



## 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

|                                                     |                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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>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<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 range                 | 1.6...2.5 A conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                             |
| Magnetic tripping current                           | 33.5 A                                                                                                                                                                                                                                                                                                              |
| [Ith] conventional free air 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 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<br>EN/IEC 60947-4-1                                                                                                                |
| Product certifications                | CCC[RETURN]JUL[RETURN]CSA[RETURN]EAC[RETURN]ATEX[RETURN]LROS<br>(Lloyds register of shipping)[RETURN]BV[RETURN]RINA[RETURN]DNV-<br>GL[RETURN]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<br>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             | 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 |

## Offer Sustainability

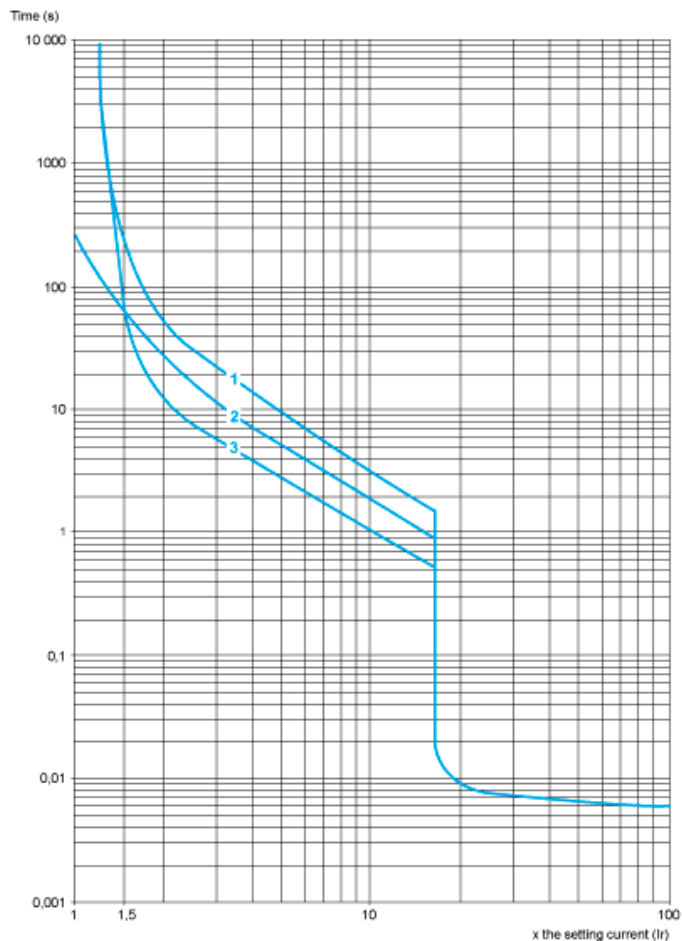
|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|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

## 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

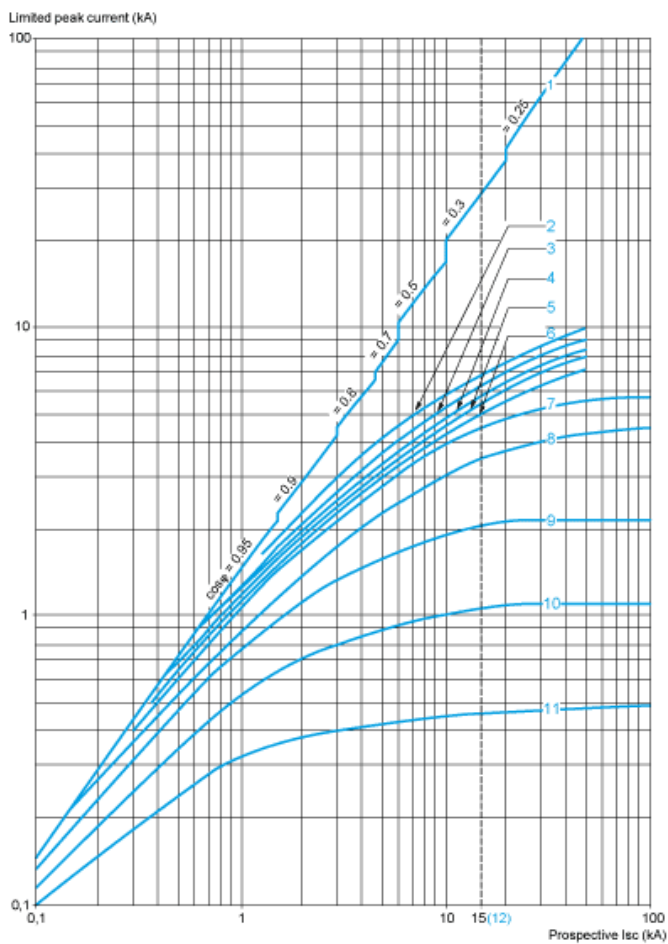


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

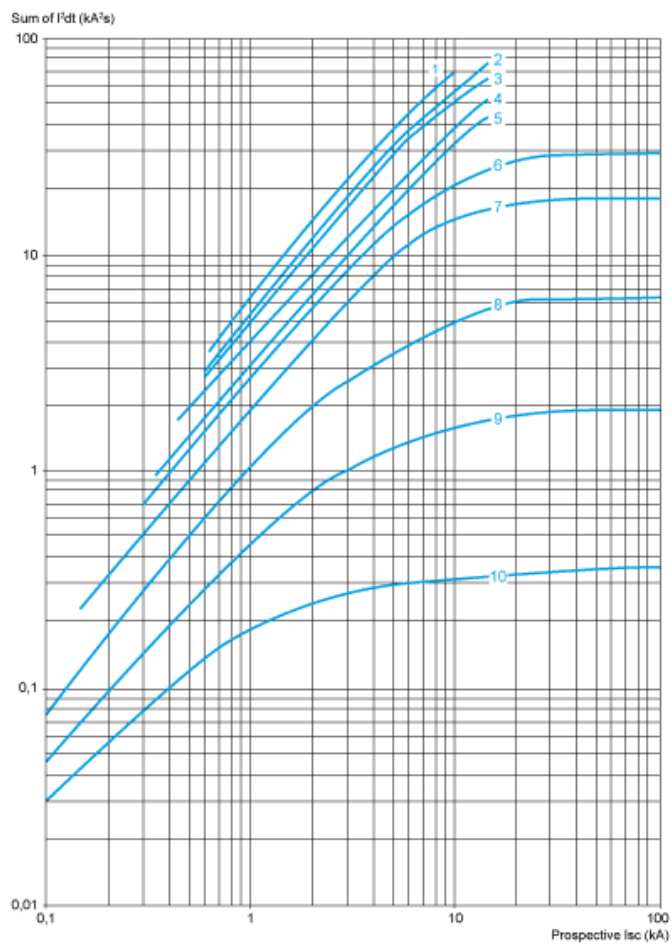


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2ME

Thermal Limit in  $\text{kA}^2\text{s}$  in the Magnetic Operating Zone

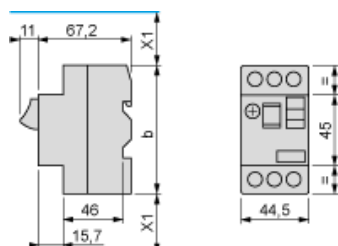
Sum of  $I^2 dt = f$  (prospective  $I_{sc}$ ) at  $1.05 U_e = 435 \text{ V}$



- 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



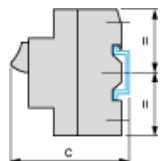
- (1) Maximum  
X1 Electrical clearance = 40 mm for  $U_e \leq 690$  V

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

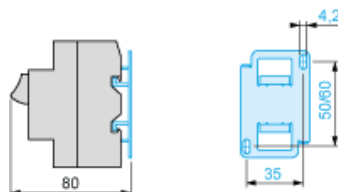
## Mounting

### GV2ME

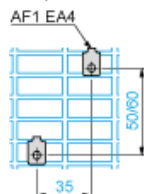
On 35 mm rail



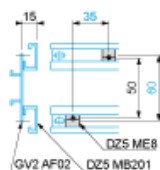
c = 78.5 on AM1 DP200 (35 x 7.5)  
c = 86 on AM1 DE200, ED200 (35 x 15)  
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

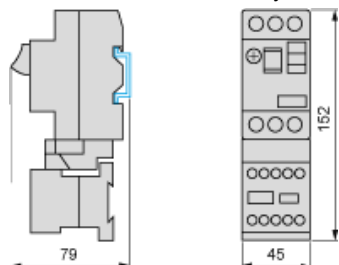


On rails DZ5 MB201



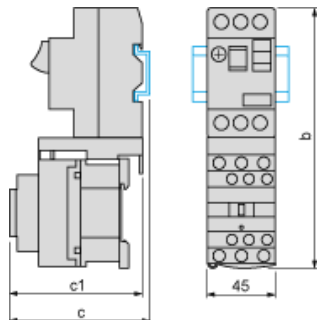
### GV2AF01

#### Combination GV2ME + TeSys k contactor



#### GV2AF3

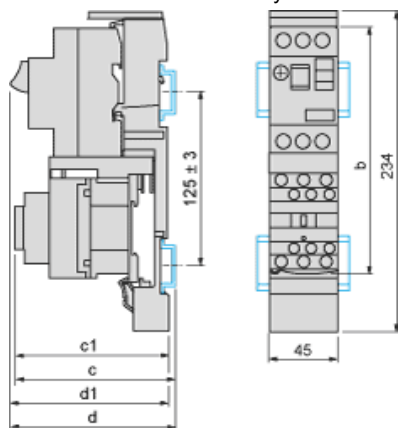
#### Combination GV2ME + TeSys d contactor



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

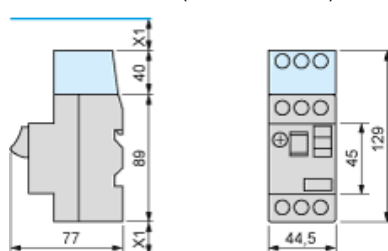
#### GV2AF4 + LAD311

#### 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          |

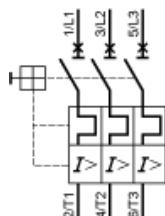
#### GV2ME + GV1L3 (Current Limiter)



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

