

Product datasheet

Specifications



Motor circuit breaker, TeSys GV2, 3P, 17-23 A, thermal magnetic, screw clamp terminals

GV2ME21

Main

| | |
|---------------------------|-------------------------|
| Range | TeSys Deca |
| Product Name | TeSys GV2 TeSys Deca |
| Product Or Component Type | Motor circuit breaker |
| Device Short Name | GV2ME |
| 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 AC-3e 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 Panel: screwed (with adaptor plate) |
| Motor Power Kw | 9 kW at 400/415 V AC 50/60 Hz 11 kW at 500 V AC 50/60 Hz 18.5 kW at 690 V AC 50/60 Hz |
| Breaking Capacity | 50 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 15 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 6 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 4 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 3 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 40 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Control Type | Push-button |
| [In] Rated Current | 23 A |
| Thermal Protection Adjustment Range | 17...23 A conforming to IEC 60947-4-1 |
| Magnetic Tripping Current | 327 A |
| [Ith] Conventional Free Air Thermal Current | 23 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 |
| Suitability For Isolation | Yes conforming to IEC 60947-1 § 7-1-6 |
| Power Dissipation Per Pole | 2.5 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 |
| Width | 45 mm |
| Height | 89 mm |
| Depth | 78.5 mm |
| Net Weight | 0.26 kg |
| Colour | Dark grey |

Environment

| | |
|--|---|
| Standards | EN/IEC 60947-2 EN/IEC 60947-4-1 |
| Product Certifications | CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL UKCA |
| 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 | 4.800 cm |
| Package 1 Length | 8.500 cm |
| Package 1 Weight | 287.000 g |
| Unit Type Of Package 2 | S02 |
| Number Of Units In Package 2 | 24 |
| Package 2 Height | 15.000 cm |

| | |
|------------------------------|------------|
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 7.228 kg |
| Unit Type Of Package 3 | P06 |
| Number Of Units In Package 3 | 384 |
| Package 3 Height | 75.000 cm |
| Package 3 Width | 60.000 cm |
| Package 3 Length | 80.000 cm |
| Package 3 Weight | 125.988 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

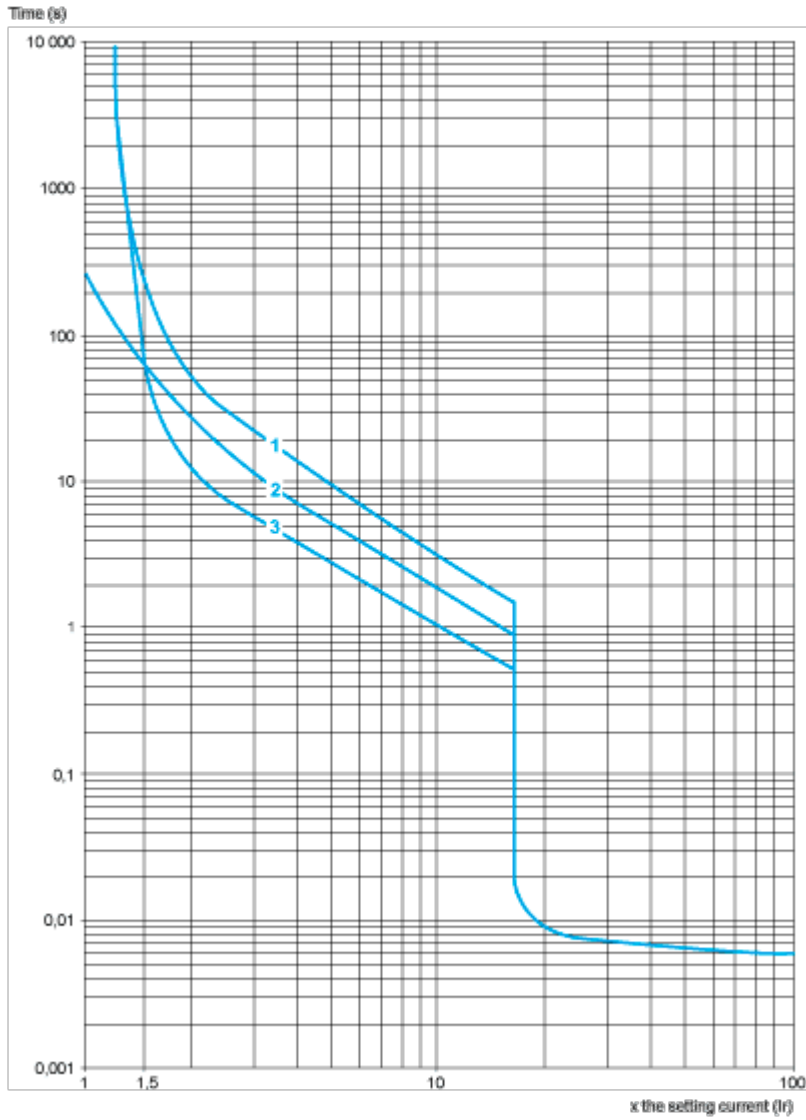
Environmental Disclosure [Product Environmental Profile](#)

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

Thermal-Magnetic Tripping Curves for GV2ME and GV2P
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 GV2ME and GV2P (3-Phase 400/415 V)

Dynamic Stress

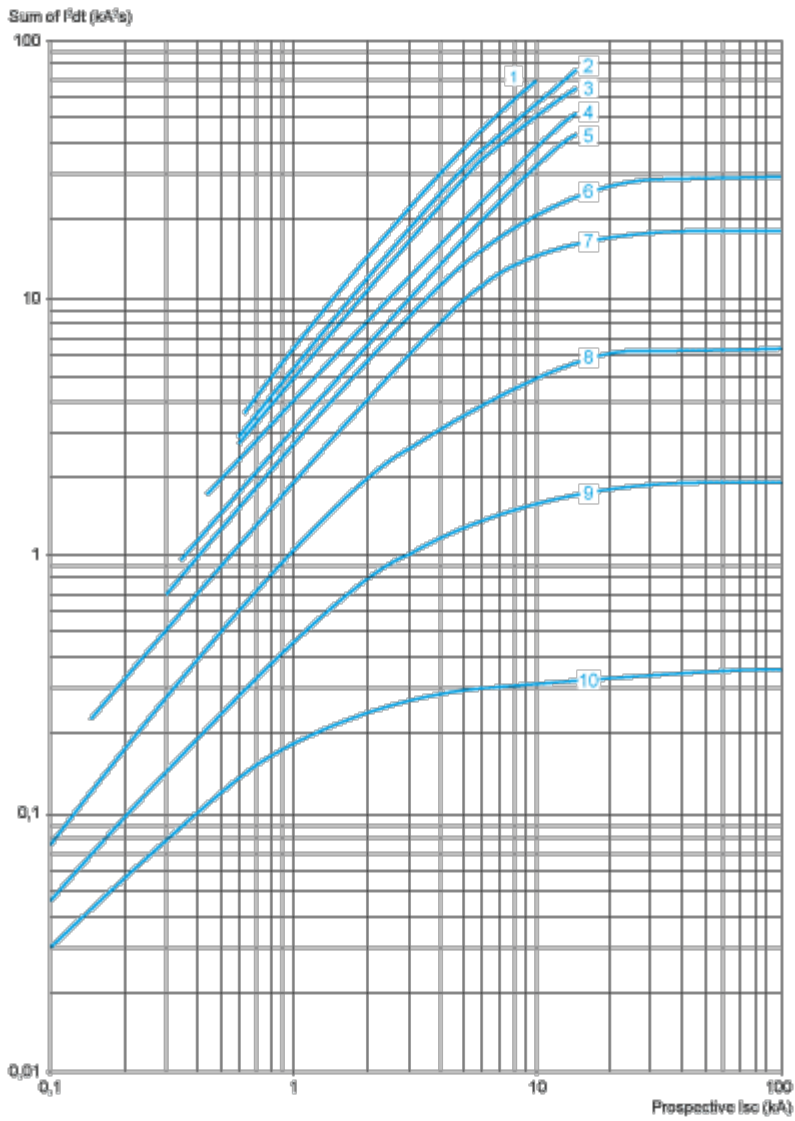
$I_{peak} = f(\text{prospective } I_{sc}) \text{ at } 1.05 U_e = 435 \text{ V}$



- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2ME
Thermal Limit in kA²s in the Magnetic Operating Zone

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

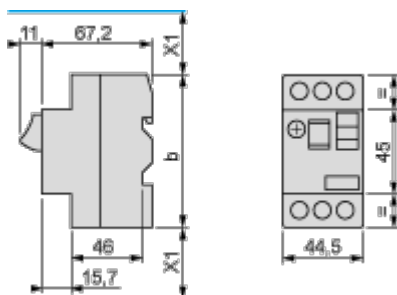


- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

Dimensions Drawings

Dimension

GV2ME



(1) Maximum

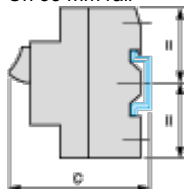
X1 Electrical clearance = 40 mm for $U_e \leq 690$ V

| | b |
|--------------------------|-----|
| GV2ME $\bullet\bullet$ | 89 |
| GV2ME $\bullet\bullet$ 3 | 101 |

Mounting

GV2ME

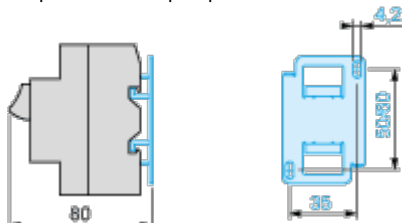
On 35 mm rail



c = 78.5 on AM1 DP200 (35 x 7.5)

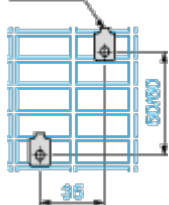
c = 86 on AM1 DE200, ED200 (35 x 15)

On panel with adapter plate GV2AF02

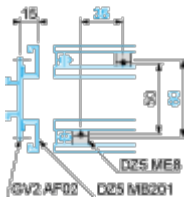


On pre-slotted plate AM1 PA

AF1 EA4

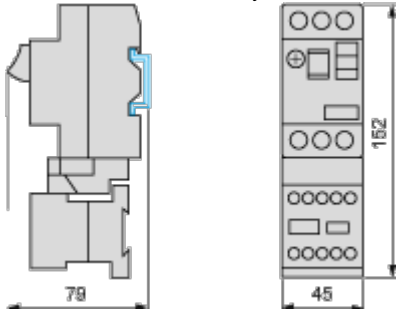


On rails DZ5 MB201



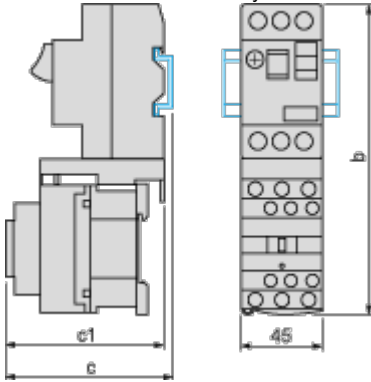
GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

Combination GV2ME + TeSys d contactor



| GV2ME + | LC1D09...D18 | LC1D25 and D32 |
|---------|--------------|----------------|
| b | 176.4 | 186.8 |
| c1 | 94.1 | 100.4 |
| c | 99.6 | 105.9 |

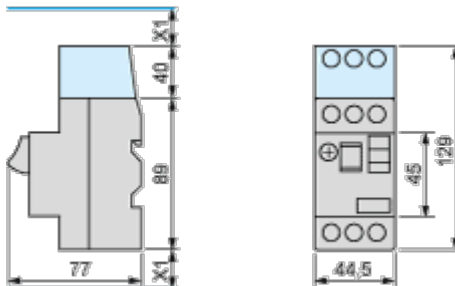
GV2AF4 + LAD311

Combination GV2ME + TeSys d contactor



| GV2ME + | LC1D09...D18 | LC1D25 and D32 |
|---------|--------------|----------------|
| b | 176.4 | 186.8 |
| c1 | 103.1 | 136.4 |
| c | 135.6 | 141.9 |
| d1 | 107 | 107 |
| d | 112.5 | 112.5 |

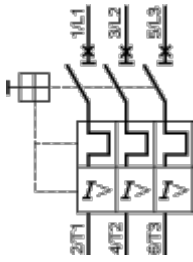
GV2ME + GV1L3 (Current Limiter)



X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue ≤ 690 V

Connections and Schema

GV2ME•• and GV2RT



Connection of Undervoltage Trip for Dangerous Machines (Conforming to INRS) on GV2ME Only

