

Product data sheet

Specifications



TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 0.63 to 1 A, screw clamp

GV2ME05

Product availability : Stock - Normally stocked in distribution facility

Main

| | |
|---------------------------|-------------------------|
| Range | TeSys Deca |
| Product name | TeSys GV2 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 IEC 60947-2 AC-3 IEC 60947-4-1 |
| Network frequency | 50/60 Hz IEC 60947-4-1 |
| Fixing mode | 35 mm symmetrical DIN rail clipped (Panel screwed with adaptor plate) |
| Motor power kW | 0.25 kW 400/415 V AC 50/60 Hz 0.55 kW 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 60947-2 100 kA Icu 440 V AC 50/60 Hz IEC 60947-2 100 kA Icu 500 V AC 50/60 Hz IEC 60947-2 100 kA Icu 690 V AC 50/60 Hz IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % 230/240 V AC 50/60 Hz IEC 60947-2 100 % 400/415 V AC 50/60 Hz IEC 60947-2 100 % 440 V AC 50/60 Hz IEC 60947-2 100 % 500 V AC 50/60 Hz IEC 60947-2 100 % 690 V AC 50/60 Hz IEC 60947-2 |
| Control type | Push-button |
| Line Rated Current | 1 A |
| Thermal protection adjustment range | 0.63...1 A IEC 60947-4-1 |
| Magnetic tripping current | 13 A |
| [Ith] conventional free air thermal current | 1 A IEC 60947-4-1 |
| [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 |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947-2 |
| Phase failure sensitivity | Yes IEC 60947-4-1 |
| Suitability for isolation | Yes IEC 60947-1 § 7-1-6 |
| Power dissipation per pole | 2.5 W |
| Mechanical durability | 100000 cycles |
| Electrical durability | 100000 cycles AC-3 415 V In |
| Rated duty | Continuous IEC 60947-4-1 |
| Tightening torque | 15.05 lbf.in (1.7 N.m) screw clamp terminal |
| Width | 1.77 in (45 mm) |
| Height | 3.50 in (89 mm) |
| Depth | 3.09 in (78.5 mm) |
| Net Weight | 0.62 lb(US) (0.28 kg) |
| Color | Dark grey |

Environment

| | |
|--|---|
| Standards | EN/IEC 60947-2 EN/IEC 60947-4-1 |
| Product Certifications | CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL UKCA |
| IK degree of protection | IK04 |
| IP degree of protection | IP20 IEC 60529 |
| Climatic withstand | IACS E10 |
| Ambient Air Temperature for Storage | -40...176 °F (-40...80 °C) |
| Fire resistance | 1760 °F (960 °C) IEC 60695-2-11 |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C) |
| Mechanical robustness | Shocks 30 Gn for 11 ms Vibrations 5 Gn, 5...150 Hz |
| Operating altitude | 6561.68 ft (2000 m) |

Ordering and shipping details

| | |
|--------------------------|----------------------------------|
| Category | 22367-MANUAL STR PROTECTOR - GV2 |
| Discount Schedule | I11 |
| GTIN | 3389110343038 |
| Returnability | Yes |
| Country of origin | TH |

Packing Units

| | |
|-------------------------------------|-----|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |

| | |
|------------------------------|----------------------------|
| Package 1 Height | 1.77 in (4.500 cm) |
| Package 1 Width | 3.35 in (8.500 cm) |
| Package 1 Length | 3.74 in (9.500 cm) |
| Package 1 Weight | 8.15 oz (231.000 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 24 |
| Package 2 Height | 5.91 in (15.000 cm) |
| Package 2 Width | 11.81 in (30.000 cm) |
| Package 2 Length | 15.75 in (40.000 cm) |
| Package 2 Weight | 12.78 lb(US) (5.799 kg) |
| Unit Type of Package 3 | P12 |
| Number of Units in Package 3 | 768 |
| Package 3 Height | 35.43 in (90.000 cm) |
| Package 3 Width | 31.50 in (80.000 cm) |
| Package 3 Length | 47.24 in (120.000 cm) |
| Package 3 Weight | 391.12 lb(US) (177.408 kg) |

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 |
| China RoHS Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information. |
| RoHS exemption information | Yes |
| 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

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



- 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

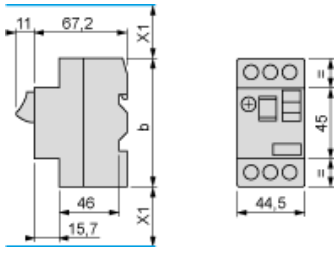
Sum of $I^2dt = f$ (prospective Isc) at 1.05 Ue = 435 V



- 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 $U_e \leq 690$ 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

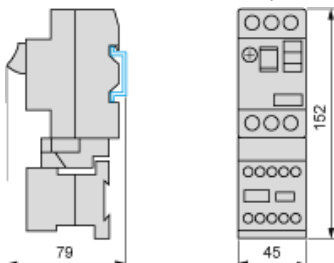


On rails DZ5 MB201



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



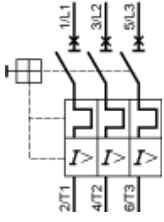
| GV2ME + | LC1D09...D18 | LC1D25 and D32 |
|---------|--------------|----------------|
| b | 176.4 | 186.8 |
| c1 | 103.1 | 136.4 |
| c | 135.6 | 141.9 |
| d1 | 107 | 107 |
| d | 112.5 | 112.5 |

GV2ME + GV1L3 (Current Limiter)



X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue ≤ 690 V

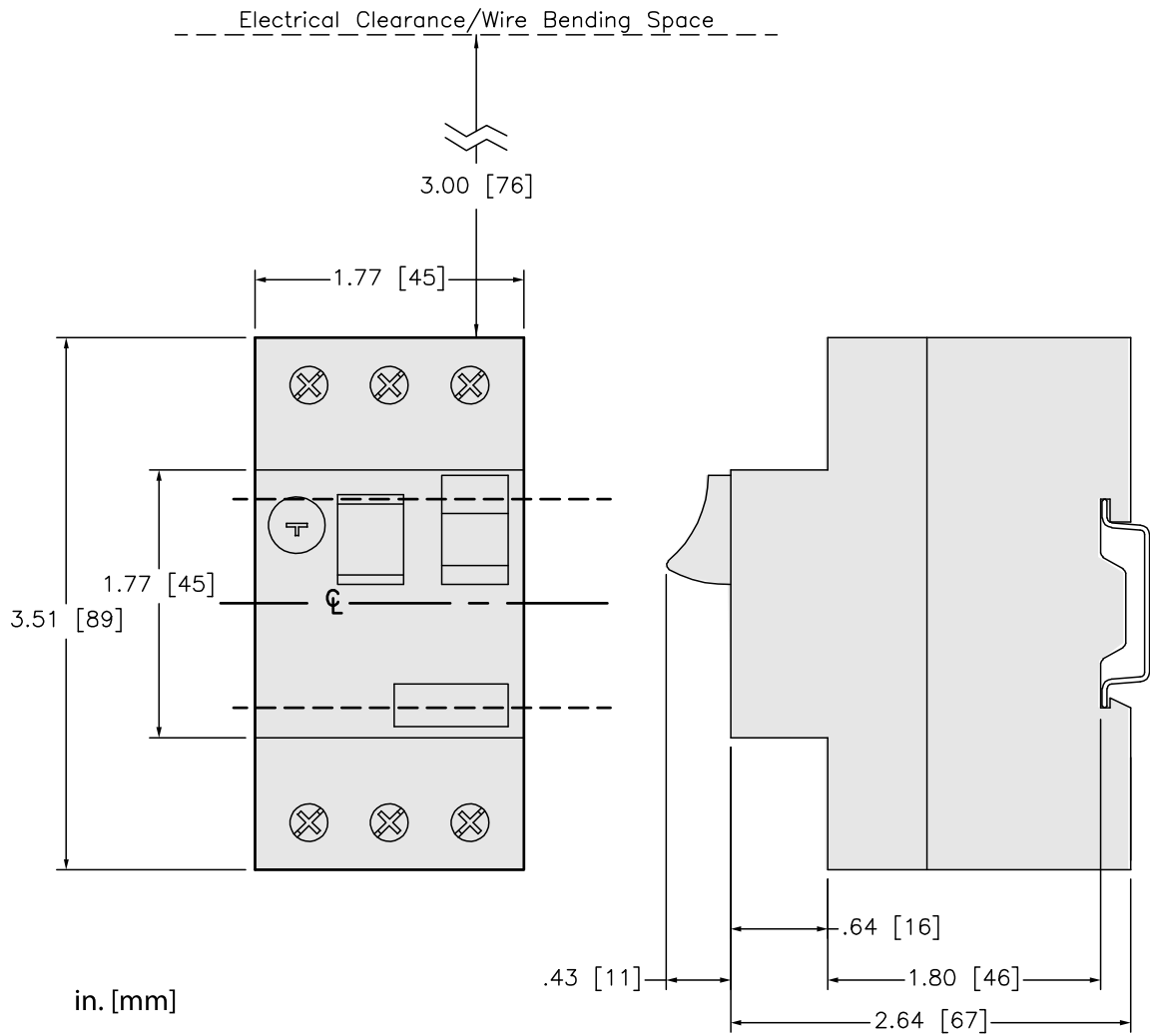
GV2ME•• and GV2RT



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



Dimensions



Recommended replacement(s)