

GV2ME10

TeSys GV2 Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 4 to 6.3 A, screw clamp



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 Category A IEC 60947-2 |
| Network frequency | 50/60 Hz IEC 60947-4-1 |
| Fixing mode | 35 mm symmetrical DIN rail: clipped Panel screwed with adaptor plate) |
| Operating position | Any position |
| Motor power kW | 2.2 KW 400/415 V AC 50/60 Hz 3 KW 500 V AC 50/60 Hz 4 kW at 690 V AC 50/60 Hz |
| Breaking capacity | 100 KA Icu 230/240 V AC 50/60 Hz IEC 60947-2 100 KA Icu 400/415 V AC 50/60 Hz IEC 60947-2 3 KA Icu 690 V AC 50/60 Hz IEC 60947-2 50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % 500 V AC 50/60 Hz IEC 60947-2 100 % 230/240 V AC 50/60 Hz IEC 60947-2 100 % 440 V AC 50/60 Hz IEC 60947-2 100 % 400/415 V AC 50/60 Hz IEC 60947-2 75 % 690 V AC 50/60 Hz IEC 60947-2 |
| Control type | Push-button |
| Line Rated Current | 6.3 A |
| Thermal protection adjustment range | 4...6.3 A |
| Magnetic tripping current | 78 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 | 6.3 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 conforming to IEC 60947-4-1 |
| Tightening torque | 15.05 lbf.in (1.7 N.m) screw clamp terminals |
| Suitability for isolation | Yes conforming to IEC 60947-1 |

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 IEC 60947-4-1 |
| Height | 3.50 in (89 mm) |
| Maximum Width | 1.77 in (45 mm) |
| Depth | 3.09 in (78.5 mm) |
| Net Weight | 0.57 lb(US) (0.26 kg) |

Environment

| | |
|---------------------------------------|--|
| Standards | EN/IEC 60947-2 EN/IEC 60947-4-1 CSA C22.2 No 60947-4-1 UL 60947-4-1 |
| Product certifications | IECEE CB Scheme UL CSA CCC EAC ATEX BV LROS (Lloyds register of shipping) DNV-GL RINA |
| 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 | 00785901211969 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.62 lb(US) (0.28 kg) |
| Returnability | Yes |
| Country of origin | TH |

Packing Units

| | |
|------------------------------|----------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.89 in (4.8 cm) |
| Package 1 width | 3.35 in (8.5 cm) |
| Package 1 Length | 3.66 in (9.3 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 24 |
| Package 2 Weight | 15.61 lb(US) (7.079 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 | 264.21 lb(US) (119.844 kg) |
| Package 3 Height | 31.50 in (80 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 www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

Contractual warranty

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|----------|-----------|
| 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 $I^2dt = f(\text{prospective } I_{sc})$ 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 |

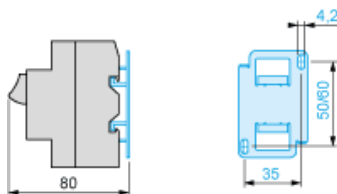
Mounting

GV2ME

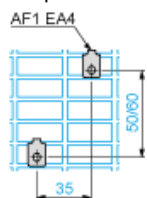
On 35 mm rail



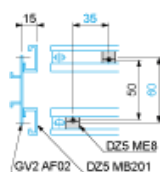
- $c = 78.5$ on AM1 DP200 (35 x 7.5)
 $c = 86$ on AM1 DE200, ED200 (35 x 15)
 On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA



On rails DZ5 MB201



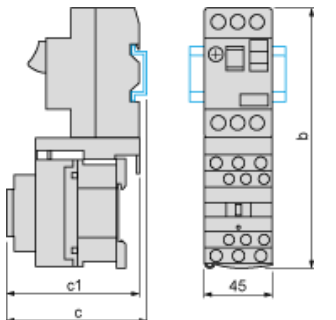
GV2AF01

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 |

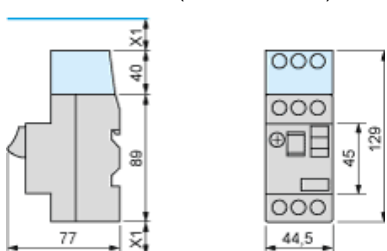
GV2AF4 + LAD311

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

