



## Main

|                           |                  |
|---------------------------|------------------|
| Range                     | TeSys            |
| Product name              | TeSys GV3        |
| Product or component type | Circuit breaker  |
| Device short name         | GV3P             |
| 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<br>Category A conforming to IEC 60947-2   |
| Network frequency                                   | 50/60 Hz conforming to 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                                      | 55 kW at 690 V AC 50/60 Hz<br>45 kW at 500 V AC 50/60 Hz<br>30 kW at 400/415 V AC 50/60 Hz   |
| Breaking capacity                                   | 100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>6 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>12 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 690 V AC 50/60 Hz conforming to IEC 60947-2                       |
| Control type  | Rotary knob  |

|   |  |
|---|--|
| [In] rated current                          | 65 A   |
| Thermal protection adjustment range         | 48...65 A  |
| Magnetic tripping current                   | 910 A  |
| [Ue] rated operational voltage              | 690 V AC 50/60 Hz conforming to IEC 60947-2  |
| [Ui] rated insulation voltage               | 690 V AC 50/60 Hz conforming to IEC 60947-2  |
| [Ith] conventional free air thermal current | 65 A conforming to 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 for AC-3 at 440 V In  |
| Maximum operating rate                      | 25 cyc/h   |
| Rated duty                                  | Continuous conforming to IEC 60947-4-1   |
| Tightening torque                           | 5 N.m on EverLink BTR screw connectors for cable 25 mm²<br>8 N.m on EverLink BTR screw connectors for cable 35 mm² |
| Suitability for isolation                   | Yes conforming to IEC 60947-1  |
| Phase failure sensitivity                   | Yes conforming to IEC 60947-4-1  |
| Height                                      | 132 mm   |
| Width                                       | 55 mm  |
| Depth                                       | 136 mm   |
| Net weight                                  | 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 conforming to IEC 60529  |
| IK degree of protection               | IK09  |
| Ambient air temperature for operation | -20...60 °C   |
| Ambient air temperature for storage   | -40...80 °C   |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-1  |
| Operating altitude                    | 3000 m  |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Weight             | 1.016 kg  |
| Package 1 Height             | 6.5 cm    |
| Package 1 width              | 14.6 cm   |
| Package 1 Length             | 16 cm     |
| Unit Type of Package 2       | P06       |
| Number of Units in Package 2 | 120       |
| Package 2 Weight             | 134.92 kg |
| Package 2 Height             | 80 cm     |

|                  |       |
|------------------|-------|
| Package 2 width  | 80 cm |
| Package 2 Length | 60 cm |

### Offer Sustainability

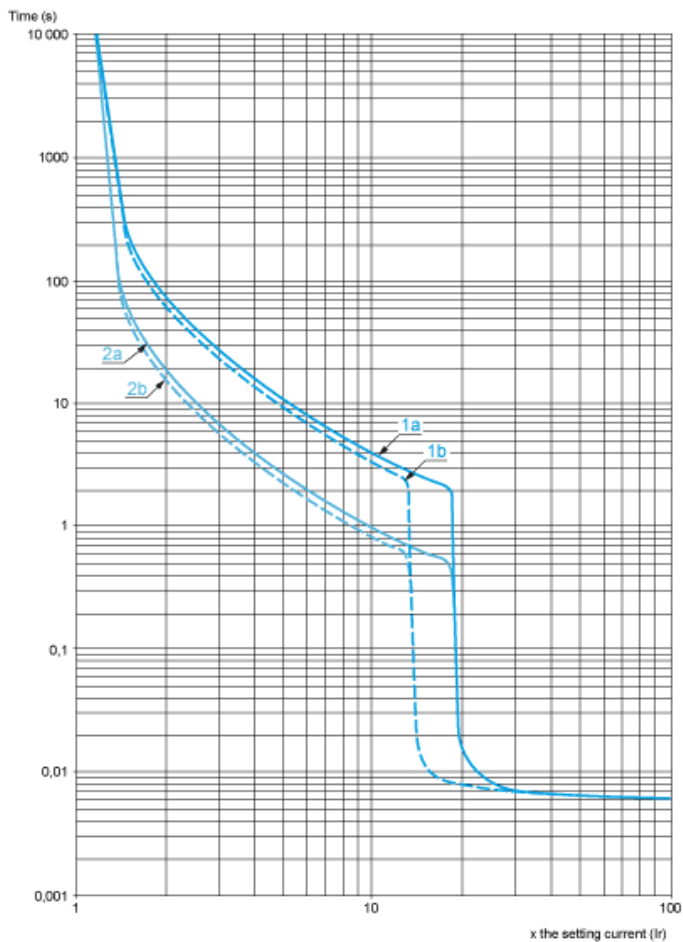
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| Mercury free               | 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   |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

### Thermal-Magnetic Tripping Curves

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

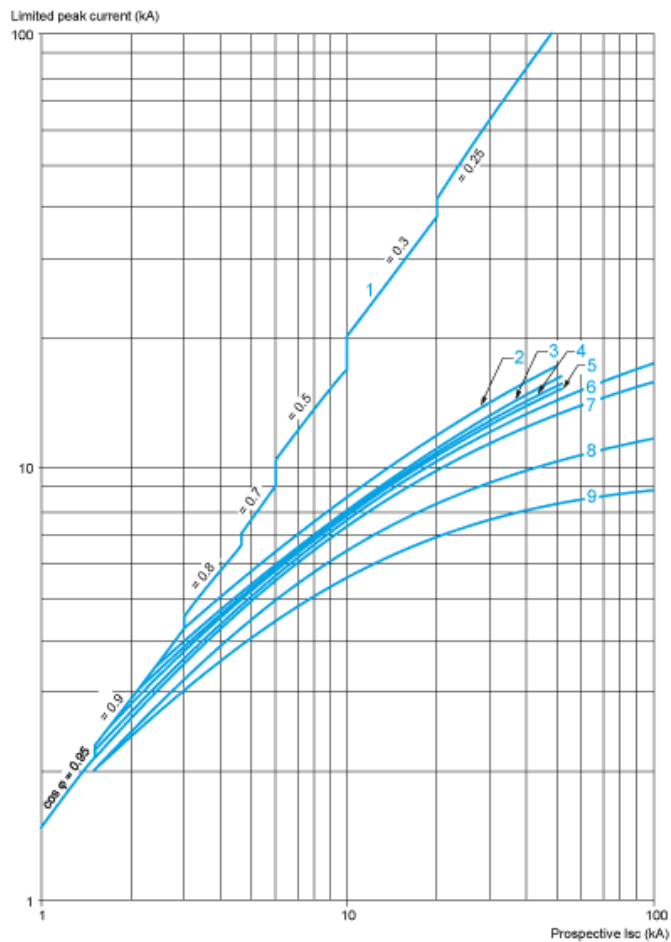


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

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

Dynamic Stress

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

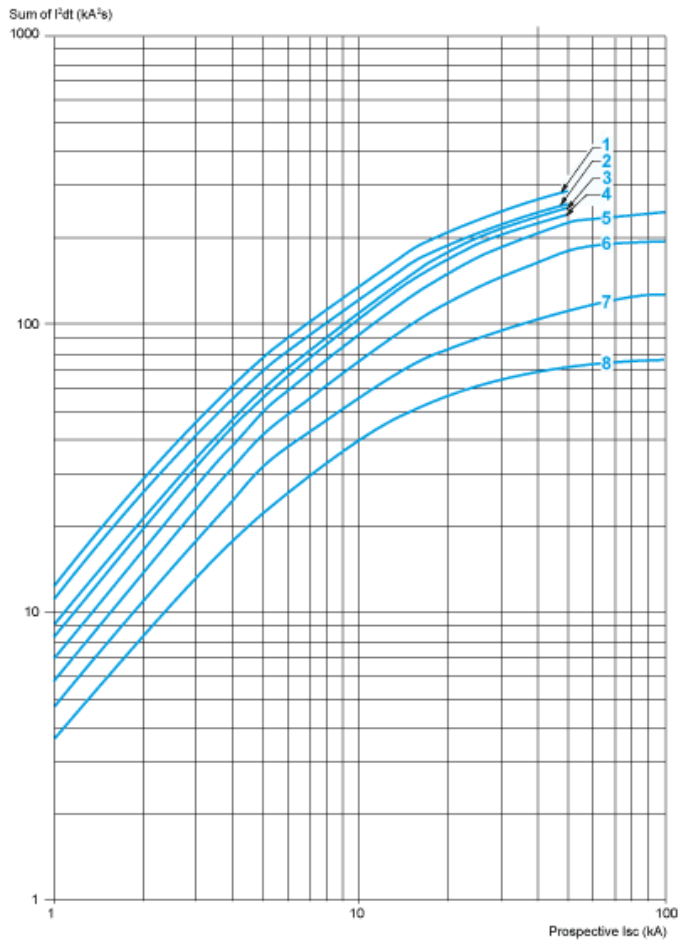


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

### Maximum Thermal Limit on Short-Circuit

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

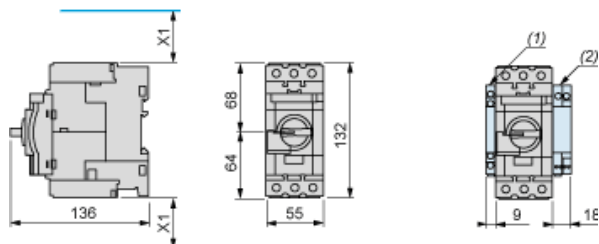
Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 \text{ V}$



- 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)

## GV3L, GV3P

### Dimensions



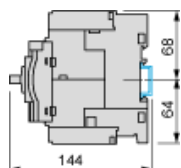
(1) Blocks GVAN..., GVAD... and GVAM11.

(2) Blocks GV3AU... and GV3AS...

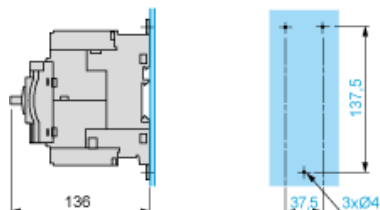
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

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.

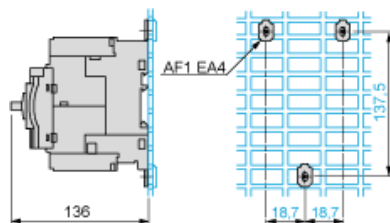
### Mounting on Rail AM1 DE200 or AM1 ED201



### Panel Mounting, using M4 Screws



### Mounting on Pre-Slotted Plate AM1 PA



GV3P..

