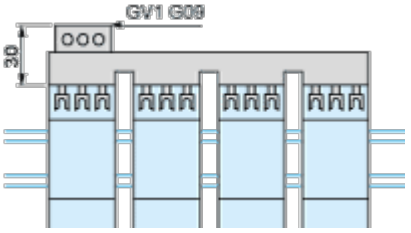



| | l | p |
|---|---|---|
| GV2G445 (4 x 45 mm) | 179 | 45 |
| GV2G454 (4 x 54 mm) | 206 | 54 |
| GV2G472 (4 x 72 mm) | 260 | 72 |

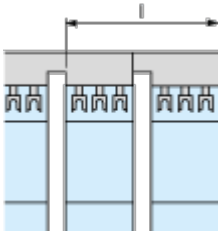
| Number of tap-offs | a | | | |
|---|---|---|---|---|
| | 5 | 6 | 7 | 8 |
| GV2G445 | 224 | 269 | 314 | 359 |
| GV2G454 | 260 | 314 | 368 | 422 |
| GV2G472 | 332 | 404 | 476 | 548 |

**Sets of Busbars for GV2L and GV2LE**

Sets of busbars GV2G••• with terminal block GV1G09

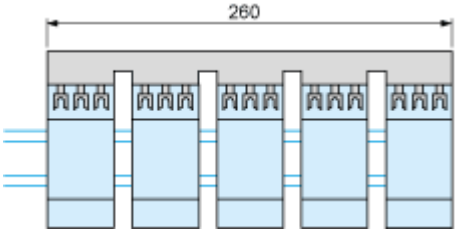



Sets of busbars GV2G245, GV2G254, GV2GR272

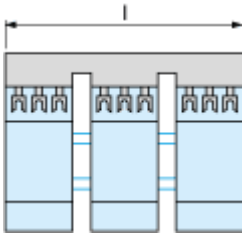



| | l |
|---|---|
| GV2G245 (2 x 45 mm) | 89 |
| GV2G254 (2 x 54 mm) | 98 |
| GV2G272 (2 x 72 mm) | 116 |

Set of busbars GV2G554




Sets of busbars GV2G345 and GV2G354

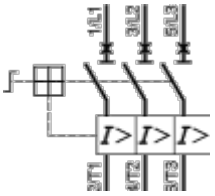



| | l |
|---|---|
| GV2G345 (3 x 45 mm) | 134 |

| | I |
|---|---|
| GV2G354 (3 x 54 mm) | 152 |

## Connections and Schema

GV2L••



Offer Marketing Illustration

**Product benefits / Features**

Offer Marketing Illustration

**Product benefits / Features**

Offer Marketing Illustration

**Product benefits / Features**

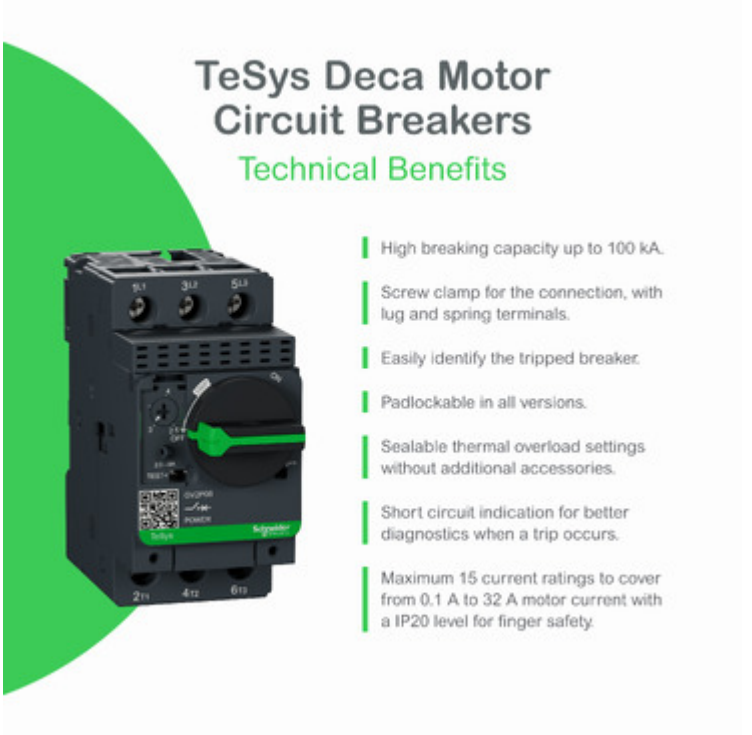
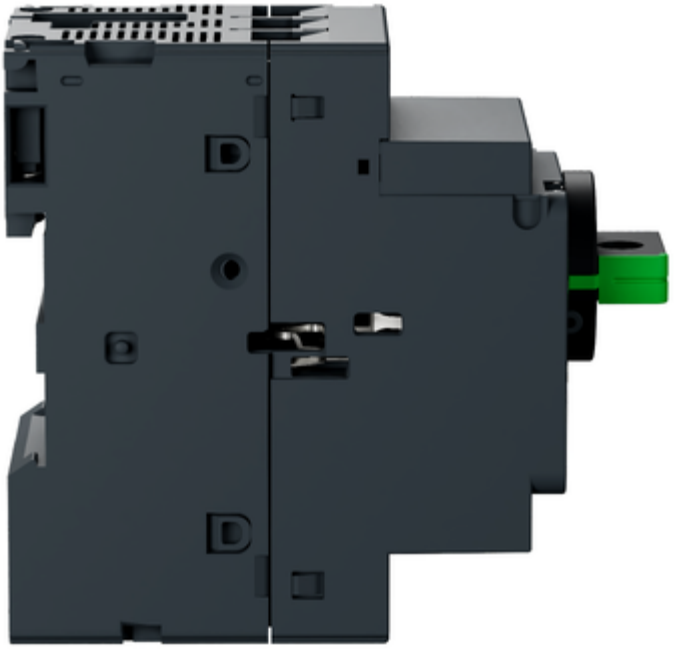
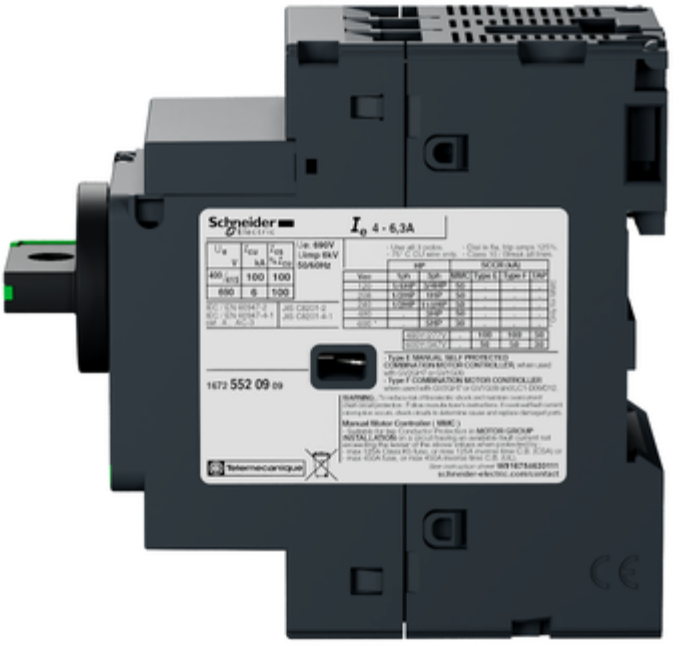


Image of product / Alternate images

**Alternative**




Schneider Electric
$I_o$ 4 - 6,3A
1672 552 09 09

Technical Illustration

## Assembly's dimensions