Specifications





# TeSys GV2-Circuit breakerthermal-magnetic - 1.6...2.5 A screw clamp terminals

GV2ME07

## Main

| Range                     | TeSys Deca              |
|---------------------------|-------------------------|
| Product Name              | TeSys GV2<br>TeSys Deca |
| Product Or Component Type | Motor circuit breaker   |
| Device Short Name         | GV2ME                   |
| Device Application        | Motor protection        |
| Trip Unit Technology      | Thermal-magnetic        |

## Complementary

| j  |   |  |
|--|---|--|
| Poles Description                                      | 3P  |  |
| Network Type   | AC  |  |
| Utilisation Category                                   | Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1<br>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<br>Panel: screwed (with adaptor plate)  |  |
| Motor Power Kw   | 0.75 kW at 400/415 V AC 50/60 Hz<br>1.1 kW at 500 V AC 50/60 Hz<br>1.5 kW at 690 V AC 50/60 Hz  |  |
| Breaking Capacity                                      | 100 kA lcu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA lcu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA lcu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA lcu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>3 kA lcu at 690 V AC 50/60 Hz conforming to IEC 60947-2 |  |
| [Ics] Rated Service Short-Circuit<br>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>100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>75 % at 690 V AC 50/60 Hz conforming to IEC 60947-2                         |  |
| Control Type   | Push-button   |  |
| [In] Rated Current                                     | 2.5 A   |  |
| Thermal Protection Adjustment<br>Range                 | 1.62.5 A conforming to IEC 60947-4-1  |  |
| Magnetic Tripping Current                              | 33.5 A  |  |
| [Ith] Conventional Free Air<br>Thermal Current         | 2.5 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<br>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<br>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<br>Storage   | -4080 °C                            |
| Fire Resistance                          | 960 °C conforming to IEC 60695-2-11 |
| Ambient Air Temperature For<br>Operation | -2060 °C                            |
| Mechanical Robustness                    | Shocks: 30 Gn for 11 ms             |
|  | Vibrations: 5 Gn, 5150 Hz           |
| Operating Altitude                       | 2000 m                              |
|  |                                     |

# **Packing Units**

| Unit Type Of Package 1       | PCE       |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1         |
| Package 1 Height             | 4.500 cm  |
| Package 1 Width              | 8.500 cm  |
| Package 1 Length             | 9.500 cm  |
| Package 1 Weight             | 257.000 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             | 6.447 kg   |
| Unit Type Of Package 3       | P12        |
| Number Of Units In Package 3 | 768        |
| Package 3 Height             | 90.000 cm  |
| Package 3 Width              | 80.000 cm  |
| Package 3 Length             | 120.000 cm |
| Package 3 Weight             | 218.304 kg |

## **Contractual warranty**

Warranty

12 months

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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

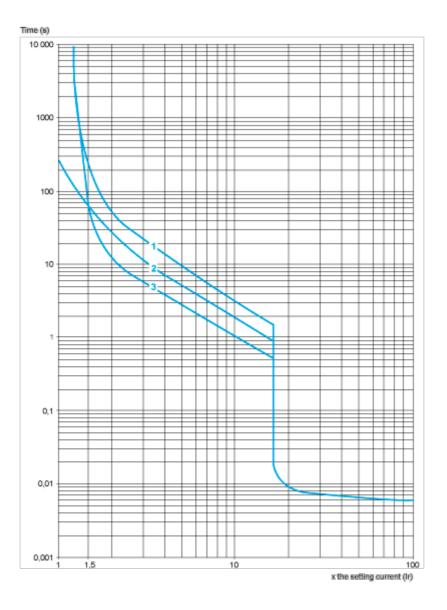
## **Certifications & Standards**

| Reach Regulation         | REACh Declaration   |  |
|--------------------------|---|--|
| Eu Rohs Directive        | Compliant with Exemptions   |  |
| China Rohs Regulation    | China RoHS declaration<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 for GV2ME and GV2P

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

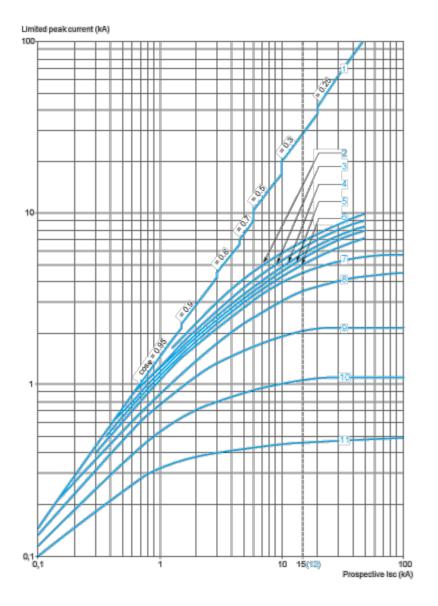


1 3 poles from cold state

- 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 (prospective lsc) at 1.05 Ue = 435 V

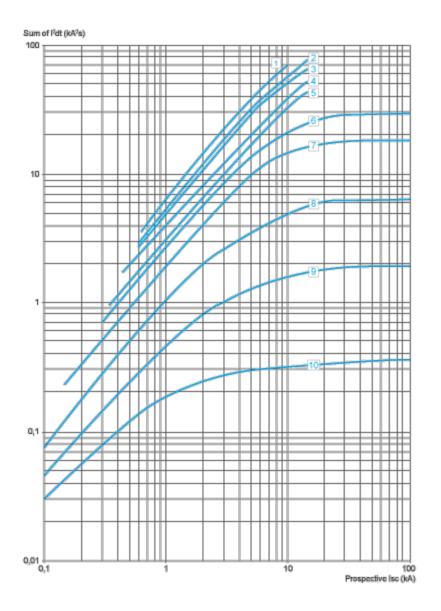


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2ME

### Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone

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

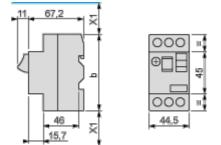


- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

**Dimensions Drawings** 

#### Dimension GV2ME





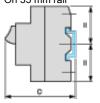
(1) Maximum

X1 Electrical clearance = 40 mm for Ue ≤ 690 V

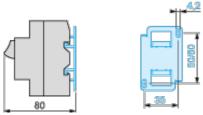
|                       | b   |
|-----------------------|-----|
| GV2ME                 | 89  |
| GV2ME <sub>●●</sub> 3 | 101 |

#### Mounting GV2ME

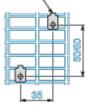
On 35 mm rail



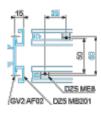
c = 78.5 on AM1 DP200 (35 x 7.5) c = 86 on AM1 DE200, ED200 (35 x 15) On panel with adapter plate GV2AF02



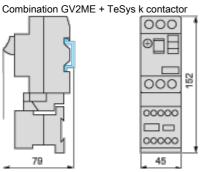
On pre-slotted plate AM1 PA <u>AF1 EA4</u>



On rails DZ5 MB201

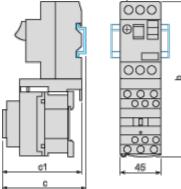


#### GV2AF01



#### GV2AF3

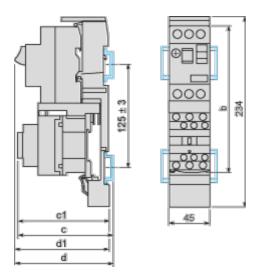
Combination GV2ME + TeSys d contactor



| GV2ME + | LC1D09D18 | LC1D25 and D32 |
|---------|-----------|----------------|
| b       | 176.4     | 186.8          |
| c1      | 94.1      | 100.4          |
| с       | 99.6      | 105.9          |

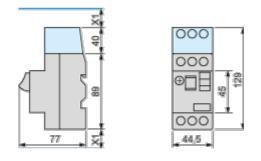
#### GV2AF4 + LAD311

Combination GV2ME + TeSys d contactor



| GV2ME + | LC1D09D18 | LC1D25 and D32 |
|---------|-----------|----------------|
| b       | 176.4     | 186.8          |
| c1      | 103.1     | 136.4          |
| с       | 135.6     | 141.9          |
| d1      | 107       | 107            |
| d       | 112.5     | 112.5          |

GV2ME + GV1L3 (Current Limiter)

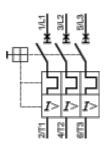


X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue  $\leq$  690 V

GV2ME07

## Connections and Schema

GV2ME •• and GV2RT



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

