



## Main

|                      |                  |
|----------------------|------------------|
| Range                | TeSys            |
| Product name         | TeSys GV2        |
| Device short name    | GV2ME            |
| Device application   | Motor            |
| 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                                      | 0.25 kW at 400/415 V AC 50/60 Hz<br>0.37 kW at 400/415 V AC 50/60 Hz<br>0.37 kW at 500 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                                  | 1 A   |
| Trip unit rating                                    | 0.63...1 A  |
| Magnetic tripping current                           | 13 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         | 1 A conforming to IEC 60947-4-1   |
| [Uimp] rated impulse withstand voltage              | 6 KV IEC 60947-2  |
| Power dissipation per pole                          | 2.5 W   |
| Mechanical durability                               | 100000 Cycles   |
| Electrical durability                               | 100000 Cycles for AC-3 at 440 V   |

|                           |   |
|---------------------------|---|
| Maximum operating rate    | 25 Cyc/H  |
| Rated duty                | Continuous conforming to IEC 60947-4-1  |
| Connections - terminals   | Screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> solid<br>Screw clamp terminals 2 cable(s) 1.5...6 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible with cable end |
| Tightening torque         | 1.7 N.M on screw clamp terminals  |
| Suitability for isolation | Yes conforming to IEC 60947-1   |
| Phase failure sensitivity | Yes conforming to IEC 60947-4-1   |
| Height                    | 89 Mm   |
| Width                     | 45 Mm   |
| Depth                     | 78.5 Mm   |
| Net weight                | 0.28 Kg   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>CSA C22.2 No 60947-4-1<br>UL 60947-4-1                                     |
| Product certifications                | IECEE CB Scheme<br>UL<br>CSA<br>CCC<br>EAC<br>ATEX<br>BV<br>LROS (Lloyds register of shipping)<br>DNV-GL<br>RINA |
| Protective treatment                  | TH   |
| IP degree of protection               | IP20 conforming to IEC 60529   |
| IK degree of protection               | IK04   |
| Ambient air temperature for operation | -20...60 °C  |
| Ambient air temperature for storage   | -40...80 °C  |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-1   |
| Operating altitude                    | 2000 m   |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 230 G    |
| Package 1 Height             | 4.7 Cm   |
| Package 1 width              | 8.5 Cm   |
| Package 1 Length             | 9.1 Cm   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 24       |
| Package 2 Weight             | 5.784 Kg |
| Package 2 Height             | 15 Cm    |
| Package 2 width              | 30 Cm    |
| Package 2 Length             | 40 Cm    |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 384      |
| Package 3 Weight             | 104.1 Kg |
| Package 3 Height             | 80 Cm    |
| Package 3 width              | 80 Cm    |
| Package 3 Length             | 60 Cm    |

## Offer Sustainability

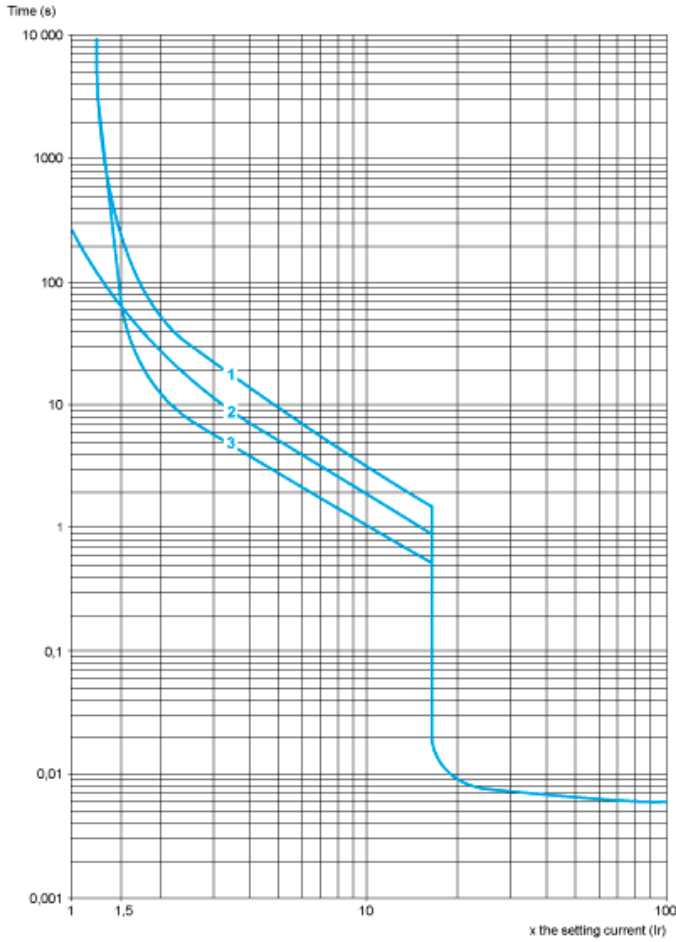
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | 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>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## 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

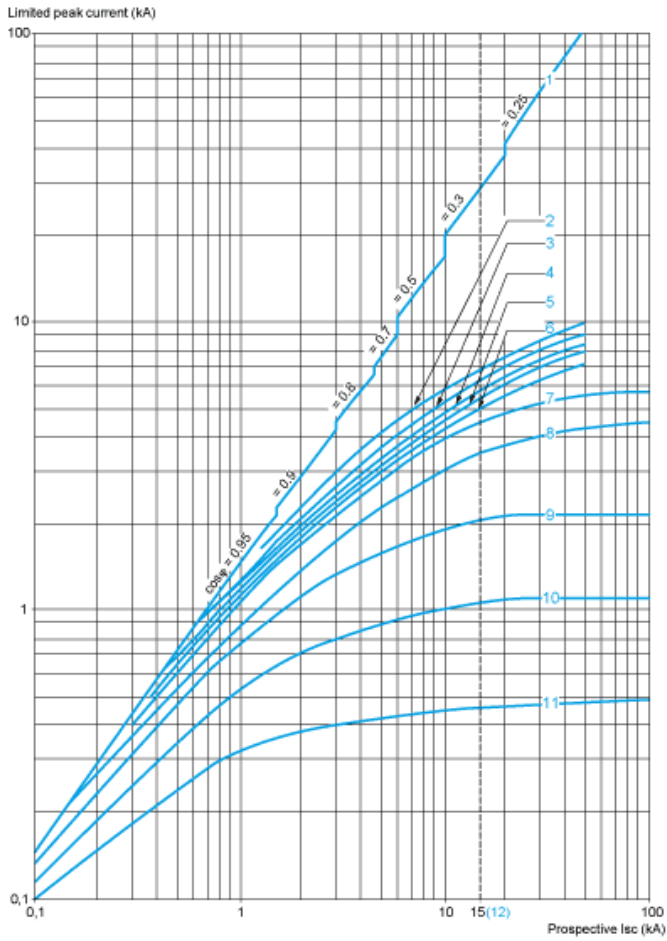


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

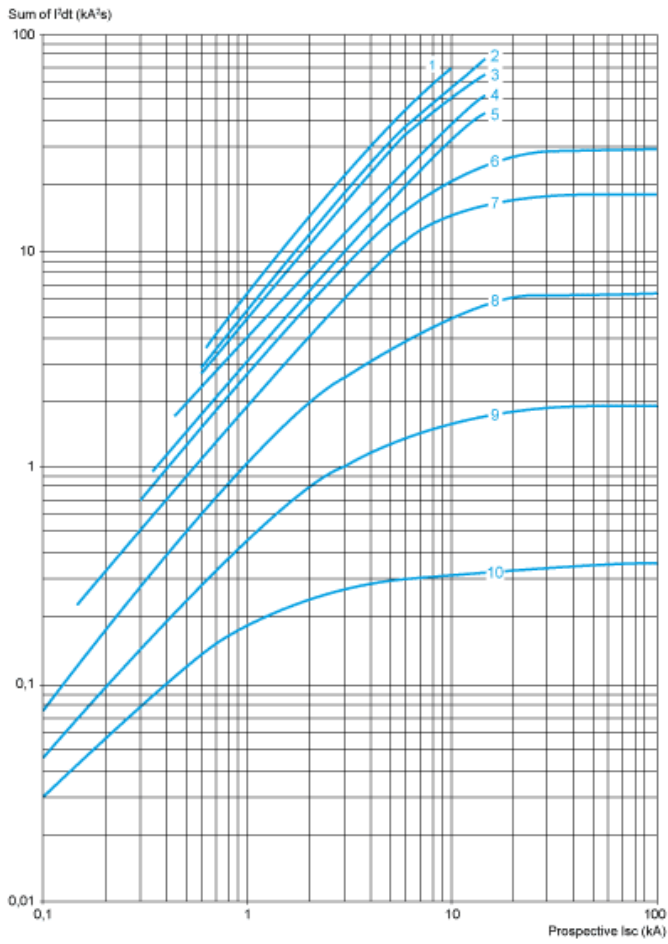


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2ME

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

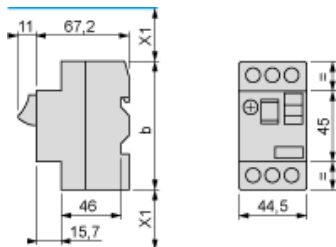
Sum of  $I^2dt = f$  (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V



- 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



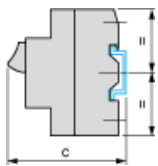
- (1) Maximum  
X1 Electrical clearance = 40 mm for  $U_e \leq 690$  V

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

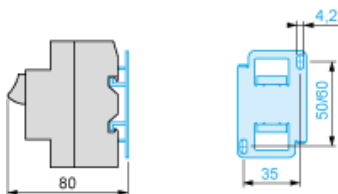
Mounting

GV2ME

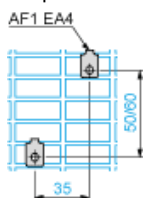
On 35 mm rail



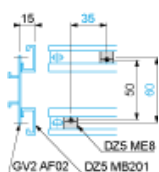
- $c = 78.5$  on AM1 DP200 (35 x 7.5)  
 $c = 86$  on AM1 DE200, ED200 (35 x 15)  
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

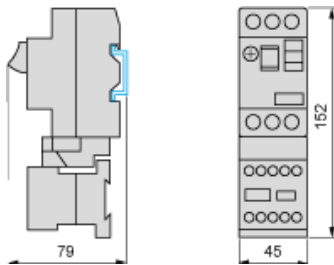


On rails DZ5 MB201



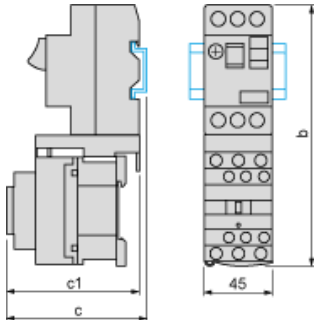
GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

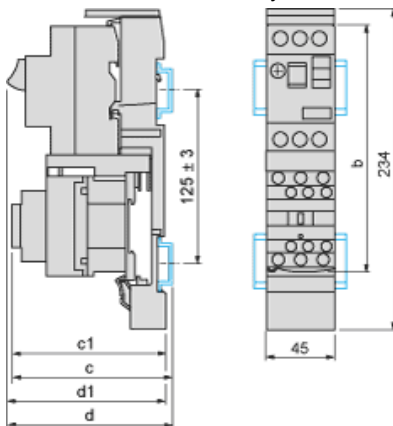
Combination GV2ME + TeSys d contactor



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

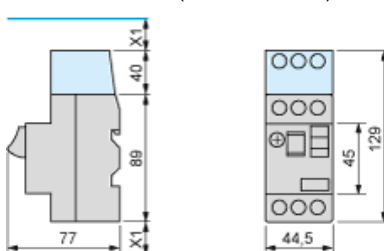
GV2AF4 + LAD311

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          |

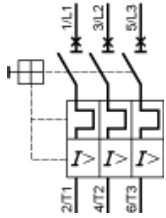
GV2ME + GV1L3 (Current Limiter)



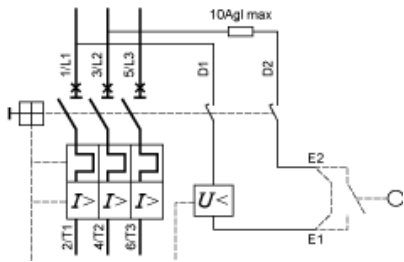
X1 = 10 mm for  $U_e = 230\text{ V}$  or 30 mm for  $230\text{ V} < U_e \leq 690\text{ V}$



GV2ME•• and GV2RT



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



Product Life Status : **Commercialised**