# Product data sheet

Specifications



## TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 2.5...4 A, spring terminals

GV2ME083

**Product availability : Stock - Normally stocked in distribution facility**

## Price* : 180.00 USD

### Main

| | |
|---|---|
| **Range of Product** | TeSys GV2 |
| **Range** | TeSys<br>TeSys Deca |
| **Device short name** | GV2ME |
| **Product name** | TeSys GV2<br>TeSys Deca |
| **Product or Component Type** | Circuit breaker |
| **Device Application** | Motor |
| **Trip unit technology** | Thermal-magnetic |

### Complementary

| | |
|---|---|
| **Poles description** | 3P |
| **Network type** | AC |
| **Utilisation category** | AC-3 IEC 60947-4-1<br>Category A IEC 60947-2 |
| **Network frequency** | 50/60 Hz 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** | 1.1 kW 400/415 V AC 50/60 Hz<br>1.5 kW 400/415 V AC 50/60 Hz<br>1.5 kW 500 V AC 50/60 Hz<br>2.2 kW 500 V AC 50/60 Hz |
| **Breaking capacity** | 100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 440 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 500 V AC 50/60 Hz IEC 60947-2<br>3 kA Icu 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ics] rated service short-circuit breaking capacity** | 100 % 500 V AC 50/60 Hz IEC 60947-2<br>100 % 230/240 V AC 50/60 Hz IEC 60947-2<br>100 % 440 V AC 50/60 Hz IEC 60947-2<br>100 % 400/415 V AC 50/60 Hz IEC 60947-2<br>75 % 690 V AC 50/60 Hz IEC 60947-2 |
| **Control Type** | Push-button |
| **Line Rated Current** | 4 A |

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

| | |
|---|---|
| **Thermal protection adjustment range** | 2.5…4 A |
| **Magnetic tripping current** | 51 A |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ui] rated insulation voltage** | 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ith] conventional free air thermal current** | 4 A 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 AC-3 415 V<br>415 V |
| **Maximum operating rate** | 25 cyc/h |
| **Rated duty** | Continuous IEC 60947-4-1 |
| **Phase failure sensitivity** | Yes IEC 60947-4-1 |
| **Height** | 3.98 in (101 mm) |
| **Width** | 1.77 in (45 mm) |
| **Depth** | 3.09 in (78.5 mm) |
| **Net Weight** | 0.62 lb(US) (0.28 kg) |
| **Color** | Dark grey |
| **Suitability for isolation** | Yes IEC 60947-1 |

## 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** | IACS E10 |
| **IK degree of protection** | IK04 |
| **IP degree of protection** | IP20 IEC 60529 |
| **Ambient Air Temperature for Storage** | -40…176 °F (-40…80 °C) |
| **Fire resistance** | 1760 °F (960 °C) IEC 60695-2-1 |
| **Operating altitude** | 6561.68 ft (2000 m) |
| **Ambient air temperature for operation** | -4…140 °F (-20…60 °C) |

## Ordering and shipping details

| | |
|---|---|
| **Category** | 22367-MANUAL STR PROTECTOR - GV2 |
| **Discount Schedule** | I11 |
| **GTIN** | 3389110346435 |
| **Nbr. of units in pkg.** | 1 |
| **Package weight(Lbs)** | 10.34 oz (293.0 g) |

| | |
|---|---|
| **Returnability** | No |
| **Country of origin** | FR |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Package 1 Height** | 2.17 in (5.5 cm) |
| **Package 1 width** | 4.33 in (11 cm) |
| **Package 1 Length** | 3.35 in (8.5 cm) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 20 |
| **Package 2 Weight** | 13.47 lb(US) (6.112 kg) |
| **Package 2 Height** | 5.91 in (15 cm) |
| **Package 2 width** | 11.81 in (30 cm) |
| **Package 2 Length** | 15.75 in (40 cm) |

## Offer Sustainability

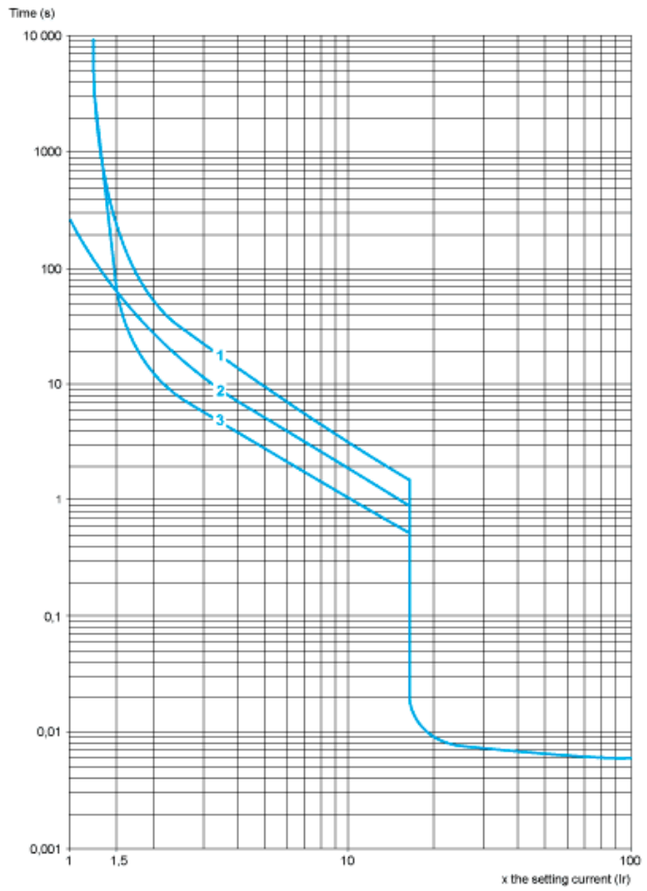
| | |
|---|---|
| **Sustainable offer status** | Green Premium product |
| **California proposition 65** | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |
| **REACh Regulation** | REACh Declaration |
| **EU RoHS Directive** | Compliant<br>EU RoHS Declaration |
| **Mercury free** | Yes |
| **RoHS exemption information** | Yes |
| **China RoHS Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information. |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |
| **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**

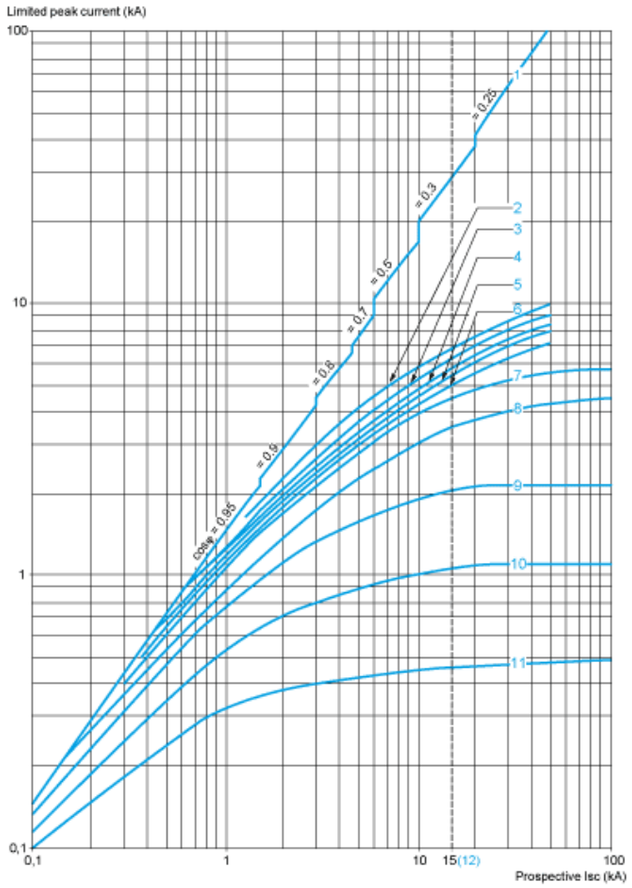



**1** 3 poles from cold state
**2** 2 poles from cold state
**3** 3 poles from hot state

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

**Dynamic Stress**

I peak = f (prospective Isc) at 1.05 Ue = 435 V

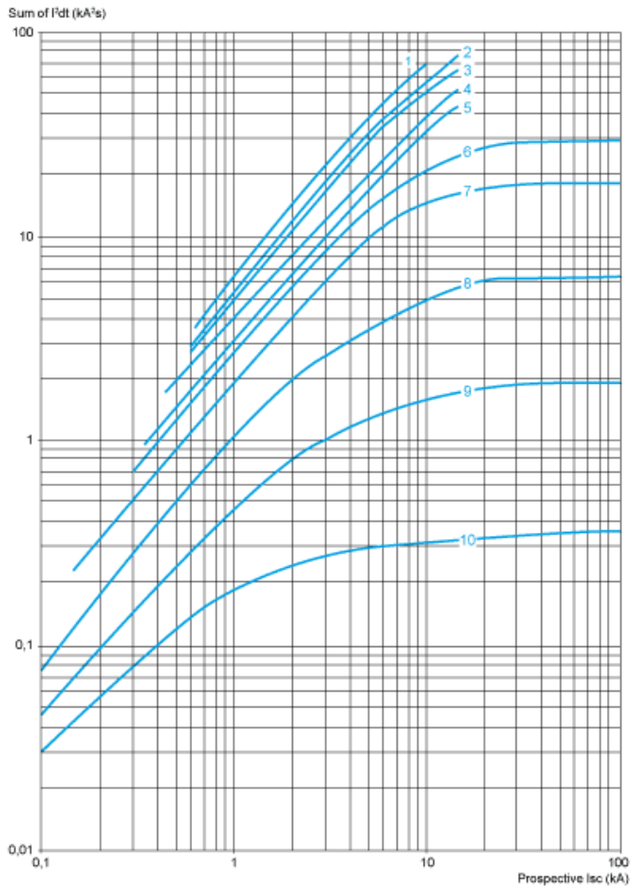



| | |
|---|---|
| **1** | Maximum peak current |
| **2** | 24-32 A |
| **3** | 20-25 A |
| **4** | 17-23 A |
| **5** | 13-18 A |
| **6** | 9-14 A |
| **7** | 6-10 A |
| **8** | 4-6.3 A |
| **9** | 2.5-4 A |
| **10** | 1.6-2.5 A |
| **11** | 1-1.6 A |
| **12** | Limit of rated ultimate breaking capacity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

## Thermal Limit on Short-Circuit for GV2ME

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

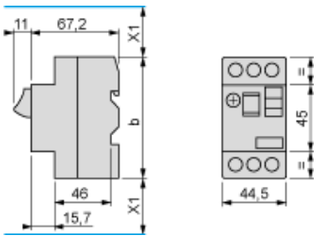
Sum of $I^2dt$ = f (prospective Isc) at 1.05 Ue = 435 V




**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

## Dimension

**GV2ME**



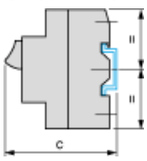

**(1)** Maximum
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

| | b |
|---|---|
| GV2ME•• | 89 |
| GV2ME••3 | 101 |

## Mounting

**GV2ME**

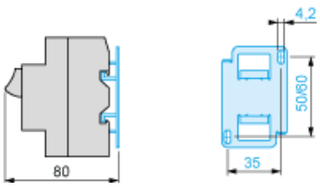
On 35 mm rail



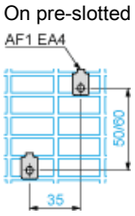

c = 78.5 on AM1 DP200 (35 x 7.5)

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

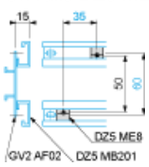
On panel with adapter plate GV2AF02




On pre-slotted plate AM1 PA

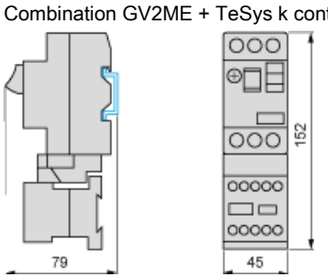



On rails DZ5 MB201



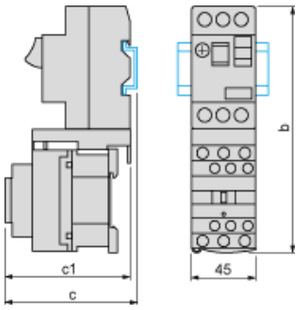

**GV2AF01**

Combination GV2ME + TeSys k contactor




**GV2AF3**

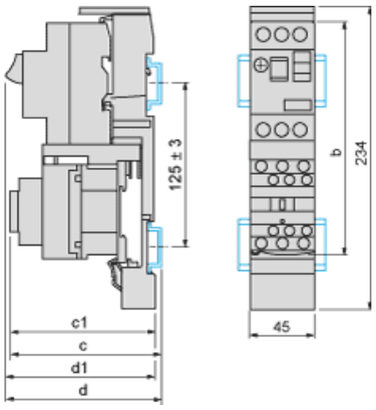
Combination GV2ME + TeSys d contactor




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

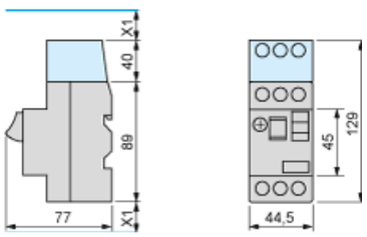
**GV2AF4 + LAD311**

Combination GV2ME + TeSys d contactor



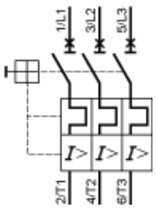

| GV2ME + | LC1D09…D18 | LC1D25 and D32 |
|---|---|---|
| b | 176.4 | 186.8 |
| c1 | 103.1 | 136.4 |
| c | 135.6 | 141.9 |
| d1 | 107 | 107 |
| d | 112.5 | 112.5 |

**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**

