

# GV2ME03

Motor circuit breaker, TeSys  
Deca, 3P, 0.25-0.4A, thermal magnetic, screw  
clamp terminals, button control



## Main

|                           |                          |
|---------------------------|--------------------------|
| Range of product          | TeSys GV2                |
| Range                     | TeSys Deca<br>TeSys Deca |
| Device short name         | GV2ME                    |
| Product name              | TeSys GV2<br>TeSys Deca  |
| Product or component type | Motor circuit breaker    |
| 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<br>Category A conforming to IEC 60947-2  |
| 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)  |
| Operating position                                  | Any position  |
| Motor power kW                                      | 0.09 kW at 400/415 V AC 50/60 Hz  |
| Breaking capacity                                   | 100 KA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 KA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>100 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 690 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>100 % at 230/240 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 400/415 V AC 50/60 Hz conforming to IEC 60947-2                          |
| Control type  | Push-button   |
| [In] rated current                                  | 0.4 A   |
| Thermal protection adjustment range                 | 0.25...0.4 A  |
| Magnetic tripping current                           | 5 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   |
| [Ith] conventional free air thermal current         | 0.4 A conforming to IEC 60947-4-1   |
| [Uimp] rated impulse withstand voltage              | 6 kV conforming to IEC 60947-2  |
| Power dissipation per pole                          | 2.5 W   |
| Mechanical durability                               | 100000 cycles   |
| Electrical durability                               | 100000 Cycles for AC-3 at 415 V<br>At 415 V   |
| Maximum operating rate                              | 25 cyc/h  |
| Rated duty  | Continuous conforming to IEC 60947-4-1  |
| Tightening torque                                   | 1.7 N.m on screw clamp terminals  |
| Mechanical robustness                               | Shocks: 30 Gn conforming to IEC 60068-2-27<br>Vibrations: 5 Gn, 5...150 Hz conforming to IEC 60068-2-6  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                           |                                       |
|---------------------------|---------------------------------------|
| Phase failure sensitivity | Yes conforming to IEC 60947-4-1       |
| Height                    | 89 mm                                 |
| Width                     | 45 mm                                 |
| Depth                     | 78.5 mm                               |
| Net weight                | 0.26 kg                               |
| Colour                    | Dark grey                             |
| Suitability for isolation | Yes conforming to IEC 60947-1 § 7-1-6 |




## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1  |
| Product certifications                | CCC<br>UL<br>CSA<br>EAC<br>ATEX<br>BV<br>LROS (Lloyds register of shipping)<br>UKCA<br>DNV-GL<br>RINA |
| Climatic withstand                    | Conforming to IACS E10  |
| IK degree of protection               | IK04  |
| IP degree of protection               | IP20 conforming to IEC 60529  |
| Ambient air temperature for storage   | -40...80 °C   |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-11   |
| Operating altitude                    | 2000 m  |
| Ambient air temperature for operation | -20...60 °C   |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Package 1 Length             | 8.5 cm   |
| Number of Units in Package 1 | 1        |
| Package 3 Width              | 60 cm    |
| Package 3 Weight             | 104.1 kg |
| Package 2 Width              | 30 cm    |
| Package 2 Height             | 15 cm    |
| Package 2 Weight             | 5.746 kg |
| Number of Units in Package 3 | 384      |
| Unit Type of Package 3       | P06      |
| Package 3 Height             | 75 cm    |
| Package 3 Length             | 80 cm    |
| Package 1 Width              | 4.8 cm   |
| Package 1 Height             | 9.3 cm   |
| Package 1 Weight             | 226 g    |
| Number of Units in Package 2 | 24       |
| Unit Type of Package 2       | S02      |
| Package 2 Length             | 40 cm    |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Compliant  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes   |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |

|                           |   |
|---------------------------|---|
| Environmental Disclosure  | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile       | <a href="#">End Of Life Information</a>   |
| WEEE                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

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

Thermal-Magnetic Tripping Curves for GV2ME and GV2P

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

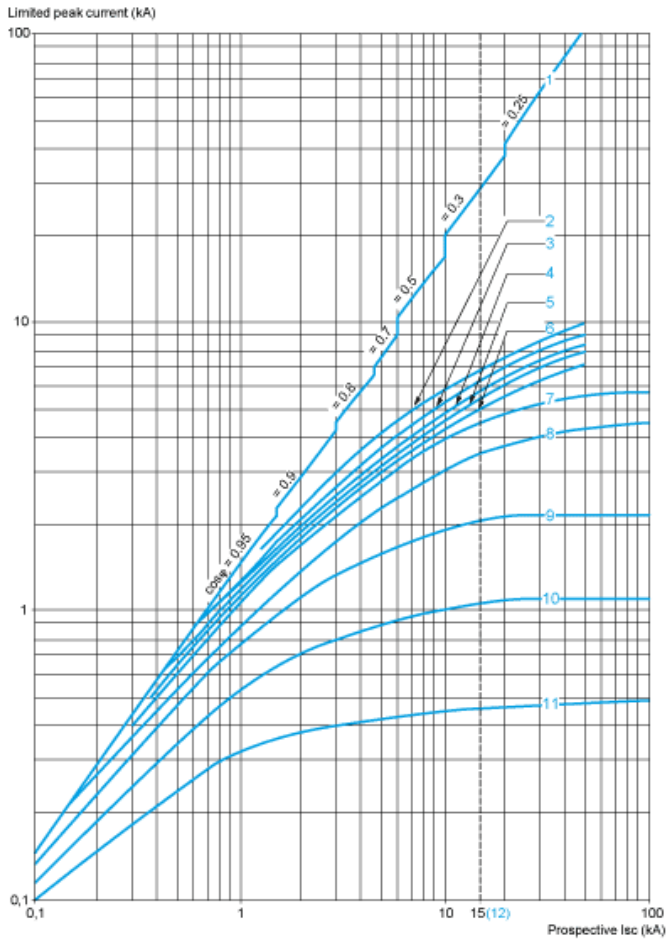


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

Current Limitation on Short-Circuit for GV2ME and GV2P (3-Phase 400/415 V))

Dynamic Stress

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

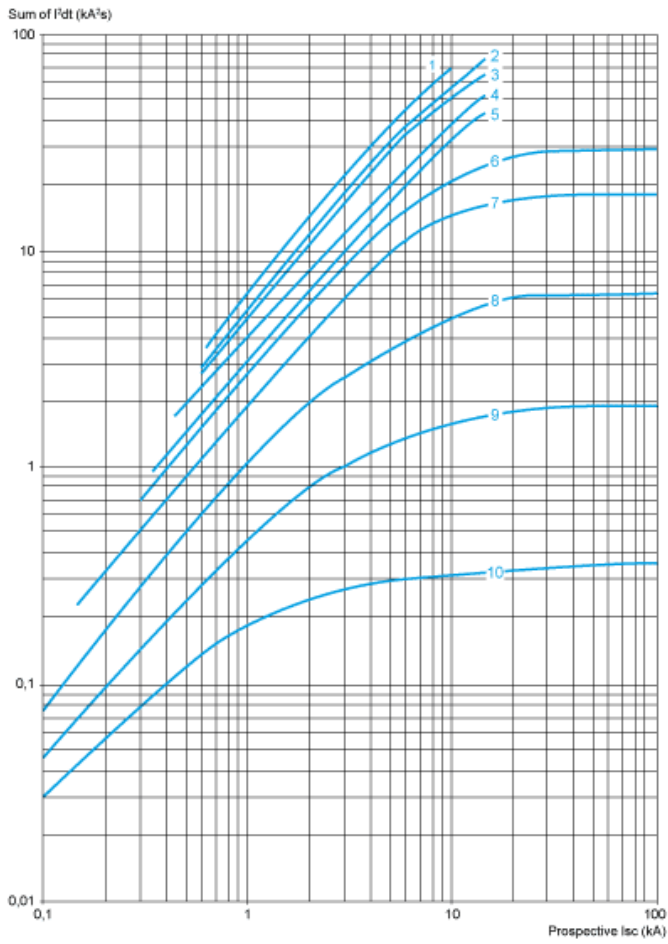


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2ME

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

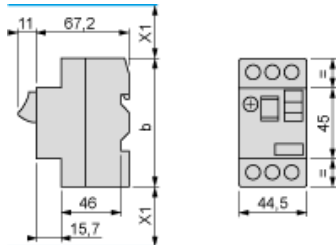
Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 V$



- 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

Dimension

GV2ME



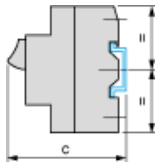
- (1) Maximum  
X1 Electrical clearance = 40 mm for  $U_e \leq 690$  V

|          | b   |
|----------|-----|
| GV2ME..  | 89  |
| GV2ME..3 | 101 |

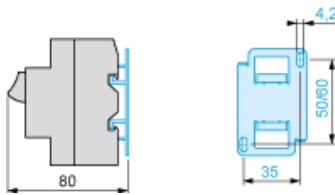
Mounting

GV2ME

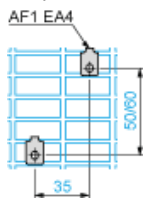
On 35 mm rail



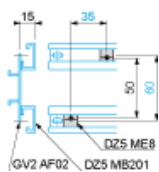
- $c = 78.5$  on AM1 DP200 (35 x 7.5)  
 $c = 86$  on AM1 DE200, ED200 (35 x 15)  
 On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

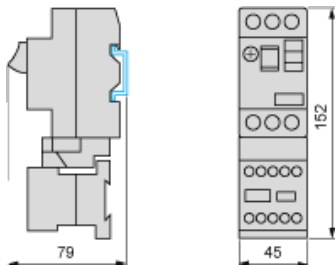


On rails DZ5 MB201



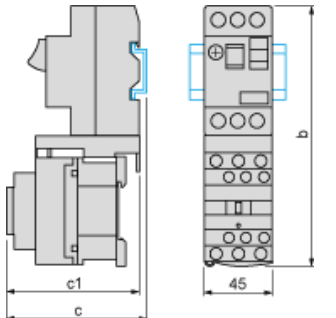
GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

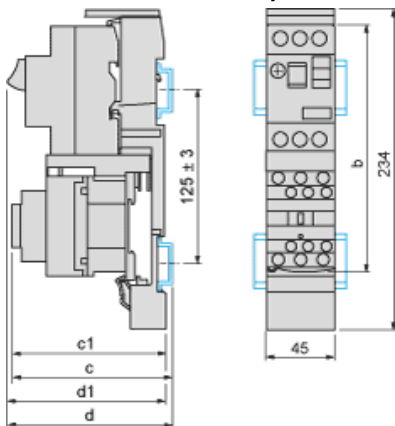
Combination GV2ME + TeSys d contactor



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

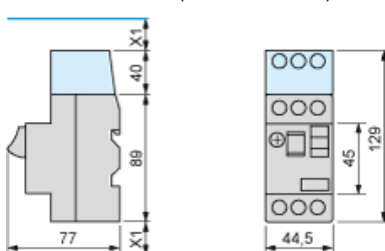
GV2AF4 + LAD311

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          |

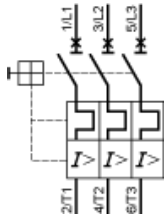
GV2ME + GV1L3 (Current Limiter)



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



GV2ME•• and GV2RT



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

