

# Product data sheet

Specifications



## TeSys GV2 Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 24 to 32 A, screw clamp

GV2ME32

Product availability : Stock - Normally stocked in distribution facility

### 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                                      | 15 kW 400/415 V AC 50/60 Hz<br>18.5 kW 500 V AC 50/60 Hz<br>22 kW 690 V AC 50/60 Hz                                                                                                                                      |
| Breaking capacity                                   | 3 kA Icu 690 V AC 50/60 Hz IEC 60947-2<br>50 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2<br>6 kA Icu 440 V AC 50/60 Hz IEC 60947-2<br>4 kA Icu 500 V AC 50/60 Hz IEC 60947-2<br>10 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % 230/240 V AC 50/60 Hz IEC 60947-2<br>75 % 690 V AC 50/60 Hz IEC 60947-2<br>75 % 500 V AC 50/60 Hz IEC 60947-2<br>50 % 400/415 V AC 50/60 Hz IEC 60947-2<br>50 % 440 V AC 50/60 Hz IEC 60947-2                      |
| Control type                                        | Push-button                                                                                                                                                                                                              |
| Line Rated Current                                  | 32 A                                                                                                                                                                                                                     |

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|                                             |                                              |
|---------------------------------------------|----------------------------------------------|
| Thermal protection adjustment range         | 24...32 A                                    |
| Magnetic tripping current                   | 416 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 | 32 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-3 440 V                     |
| Maximum operating rate                      | 25 cyc/h                                     |
| Rated duty                                  | Continuous IEC 60947-4-1                     |
| Tightening torque                           | 15.05 lbf.in (1.7 N.m) screw clamp terminals |
| Suitability for isolation                   | Yes IEC 60947-1                              |
| Phase failure sensitivity                   | Yes IEC 60947-4-1                            |
| Height                                      | 3.50 in (89 mm)                              |
| Width                                       | 1.77 in (45 mm)                              |
| Depth                                       | 3.09 in (78.5 mm)                            |
| Net weight                                  | 0.57 lb(US) (0.26 kg)                        |
| Color                                       | Dark grey                                    |

## 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<br>UKCA |
| Protective treatment                  | TH                                                                                                                       |
| IP degree of protection               | IP20 IEC 60529                                                                                                           |
| IK degree of protection               | IK04                                                                                                                     |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C)                                                                                                |
| 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)                                                                                                      |

## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22367 - MANUAL STR PROTECTOR - GV2 |
| Discount Schedule | I11                                |
| GTIN              | 3389110343298                      |

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|                       |                    |
|-----------------------|--------------------|
| Nbr. of units in pkg. | 1                  |
| Package weight(Lbs)   | 9.92 oz (281.25 g) |
| Returnability         | Yes                |
| Country of origin     | TH                 |

Packing Units

|                              |                            |
|------------------------------|----------------------------|
| Unit Type of Package 1       | PCE                        |
| Package 1 Height             | 1.77 in (4.5 cm)           |
| Package 1 width              | 3.35 in (8.5 cm)           |
| Package 1 Length             | 3.54 in (9 cm)             |
| Unit Type of Package 2       | S02                        |
| Number of Units in Package 2 | 24                         |
| Package 2 Weight             | 15.42 lb(US) (6.996 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)           |
| Unit Type of Package 3       | P06                        |
| Number of Units in Package 3 | 384                        |
| Package 3 Weight             | 264.41 lb(US) (119.936 kg) |
| Package 3 Height             | 29.53 in (75 cm)           |
| Package 3 width              | 31.50 in (80 cm)           |
| Package 3 Length             | 23.62 in (60 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 P65Warnings website |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                          |
| EU RoHS Directive          | Compliant<br><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><br>Product out of China RoHS scope. Substance declaration for your information.                                                                                     |
| 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 (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V

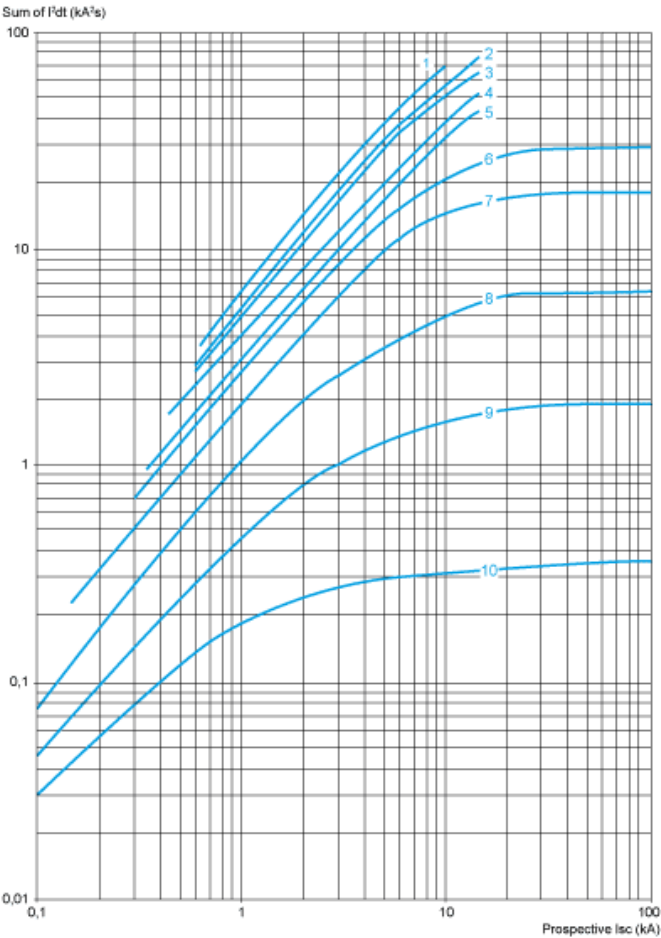


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2ME

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

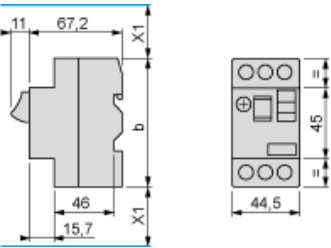
Sum of I<sup>2</sup>dt = f (prospective Isc) at 1.05 Ue = 435 V



- 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

Dimension

GV2ME



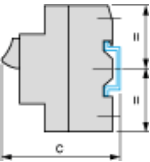
- (1) Maximum  
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

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

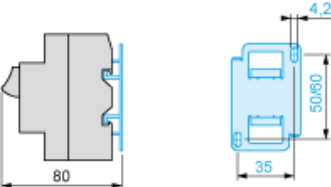
Mounting

GV2ME

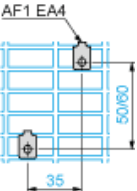
On 35 mm rail



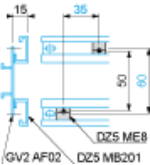
- c = 78.5 on AM1 DP200 (35 x 7.5)  
c = 86 on AM1 DE200, ED200 (35 x 15)  
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

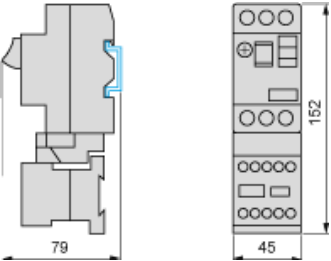


On rails DZ5 MB201



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          |

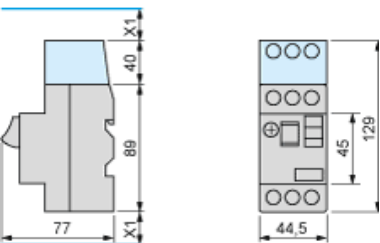
GV2AF4 + LAD311

Combination GV2ME + TeSys d contactor



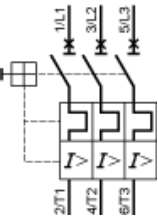
| GV2ME + | LC1D09...D18 | LC1D25 and D32 |
|---------|--------------|----------------|
| b       | 176.4        | 186.8          |
| c1      | 103.1        | 136.4          |
| c       | 135.6        | 141.9          |
| d1      | 107          | 107            |
| d       | 112.5        | 112.5    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

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

