

Product datasheet

Specifications



Motor circuit breaker, TeSys GV2, TeSys Deca, 3P, 10A, magnetic, rotary handle, screw clamp terminals

GV2L14

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 conforming to IEC 60947-2 AC-3 conforming to IEC 60947-4-1 AC-3e conforming to IEC 60947-4-1 |
| Network frequency | 50/60 Hz conforming to IEC 60947-2 |
| Motor power kW | 3 kW at 400/415 V AC 50/60 Hz 4 kW at 400/415 V AC 50/60 Hz 4 kW at 500 V AC 50/60 Hz 5.5 kW at 690 V AC 50/60 Hz 7.5 kW at 690 V AC 50/60 Hz |
| Breaking capacity | 100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 20 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 4 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 60947-2 100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Control type | Rotary handle |
| [In] rated current | 10 A |
| Magnetic tripping current | 149 A |
| [Ith] conventional free air thermal current | 14 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 |
| Electrical durability | 100000 cycles for AC-3 at 415 V In 100000 cycles for AC-3e at 415 V In |
| Rated duty | Continuous conforming to IEC 60947-4-1 |
| Tightening torque | 1.7 N.m - on screw clamp terminal |
| Fixing mode | 35 mm symmetrical DIN rail: clipped Panel: screwed (with 2 x M4 screws) |
| Mounting position | Horizontal Vertical |
| Width | 45 mm |
| Height | 89 mm |
| Depth | 97 mm |
| Product weight | 0.33 kg |
| Colour | Dark grey |

Environment

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

Packing Units

| | |
|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.300 cm |
| Package 1 Width | 4.600 cm |
| Package 1 Length | 10.000 cm |
| Package 1 Weight | 323.000 g |
| Unit Type of Package 2 | S02 |

| | |
|-------------------------------------|-----------|
| Number of Units in Package 2 | 20 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 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.eq.CO2 per CR, Total Life cycle) **8**

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard **No**

Packaging without single use plastic **No**

SCIP Number **04104e70-ba29-493c-b2cc-b5837d1f902b**

China RoHS Regulation [China RoHS declaration](#)

Use Again

Repack and remanufacture

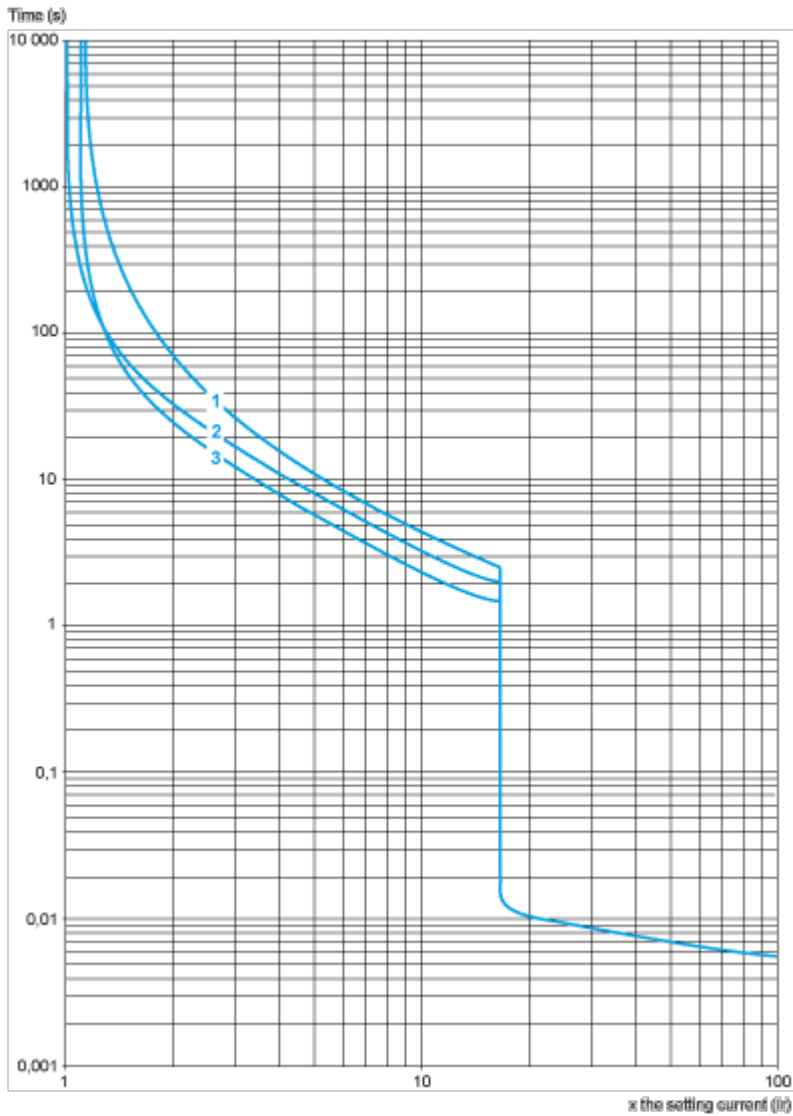
Circularity Profile [End of Life Information](#)

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

Take-back **No**

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

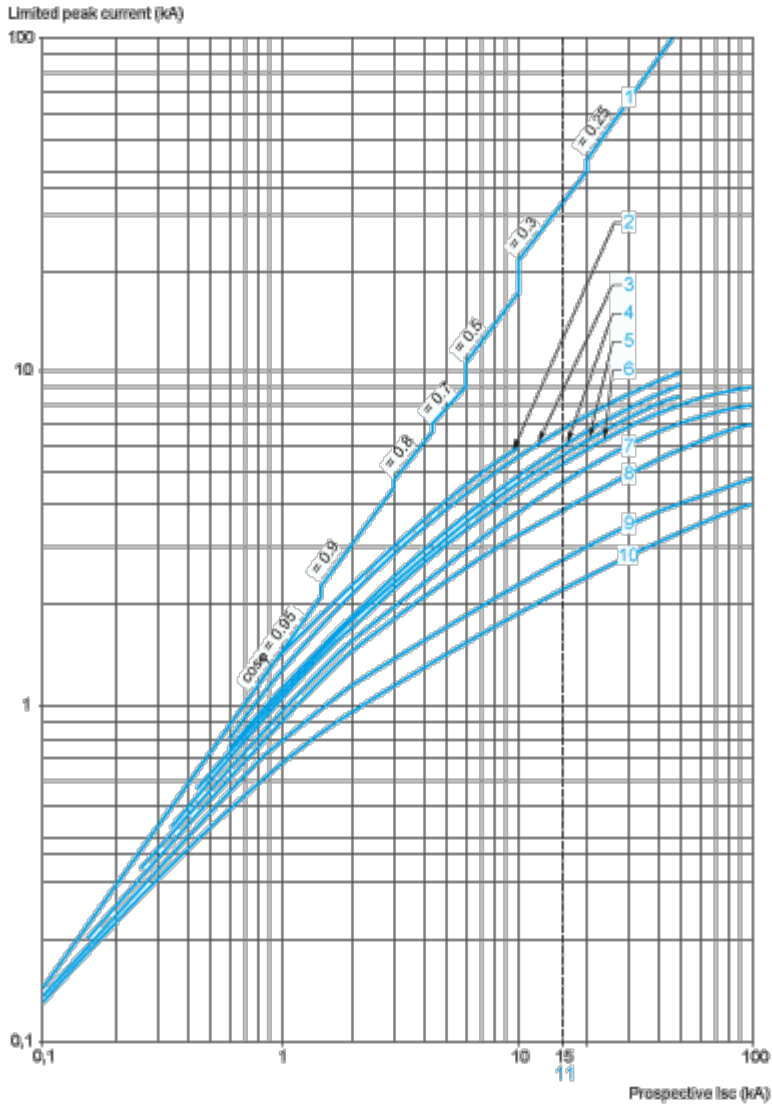


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

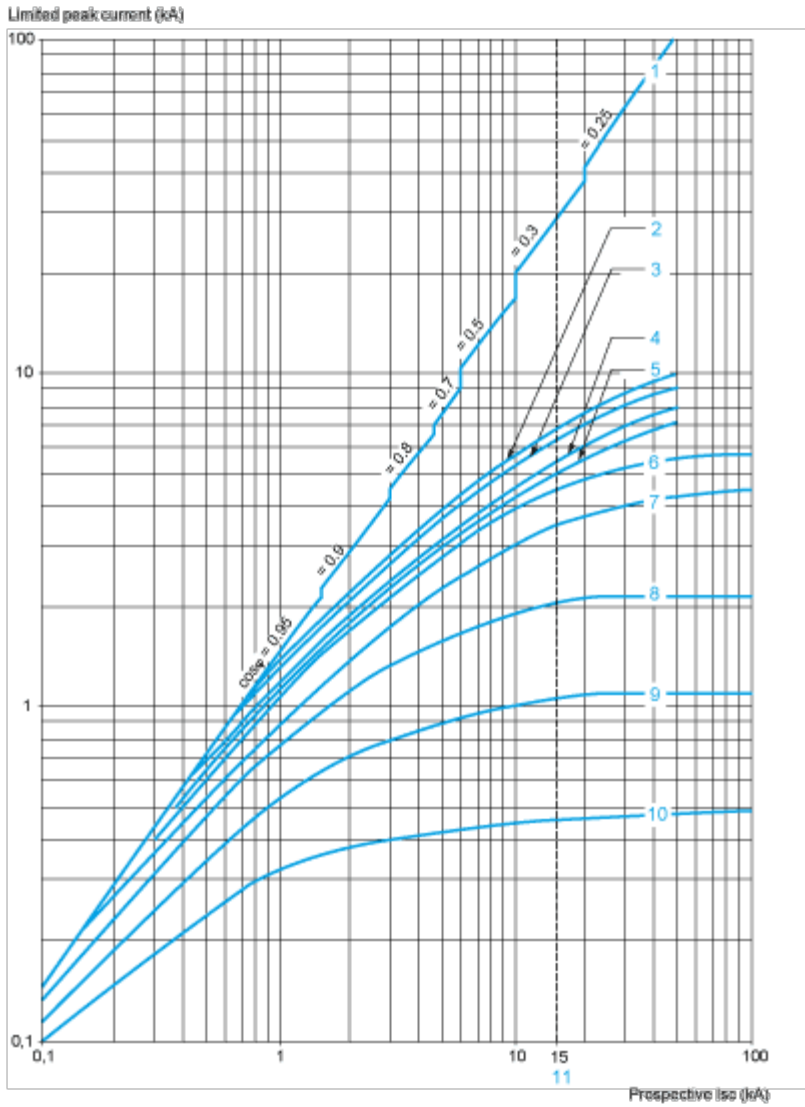


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

Dynamic Stress

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

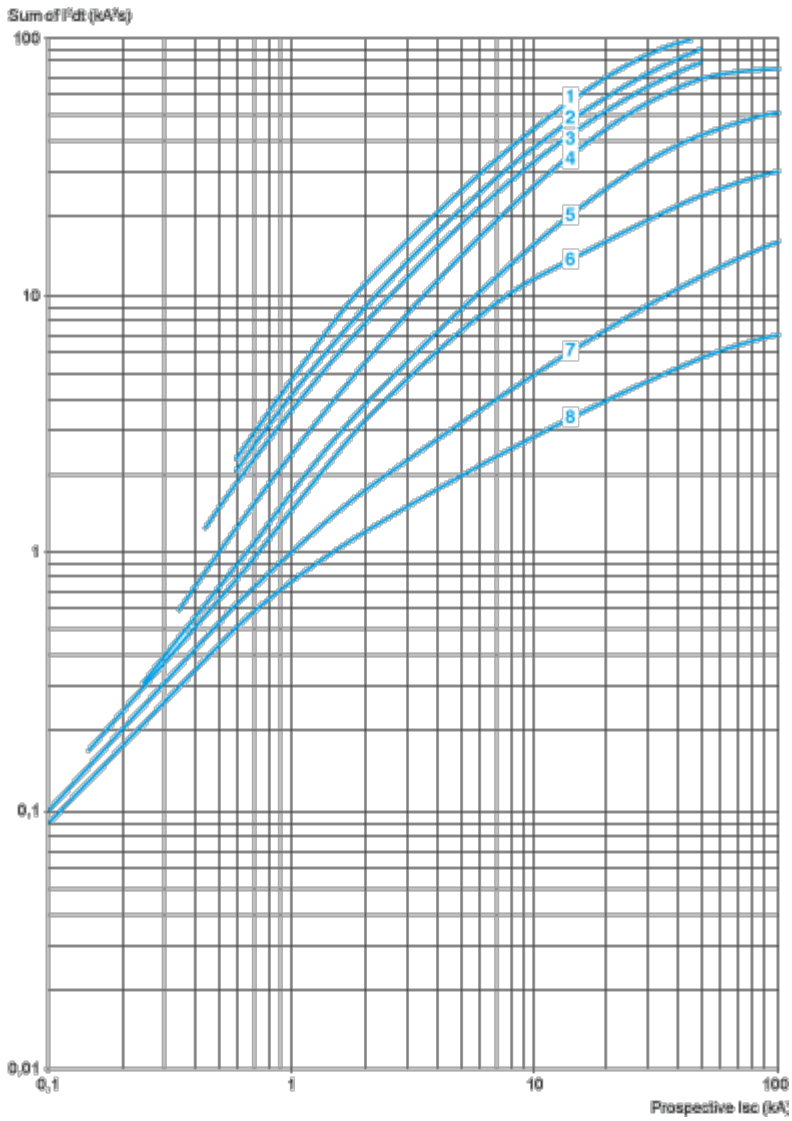


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2L Only

Thermal Limit in kA²s in the Magnetic Operating Zone

Sum of I²dt = f (prospective Isc) at 1.05 Ue = 435 V

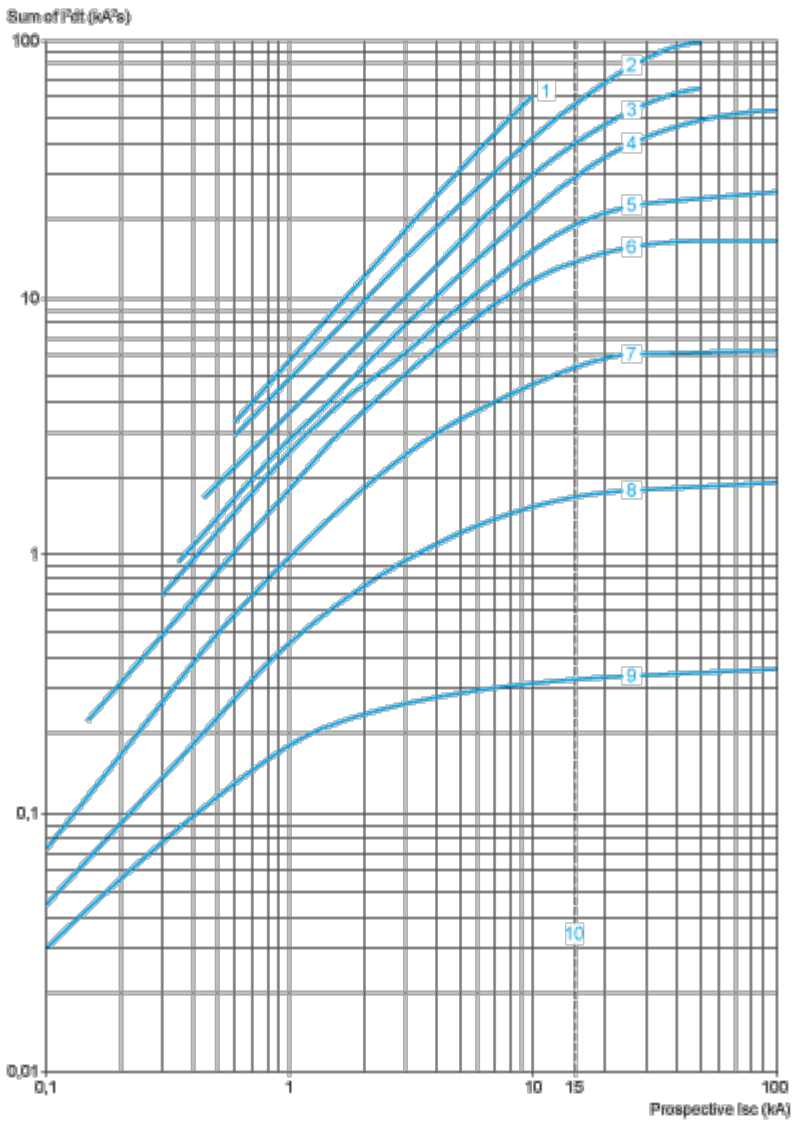


- 1 25 A and 32 A
- 2 18 A
- 3 14 A
- 4 10 A
- 5 6.3 A
- 6 4 A
- 7 2.5 A
- 8 1.6 A

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

Thermal Limit in kA²s in the Magnetic Operating Zone

Sum of I²dt = f (prospective Isc) at 1.05 Ue = 435 V

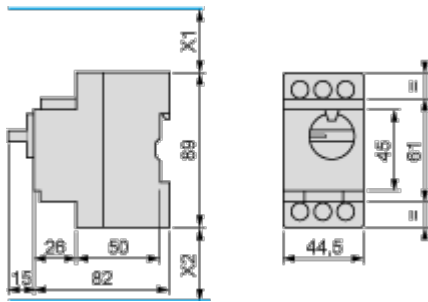


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).

Dimensions Drawings

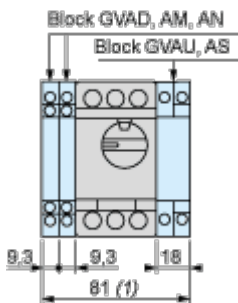
GV2L

Dimensions



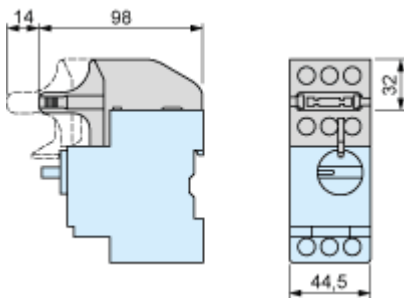
X1 Electrical clearance = 40 mm for $U_e \leq 415$ V, or 80 mm for $U_e = 440$ V, or 120 mm for $U_e = 500$ and 690 V.
 X2 = 40 mm.

GVAD, AM, AN, AU, AS



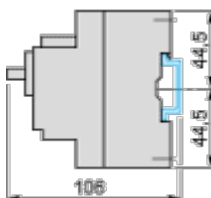
1 Maximum

GV2AK00

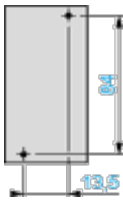


Mounting

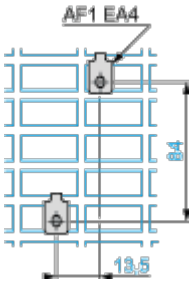
On rail AM1 DE200, AM1 ED200 (35 x 15)



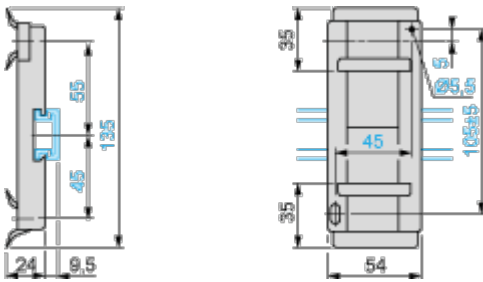
Panel mounted



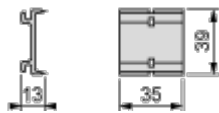
On pre-slotted mounting plate AM1 PA



Adapter Plate GK2AF01

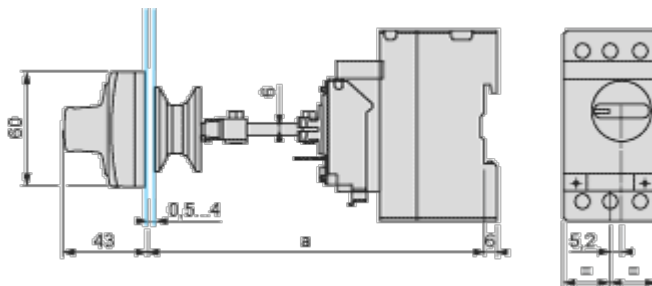


7.5 mm Height Compensation Plate GV1F03

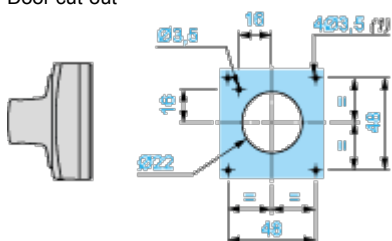


Mounting

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

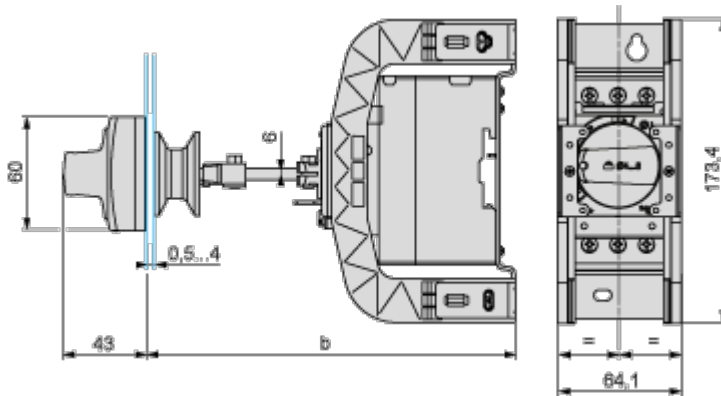


Door cut-out



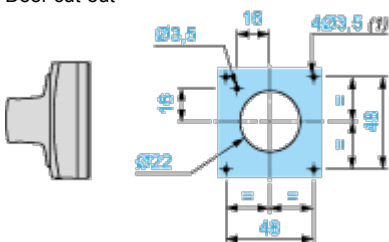
(1) For IP65 only.

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 |

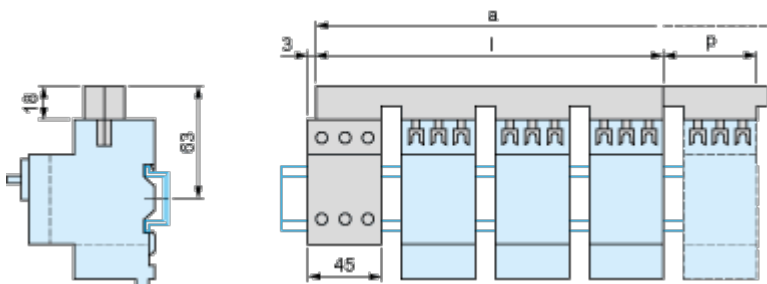
Door cut-out



(1) For IP65 only.

GV2L and GV2LE

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

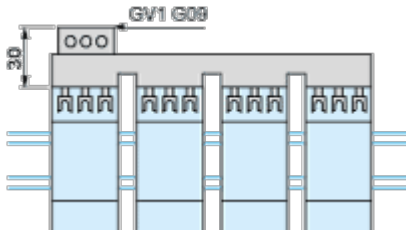


| | l | p |
|---------------------|-----|----|
| GV2G445 (4 x 45 mm) | 179 | 45 |
| GV2G454 (4 x 54 mm) | 206 | 54 |
| GV2G472 (4 x 72 mm) | 260 | 72 |

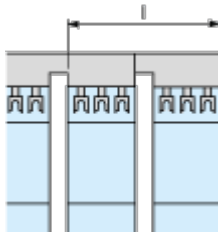
| Number of tap-offs | a | | | |
|--------------------|-----|-----|-----|-----|
| | 5 | 6 | 7 | 8 |
| GV2G445 | 224 | 269 | 314 | 359 |
| GV2G454 | 260 | 314 | 368 | 422 |
| GV2G472 | 332 | 404 | 476 | 548 |

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

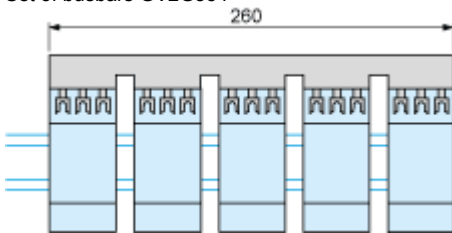


Sets of busbars GV2G245, GV2G254, GV2GR272

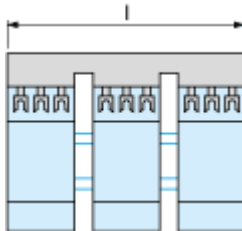


| | l |
|---------------------|-----|
| GV2G245 (2 x 45 mm) | 89 |
| GV2G254 (2 x 54 mm) | 98 |
| GV2G272 (2 x 72 mm) | 116 |

Set of busbars GV2G554



Sets of busbars GV2G345 and GV2G354



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

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

Connections and Schema

GV2L••

