# Product datasheet

Specifications

Green Premium™

## Motor circuit breaker, TeSys GV3, 3P, 37-50 A, thermal magnetic, EverLink terminals

Local distributor code:

389530576 GV3P50

**EAN Code: 3389119405409**

## Main

| | |
|---|---|
| **Range** | TeSys Deca |
| **Product Name** | TeSys GV3<br>TeSys Deca |
| **Product Or Component Type** | Motor circuit breaker |
| **Device Short Name** | GV3P |
| **Device Application** | Motor protection |
| **Trip Unit Technology** | Thermal-magnetic |

## Complementary

| | |
|---|---|
| **Poles Description** | 3P |
| **Network Type** | AC |
| **Utilisation Category** | AC-3 conforming to IEC 60947-4-1 |
| **Network Frequency** | 50/60 Hz conforming to IEC 60947-4-1 |
| **Fixing Mode** | 35 mm symmetrical DIN rail: clipped<br>Panel: screwed (with 3 x M4 screws) |
| **Motor Power Kw** | 22 kW at 400/415 V AC 50/60 Hz<br>30 kW at 500 V AC 50/60 Hz<br>45 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>50 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>12 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>6 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<br>100 % at 400/415 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>50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Control Type** | Rotary handle |
| **[In] Rated Current** | 50 A |
| **Thermal Protection Adjustment Range** | 37…50 A conforming to IEC 60947-4-1 |
| **Magnetic Tripping Current** | 700 A |
| **[Ith] Conventional Free Air Thermal Current** | 50 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 |
| **Phase Failure Sensitivity** | Yes conforming to IEC 60947-4-1 |

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

| | |
|---|---|
| **Suitability For Isolation** | Yes conforming to IEC 60947-1 |
| **Power Dissipation Per Pole** | 8 W |
| **Mechanical Durability** | 50000 cycles |
| **Electrical Durability** | 50000 cycles for AC-3 at 415 V In |
| **Rated Duty** | Continuous conforming to IEC 60947-4-1 |
| **Tightening Torque** | 5 N.m - on screw clamp terminal |
| **Width** | 55 mm |
| **Height** | 132 mm |
| **Depth** | 136 mm |
| **Net Weight** | 0.96 kg |
| **Colour** | 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 |
| **Product Certifications** | CCC<br>UL<br>CSA<br>EAC<br>ATEX<br>LROS (Lloyds register of shipping)<br>BV<br>ABS<br>DNV-GL<br>UKCA |
| **Ik Degree Of Protection** | IK09 enclosure |
| **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: 15 Gn for 11 ms contactor open<br>Shocks: 30 Gn for 11 ms contactor closed<br>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** | 16.000 cm |
| **Package 1 Width** | 6.500 cm |
| **Package 1 Length** | 14.500 cm |
| **Package 1 Weight** | 1.008 kg |
| **Unit Type Of Package 2** | P06 |
| **Number Of Units In Package 2** | 120 |
| **Package 2 Height** | 75.000 cm |

| | |
|---|---|
| **Package 2 Width** | 60.000 cm |
| **Package 2 Length** | 80.000 cm |
| **Package 2 Weight** | 136.960 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-$CO_2$ 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

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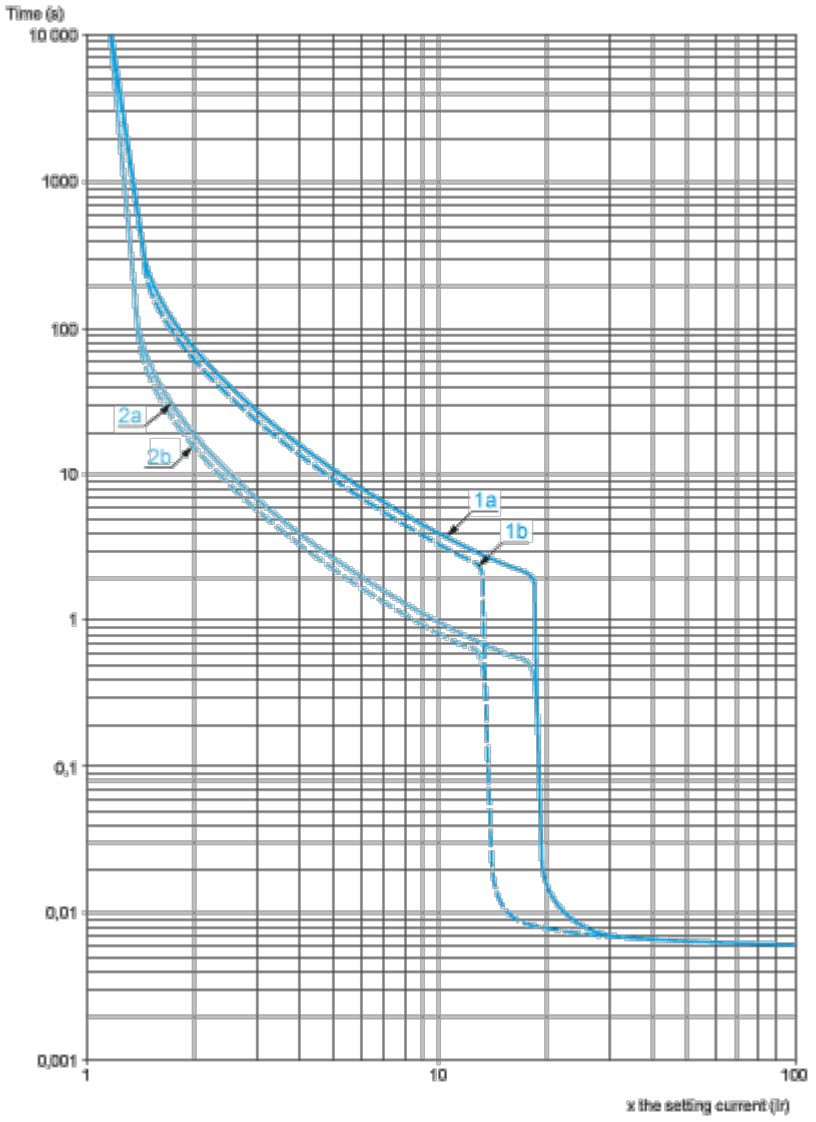
|---|---|
| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Compliant with Exemptions |
| **China Rohs Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information |
| **Environmental Disclosure** | Product Environmental Profile |
| **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

### Thermal-Magnetic Tripping Curves

**Average Operating Times at 20 °C Related to Multiples of the Setting Current**

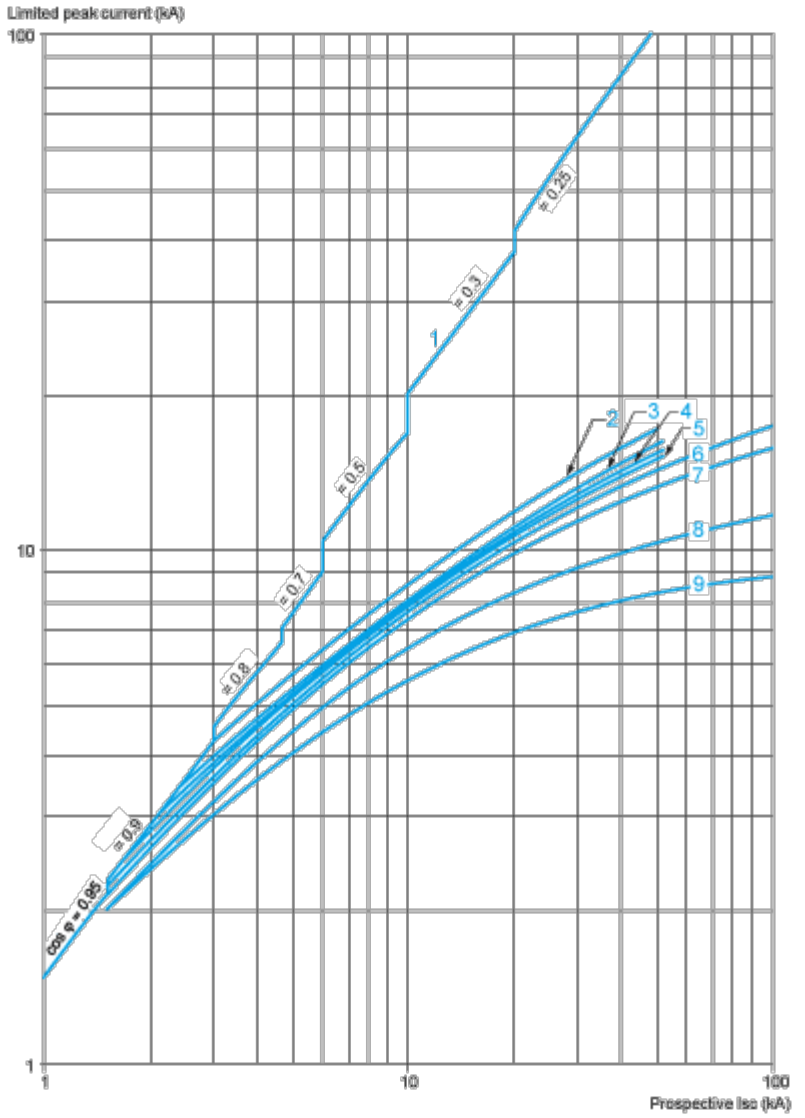



| | |
|---|---|
| 1a | 3 poles from cold state (Ir minimum): GV3P |
| 1b | 3 poles from cold state (Ir maximum): GV3P |
| 2a | 3 poles from hot state (Ir minimum): GV3P |
| 2b | 3 poles from hot state (Ir maximum): GV3P |

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

**Dynamic Stress**

I peak = f (prospective Isc) at 1.05 Ue = 435 V




1 Maximum peak current

2 70-80 A (GV3P80), 62-73 A (GV3P73)

3 48-65 A (GV3P65)

4 37-50 A (GV3P50)

5 30-40 A (GV3P40)

6 23-32 A (GV3P32)

7 17-25 A (GV3P25)

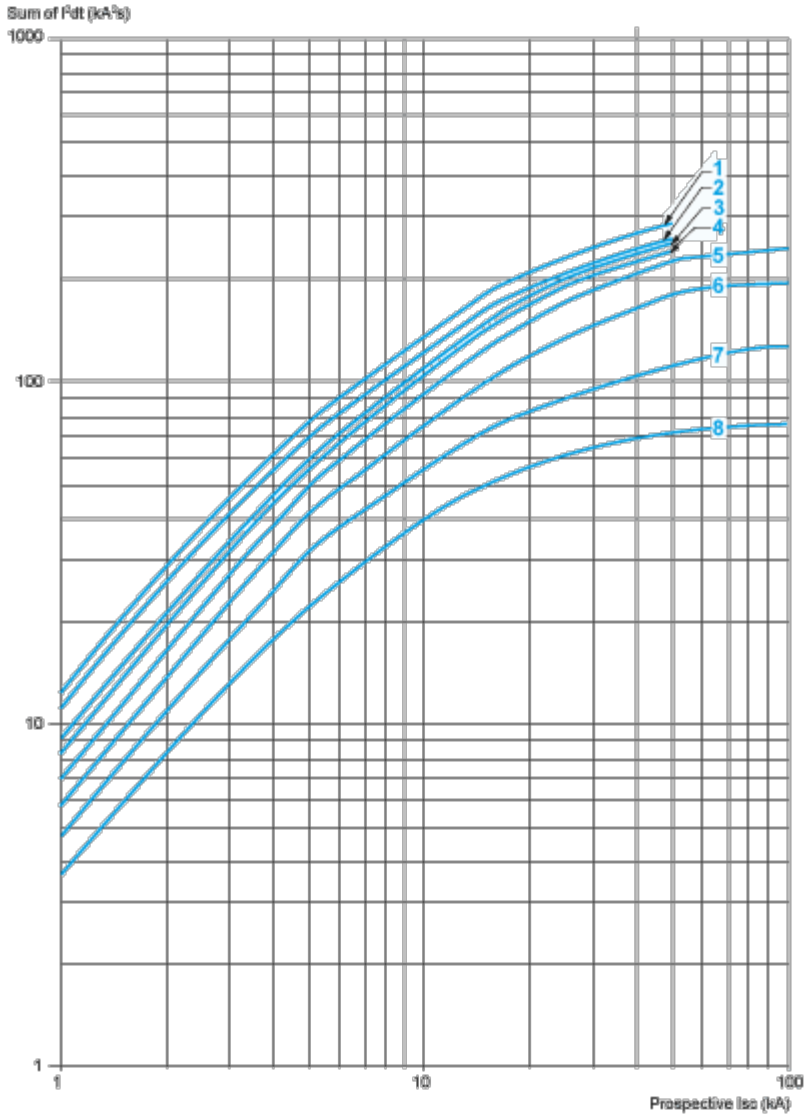
8 12-18 A (GV3P18)

9 9-13 A (GV3P13)

## Maximum Thermal Limit on Short-Circuit

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

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




1 70-80 (GV3P80) - 62-73 (GV3P73)

2 48-65 A (GV3P65)

3 37-50 A (GV3P50)

4 30-40 A (GV3P40)

5 23-32 A (GV3P32)

6 17-25 A (GV3P25)

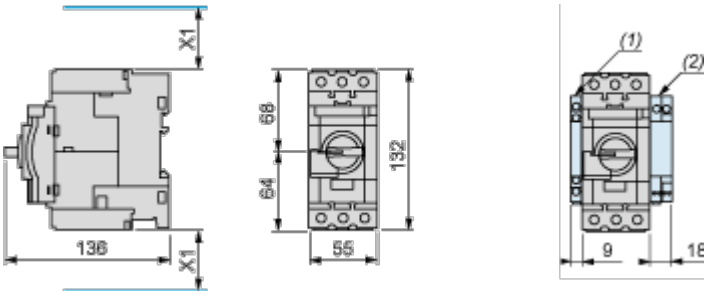
7 12-18 A (GV3P18)

8 9-13 A (GV3P13)

## Dimensions Drawings

### GVI3L, GV3P

**Dimensions**



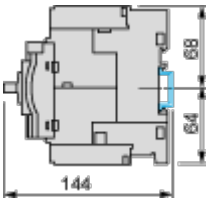

(1) Blocks GVAN••, GVAD•• and GVAM11.

(2) Blocks GV3AU•• and GV3AS••.

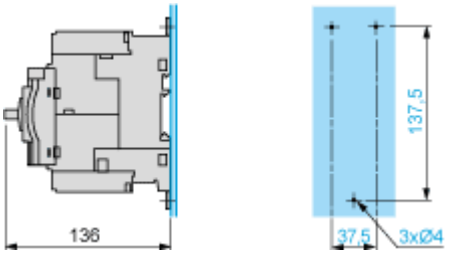
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

**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.

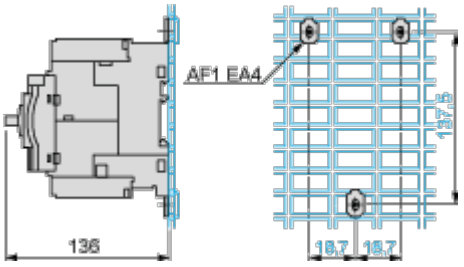
**Mounting on Rail AM1 DE200 or AM1 ED201**

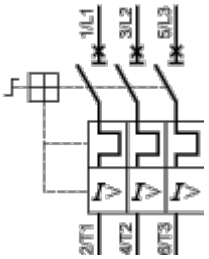



**Panel Mounting, using M4 Screws**




**Mounting on Pre-Slotted Plate AM1 PA**



## Connections and Schema

**GV3P••**