



## Main

|                      |                  |
|----------------------|------------------|
| Range                | TeSys            |
| Product name         | TeSys GV3        |
| Device short name    | GV3P             |
| 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 3 x M4 screws)                                                                                                                                                     |
| Operating position                                  | Any position                                                                                                                                                                                                                |
| Motor power kW                                      | 22 KW 400/415 V AC 50/60 Hz<br>30 KW 500 V AC 50/60 Hz<br>45 kW 690 V AC 50/60 Hz                                                                                                                                           |
| Breaking capacity                                   | 100 KA Icu 230/240 V AC 50/60 Hz IEC 60947-2<br>50 KA Icu 440 V AC 50/60 Hz IEC 60947-2<br>6 KA Icu 690 V AC 50/60 Hz IEC 60947-2<br>50 KA Icu 400/415 V AC 50/60 Hz IEC 60947-2<br>12 kA Icu 500 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>100 % 440 V AC 50/60 Hz IEC 60947-2<br>100 % 400/415 V AC 50/60 Hz IEC 60947-2<br>50 % 500 V AC 50/60 Hz IEC 60947-2<br>50 % 690 V AC 50/60 Hz IEC 60947-2                       |
| Control type                                        | Rotary knob                                                                                                                                                                                                                 |
| Line Rated Current                                  | 50 A                                                                                                                                                                                                                        |
| Thermal protection adjustment range                 | 37...50 A                                                                                                                                                                                                                   |
| Magnetic tripping current                           | 700 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         | 50 A IEC 60947-4-1                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage              | 6 kV IEC 60947-2                                                                                                                                                                                                            |
| Power dissipation per pole                          | 8 W                                                                                                                                                                                                                         |
| Mechanical durability                               | 50000 cycles                                                                                                                                                                                                                |
| Electrical durability                               | 50000 cycles AC-3 440 V In                                                                                                                                                                                                  |
| Maximum operating rate                              | 25 cyc/h                                                                                                                                                                                                                    |
| Rated duty                                          | Continuous IEC 60947-4-1                                                                                                                                                                                                    |

|                           |                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connections - terminals   | EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) solid<br>EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible without cable end<br>EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible with cable end |
| Tightening torque         | 44.25 Lbf.in (5 N.m) EverLink BTR screw connectors 0.04 in <sup>2</sup> (25 mm <sup>2</sup> )<br>70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.05 in <sup>2</sup> (35 mm <sup>2</sup> )                                                                                                                                   |
| Suitability for isolation | Yes IEC 60947-1                                                                                                                                                                                                                                                                                                                  |
| Phase failure sensitivity | Yes IEC 60947-4-1                                                                                                                                                                                                                                                                                                                |
| Maximum Height            | 5.20 in (132 mm)                                                                                                                                                                                                                                                                                                                 |
| Maximum Width             | 2.17 in (55 mm)                                                                                                                                                                                                                                                                                                                  |
| Maximum Depth             | 5.35 in (136 mm)                                                                                                                                                                                                                                                                                                                 |
| Net Weight                | 2.12 lb(US) (0.96 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>ABS |
| Protective treatment                  | TH                                                                                                              |
| IP degree of protection               | IP20 IEC 60529                                                                                                  |
| IK degree of protection               | IK09                                                                                                            |
| 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                    | 9842.52 ft (3000 m)                                                                                             |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22366 - MAN STR PROTECTORS-GV1/GV3 |
| Discount Schedule     | I11                                |
| GTIN                  | 00785901590699                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 2.22 lb(US) (1.01 kg)              |
| Returnability         | Yes                                |
| Country of origin     | FR                                 |

## Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Package 1 Height             | 2.56 in (6.5 cm)          |
| Package 1 width              | 5.71 in (14.5 cm)         |
| Package 1 Length             | 6.30 in (16 cm)           |
| Unit Type of Package 2       | P06                       |
| Number of Units in Package 2 | 120                       |
| Package 2 Weight             | 295.33 lb(US) (133.96 kg) |
| Package 2 Height             | 29.53 in (75 cm)          |
| Package 2 width              | 31.50 in (80 cm)          |
| Package 2 Length             | 23.62 in (60 cm)          |

## Offer Sustainability

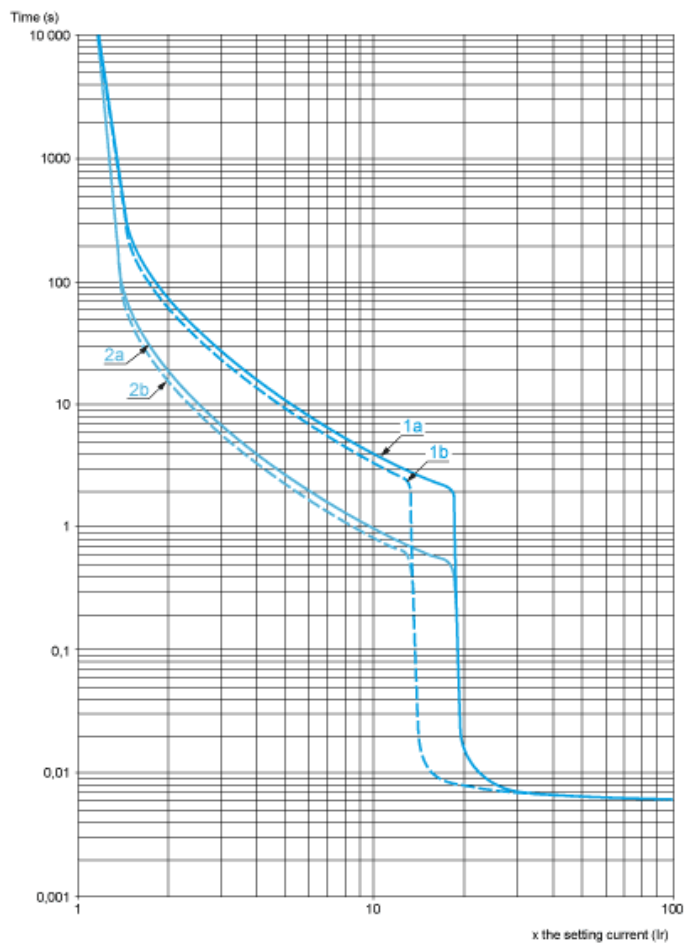
|                            |                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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

Average Operating Times at 20 °C Related to Multiples of the Setting Current

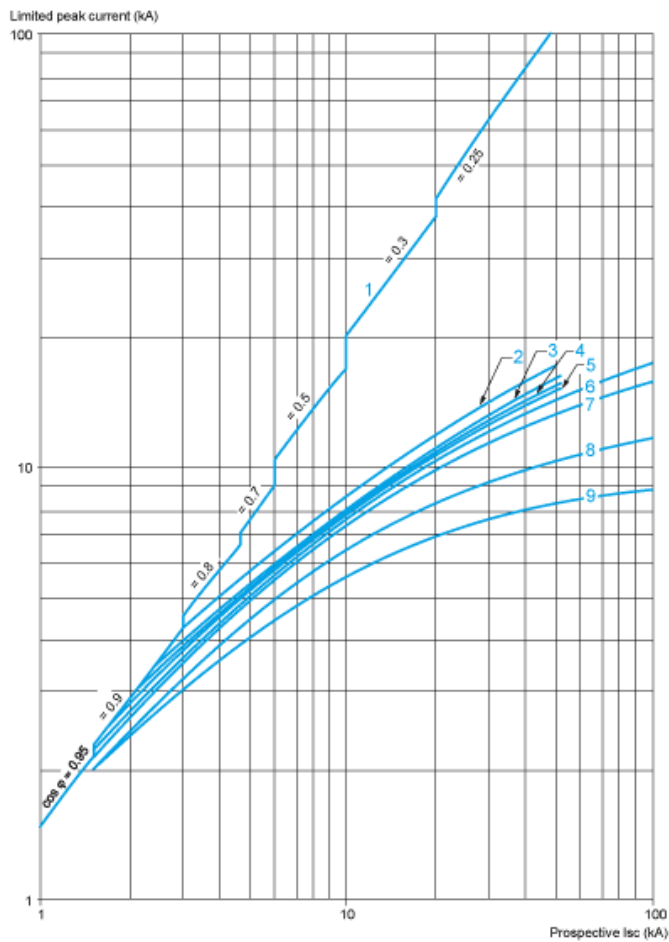


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

### Current Limitation on Short-Circuit (3-Phase 400/415 V)

Dynamic Stress

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

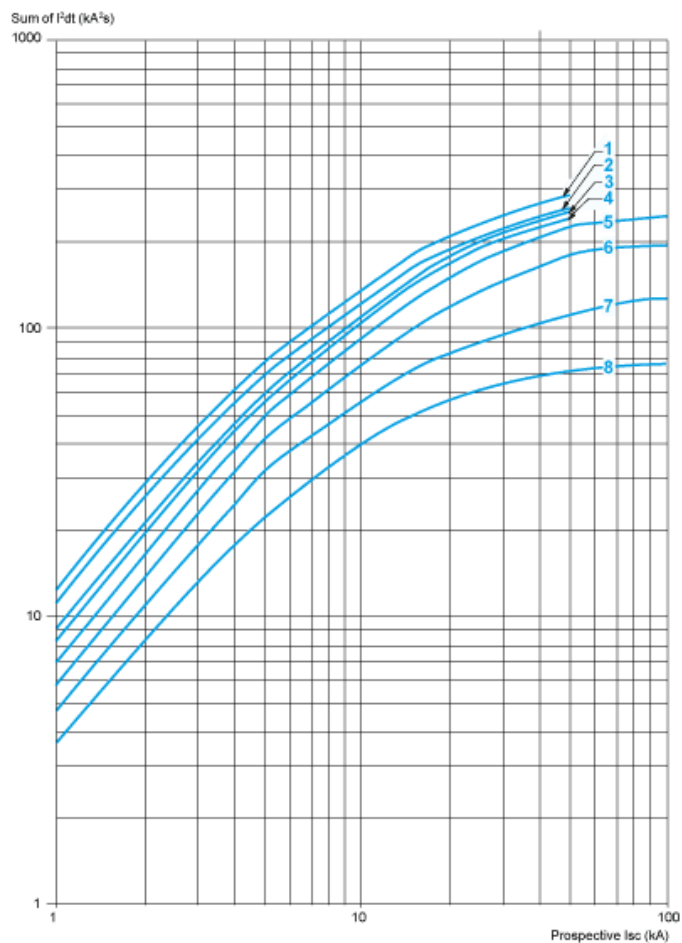


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

### Maximum Thermal Limit on Short-Circuit

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

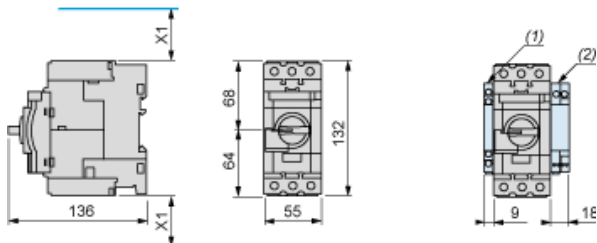
Sum of  $I^2dt = f(\text{prospective Isc})$  at  $1.05 U_e = 435 \text{ V}$



- 1 70-80 (GV3P80) - 62-73 (GV3P73)
- 2 48-65 A (GV3P65)
- 3 37-50 A (GV3P50)
- 4 30-40 A (GV3P40)
- 5 23-32 A (GV3P32)
- 6 17-25 A (GV3P25)
- 7 12-18 A (GV3P18)
- 8 9-13 A (GV3P13)

## GV13L, GV3P

### Dimensions



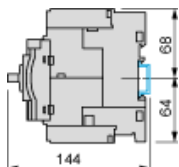
(1) Blocks GVAN.., GVAD.. and GVAM11.

(2) Blocks GV3AU.. and GV3AS..

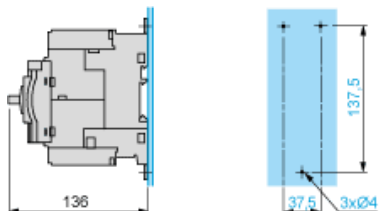
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

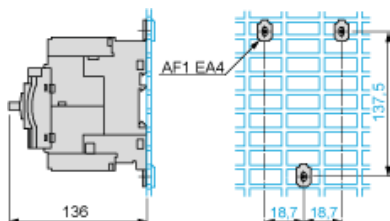
### Mounting on Rail AM1 DE200 or AM1 ED201



### Panel Mounting, using M4 Screws



### Mounting on Pre-Slotted Plate AM1 PA



GV3P..

