



## 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 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                                      | 0.75 kW 400/415 V AC 50/60 Hz<br>1.1 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                                  | 2.5 A                                                                                                                                                                                                                          |
| Thermal protection adjustment range                 | 1.6...2.5 A                                                                                                                                                                                                                    |
| Magnetic tripping current                           | 33.5 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         | 2.5 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                                                                                                                                                                                                       |
| Connections - terminals                             | Spring terminals 2 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) solid<br>Spring terminals 2 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> ) flexible without cable end                                          |
| Suitability for isolation                           | Yes IEC 60947-1                                                                                                                                                                                                                |

|                           |                       |
|---------------------------|-----------------------|
| Phase failure sensitivity | Yes IEC 60947-4-1     |
| Maximum Height            | 3.98 in (101 mm)      |
| Maximum Width             | 1.77 in (45 mm)       |
| Maximum Depth             | 3.09 in (78.5 mm)     |
| Net Weight                | 0.62 lb(US) (0.28 kg) |

## 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 |
| 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                  | 00785901212133                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 0.64 lb(US) (0.29 kg)              |
| 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              | 3.35 in (8.5 cm)          |
| Package 1 Length             | 4.41 in (11.2 cm)         |
| Unit Type of Package 2       | S02                       |
| Number of Units in Package 2 | 20                        |
| Package 2 Weight             | 13.47 lb(US) (6.108 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 | 320                       |
| Package 3 Weight             | 241.49 lb(US) (109.54 kg) |
| Package 3 Height             | 29.53 in (75 cm)          |
| Package 3 width              | 23.62 in (60 cm)          |
| Package 3 Length             | 31.50 in (80 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 Carcinogen harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a> |
| EU RoHS Directive          | Compliant <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>                                                                                                                                                                                                                            |
| 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

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



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

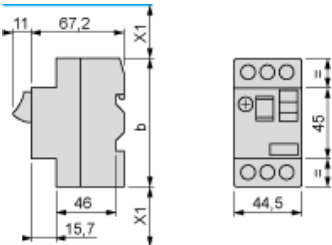
Sum of  $I^2 dt = f$  (prospective  $I_{sc}$ ) at  $1.05 U_e = 435 \text{ V}$



- 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



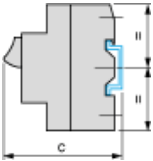
- (1) Maximum  
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

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

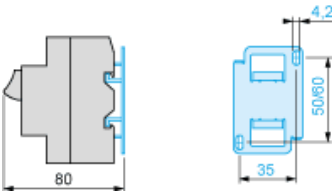
Mounting

GV2ME

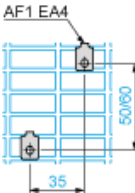
On 35 mm rail



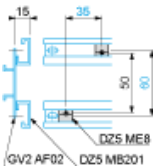
- c = 78.5 on AM1 DP200 (35 x 7.5)  
c = 86 on AM1 DE200, ED200 (35 x 15)  
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA



On rails DZ5 MB201



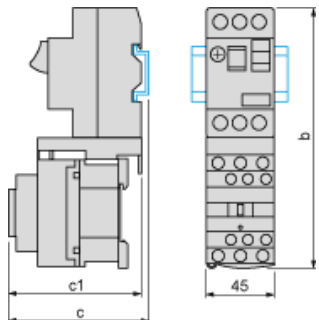
GV2AF01

#### 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



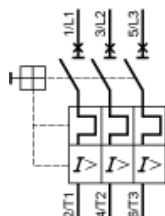
| GV2ME + | LC1D09...D18 | LC1D25 and D32 |
|---------|--------------|----------------|
| b       | 176.4        | 186.8          |
| c1      | 103.1        | 136.4          |
| c       | 135.6        | 141.9          |
| d1      | 107          | 107            |
| d       | 112.5        | 112.5    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

#### GV2ME + GV1L3 (Current Limiter)



X1 = 10 mm for  $U_e = 230\text{ V}$  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

