

Product data sheet

Specifications



Motor circuit breaker, TeSys Deca
frame 3, 3P, 73A, magnetic, rotary
handle, lugs or bars terminals

GV3L736

Main

| | |
|---------------------------|-----------------------|
| Range | TeSys Deca |
| Product Name | TeSys GV3 |
| Product Or Component Type | Motor circuit breaker |
| Device Short Name | GV3L |
| Device Application | Motor protection |
| Trip Unit Technology | Magnetic |

Complementary

| | |
|---|---|
| Poles Description | 3P |
| Network Type | AC |
| Utilisation Category | Category A conforming to IEC 60947-2 |
| Network Frequency | 50/60 Hz |
| Fixing Mode | 35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws) |
| Motor Power Kw | 37 kW at 400/415 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz 55 kW at 690 V AC 50/60 Hz |
| Breaking Capacity | 65 kA Icu at 230/240 V AC 50/60 Hz 50 kA Icu at 400/415 V AC 50/60 Hz 50 kA Icu at 440 V AC 50/60 Hz 12 kA Icu at 500 V AC 50/60 Hz 6 kA Icu at 690 V AC 50/60 Hz |
| [Ics] Rated Service Short-Circuit Breaking Capacity | 100 % at 230/240 V AC 50/60 Hz 60 % at 400/415 V AC 50/60 Hz 60 % at 440 V AC 50/60 Hz 50 % at 500 V AC 50/60 Hz 50 % at 690 V AC 50/60 Hz |
| Control Type | Rotary handle |
| [In] Rated Current | 73 A |
| Magnetic Tripping Current | 1120 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 |
| [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 | 8 W |
| Mechanical Durability | 50000 cycles |

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

| | |
|-----------------------|-----------------------------------|
| Electrical Durability | 20000 cycles for AC-3 at 415 V In |
| Tightening Torque | 6 N.m - on lugs-ring terminals |
| Width | 55 mm |
| Height | 132 mm |
| Depth | 136 mm |
| Net Weight | 0.96 kg |
| Colour | Dark grey |
| Connection Pitch | 17.5 mm without spreaders |

Environment

| | |
|---------------------------------------|---|
| Standards | EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 |
| Product Certifications | CCC UL CSA EAC LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA |
| 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: 5 Gn for 11 ms contactor open Shocks: 30 Gn for 11 ms contactor closed Vibrations: 4 Gn, 5...300 Hz |
| Operating Altitude | 3000 m |

Packing Units

| | |
|------------------------------|----------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 15.8 cm |
| Package 1 Width | 6.5 cm |
| Package 1 Length | 14.6 cm |
| Package 1 Weight | 1.016 kg |

Contractual warranty

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Mercury Free

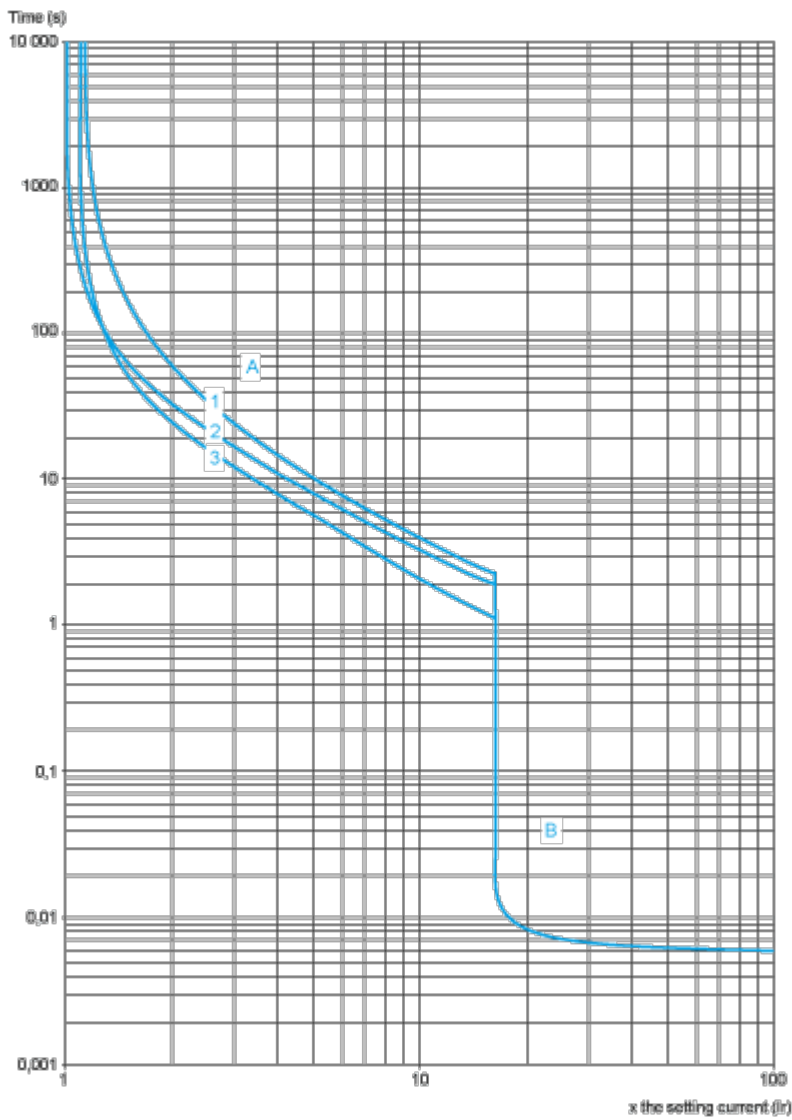
✓ Rohs Exemption Information [Yes](#)

Certifications & Standards

| | |
|--------------------------|---|
| Reach Regulation | REACH Declaration |
| Eu Rohs Directive | Compliant with Exemptions |
| China Rohs Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile | End of Life Information |

Performance Curves

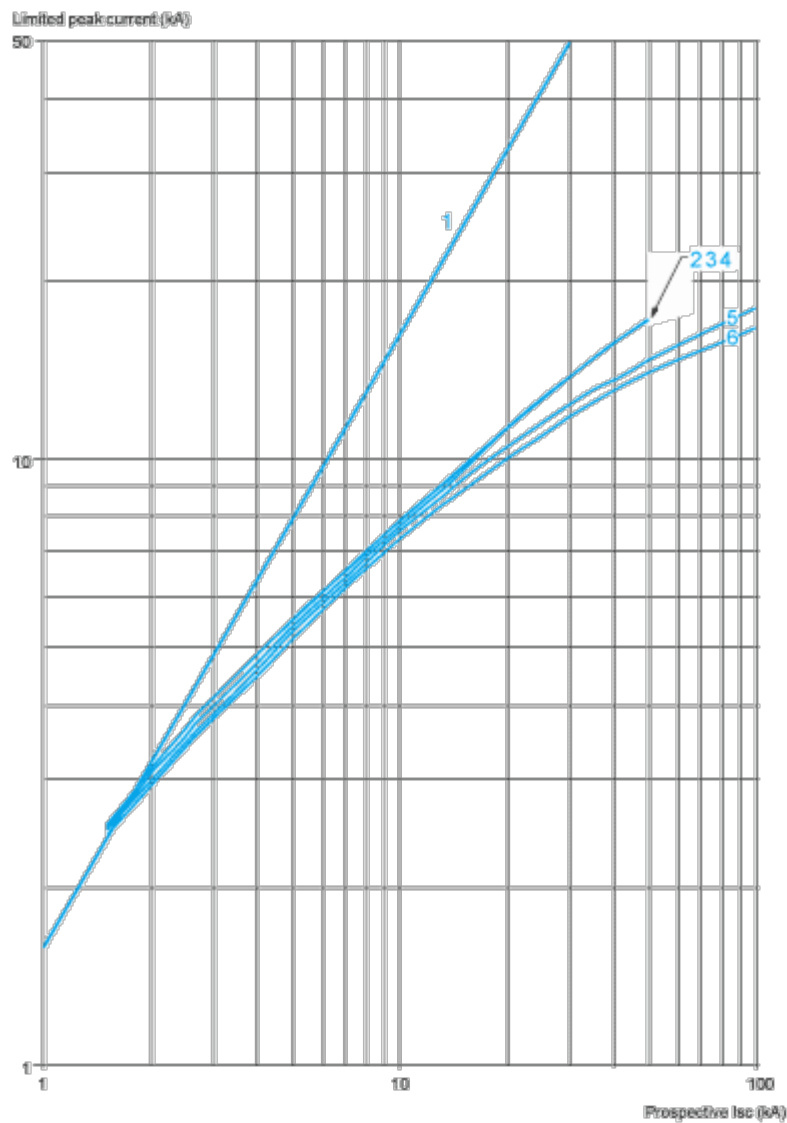
Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33
Average Operating time at 20 °C without Prior Current Flow



- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- A Thermal overload relay protection zone
- B GV3L protection zone

Current Limitation on Short-Circuit for GV3L (3-Phase 400/415 V)

Dynamic Stress
I peak = f (prospective I_{sc}) at 1.05 U_e = 435 V

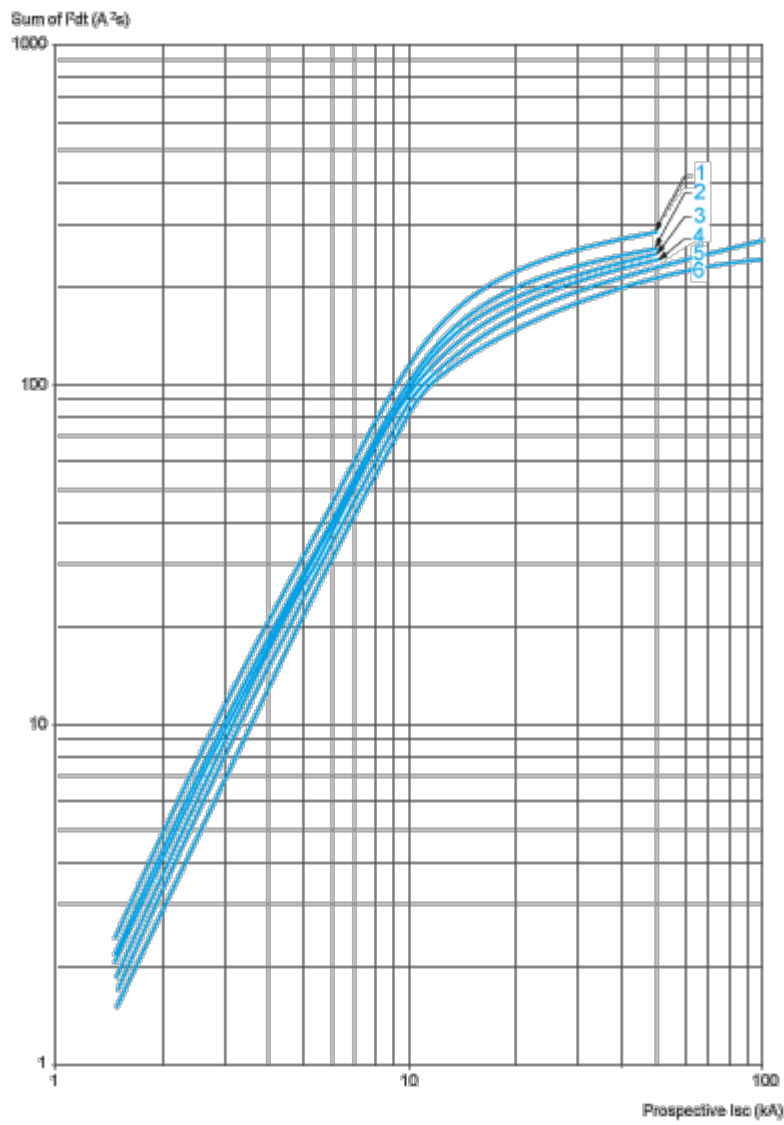


- 1 Maximum peak current
- 2 GV3L80 - GV3L73 - GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

Thermal Limit on Short-Circuit for GV3L

Thermal Limit in A²s

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

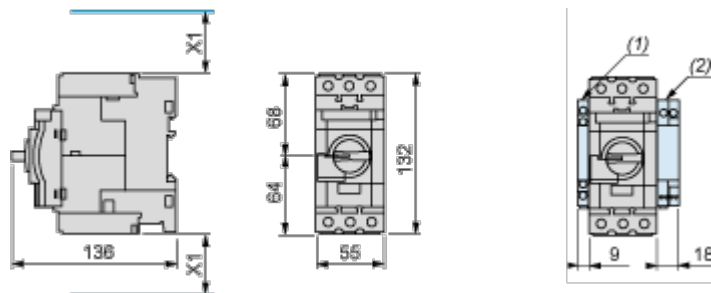


- 1 GV3L73 - GV3L80
- 2 GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

Dimensions Drawings

GV3L, GV3P

Dimensions

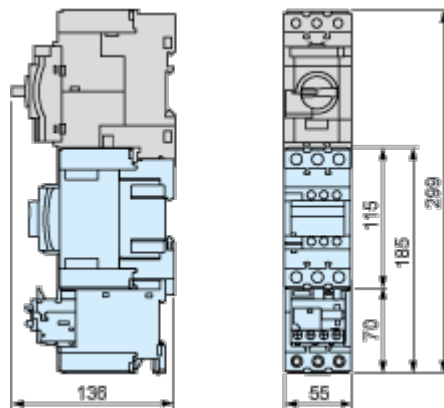


- (1) Blocks GVAN_{..}, GVAD_{..} and GVAM11.
- (2) Blocks GV3AU_{..} and GV3AS_{..}.

X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

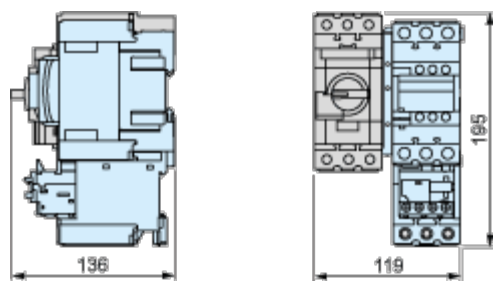
NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

Mounting with Tesys contactor LC1D40A...D80A and relay LR3D313...380 ⁽¹⁾⁽²⁾⁽³⁾



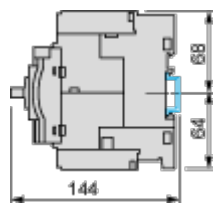
- (1) Mountings with c.b. up to GV3L73, GV3P73.
- (2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
- (3) S-shape busbar system suitable up to 73 A.

Side by side mounting with Tesys contactor LC1D40A...D73A (S-shape busbar system GV3S⁽¹⁾)

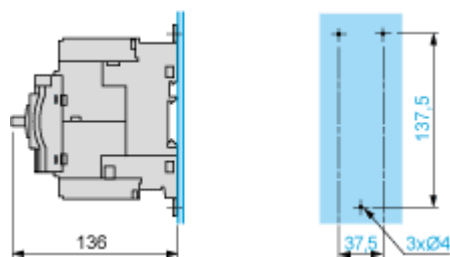


(1) Mountings with c.b. up to GV3L73, GV3P73.

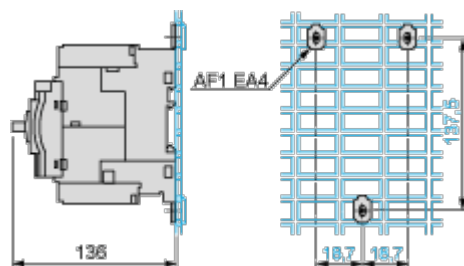
Mounting on Rail AM1 DE200 or AM1 ED201



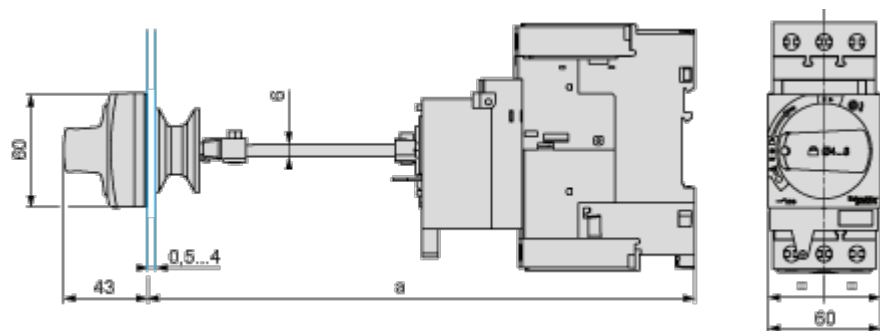
Panel Mounting, using M4 Screws



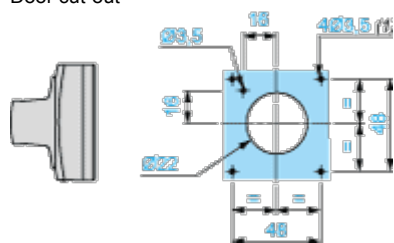
Mounting on Pre-Slotted Plate AM1 PA



Mounting of External Operator GV3APN01, GV3APN02 or GV3APN04 for Motor Circuit Breakers GV3L

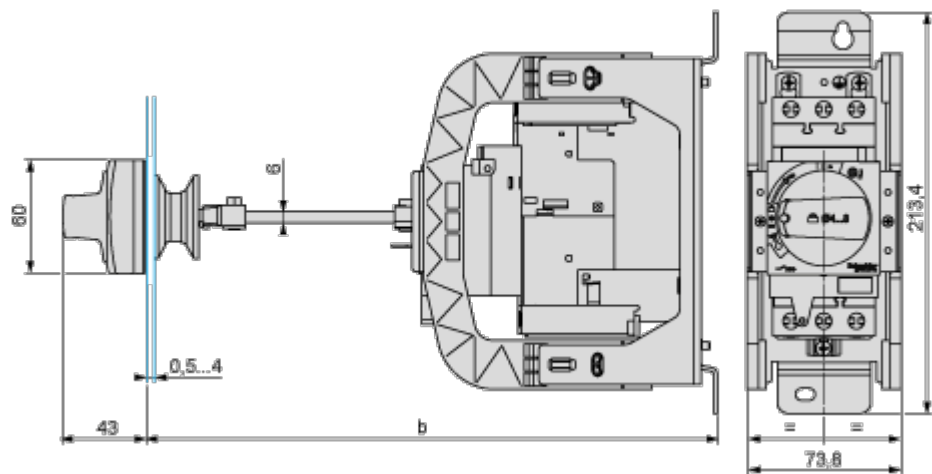


Door cut-out



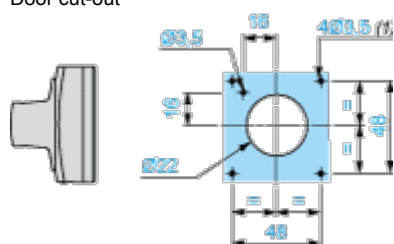
(1) For IP65 only.

Mounting of External Operator GVAPH03 for Motor Circuit Breakers GV3L



| | b | |
|--|---------|---------|
| | Minimum | Maximum |
| GV3APN _{..} + GVAPH03 | 200 | 300 |
| GV3APN _{..} + GVAPH03 + GVAPK12 | 300 | 492 |

Door cut-out



(1) For IP65 only.

Connections and Schema

GV3L••

