

Product datasheet

Specifications



Motor circuit breaker, TeSys Deca, 3P, 12-18 A, thermal magnetic, upstream EverLink terminals

GV3P181

⚠ Discontinued on: 23 Jan 2021

⚠ Discontinued

Main

| | |
|---------------------------|-----------------------|
| Range | TeSys Deca |
| Product name | TeSys GV3 |
| 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 | Category A conforming to IEC 60947-2 AC-3 conforming to IEC 60947-4-1 |
| Network frequency | 50/60 Hz conforming to IEC 60947-2 |
| Motor power kW | 7.5 kW at 400/415 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 15 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 50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 12 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 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 60947-2 100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Control type | Rotary handle |
| [In] rated current | 18 A |
| Thermal protection adjustment range | 12...18 A conforming to IEC 60947-2 |
| Magnetic tripping current | 252 A |
| [Ith] conventional free air thermal current | 18 A conforming to IEC 60947-2 |
| [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 |

Excluding VAT, FCA Jabal Ali & amp; are subject to change – check with your local distributor.

| | |
|-----------------------------------|--|
| 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 | Uninterrupted conforming to IEC 60947-4-1 |
| Tightening torque | 5 N.m - on screw clamp terminal |
| Fixing mode | 35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws) |
| Mounting position | Horizontal Vertical |
| Width | 55 mm |
| Height | 132 mm |
| Depth | 136 mm |
| Net weight | 0.96 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 60335-1:Clause 30.2 IEC/EN 60335-2-40:Annex JJ |
| Product certifications | CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV ABS DNV-GL 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 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 | 16 cm |
| Package 1 Width | 6.5 cm |
| Package 1 Length | 14.5 cm |

| | |
|------------------|-------|
| Package 1 Weight | 940 g |
|------------------|-------|

Contractual warranty

| | |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



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 >](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label

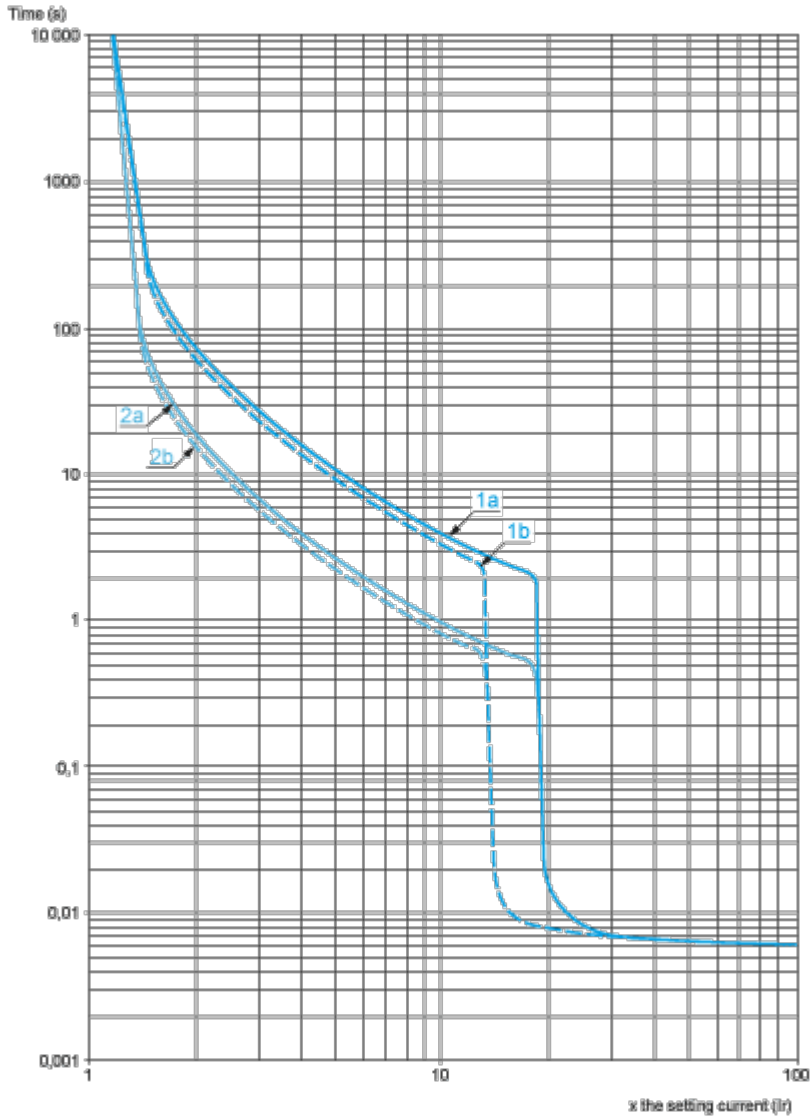


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Performance Curves

Thermal-Magnetic Tripping Curves

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

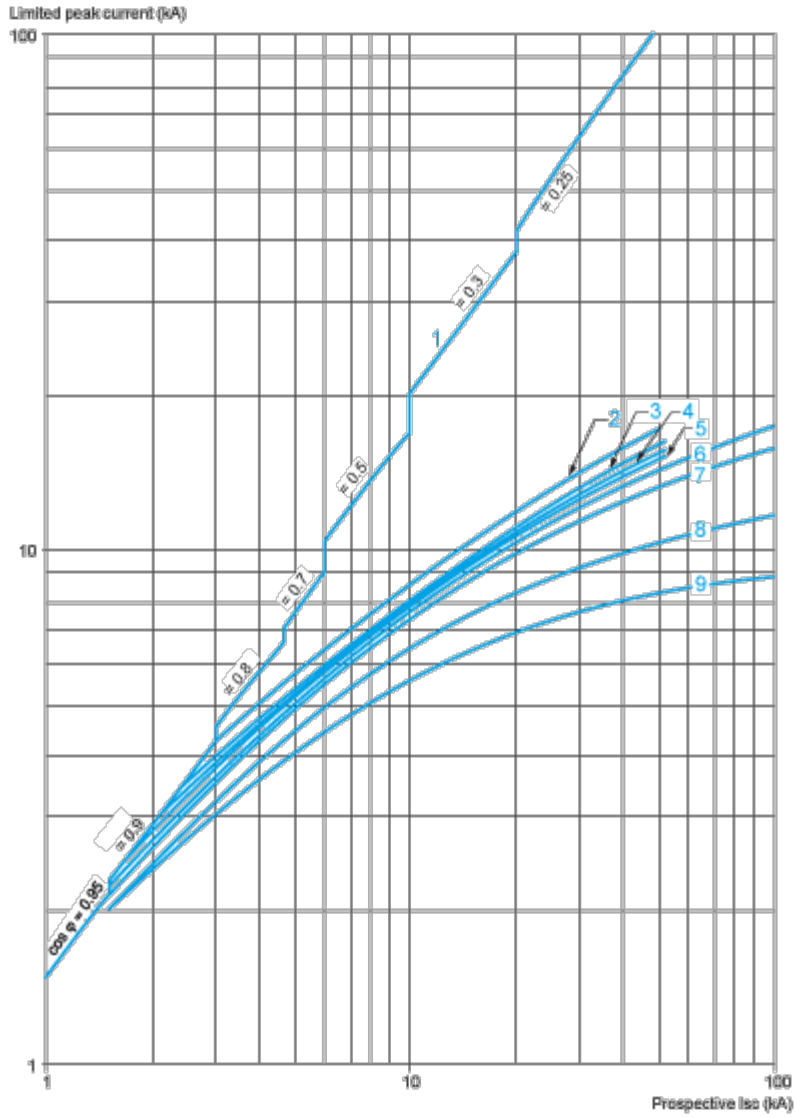


- 1a 3 poles from cold state (I_r minimum): GV3P
- 1b 3 poles from cold state (I_r maximum): GV3P
- 2a 3 poles from hot state (I_r minimum): GV3P
- 2b 3 poles from hot state (I_r maximum): GV3P

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

Dynamic Stress

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

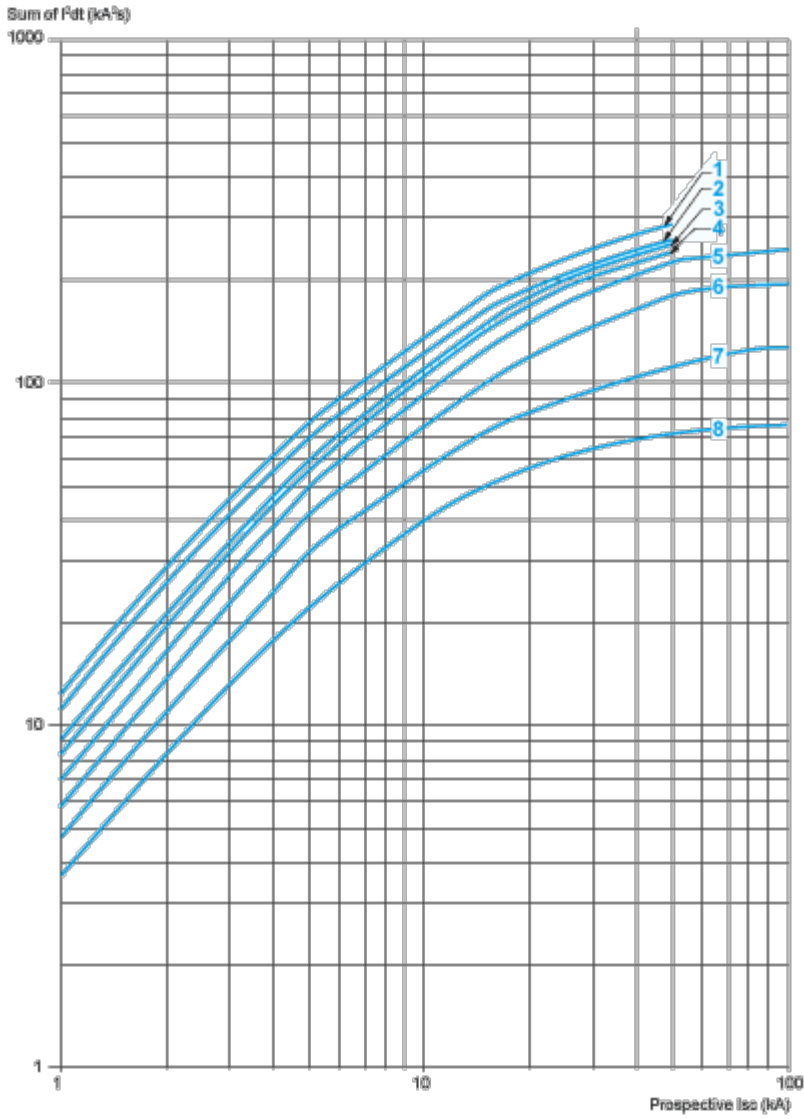


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

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

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

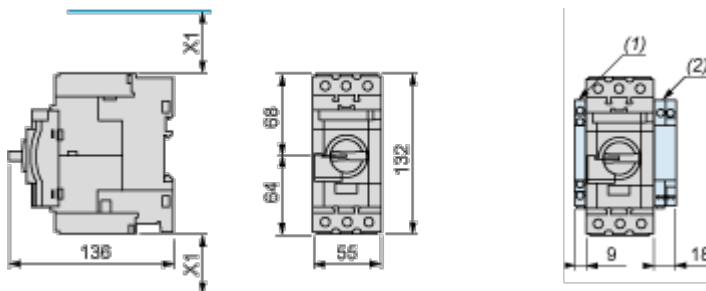


- 1 70-80 (GV3P80) - 62-73 (GV3P73)
- 2 48-65 A (GV3P65)
- 3 37-50 A (GV3P50)
- 4 30-40 A (GV3P40)
- 5 23-32 A (GV3P32)
- 6 17-25 A (GV3P25)
- 7 12-18 A (GV3P18)
- 8 9-13 A (GV3P13)

Dimensions Drawings

GVI3L, GV3P

Dimensions



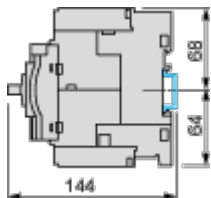
(1) Blocks GVAN_{●●}, GVAD_{●●} and GVAM11.

(2) Blocks GV3AU_{●●} and GV3AS_{●●}.

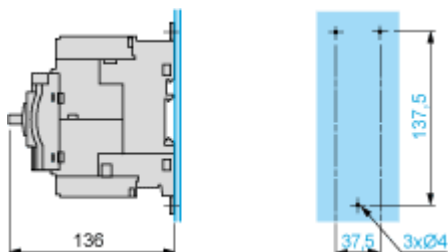
X1 = Electrical clearance (ISC max) 40 mm for U_e ≤ 500 V, 50 mm for U_e ≤ 690 V

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.

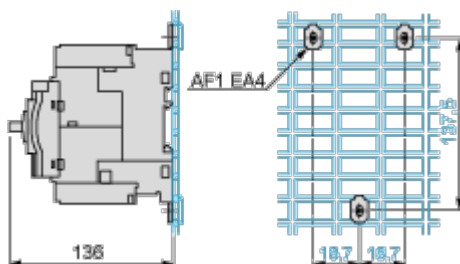
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws



Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••

