

# GV2P05

Motor circuit breaker, TeSys GV2, 3P, 0.63-1 A, thermal magnetic, screw clamp terminals



## Main

|                      |                  |
|----------------------|------------------|
| Range                | TeSys            |
| Product name         | TeSys GV2        |
| Device short name    | GV2P             |
| 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 2 x M4 screws)                                                                                                                                                                                                                                            |
| Operating position                                  | Any position                                                                                                                                                                                                                                                                                                          |
| Motor power kW                                      | 0.25 kW at 400/415 V AC 50/60 Hz<br>0.55 kW at 690 V AC 50/60 Hz                                                                                                                                                                                                                                                      |
| Breaking capacity                                   | 100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>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                          |
| Control type                                        | Rotary knob                                                                                                                                                                                                                                                                                                           |
| [In] rated current                                  | 1 A                                                                                                                                                                                                                                                                                                                   |
| Thermal protection adjustment range                 | 0.63...1 A                                                                                                                                                                                                                                                                                                            |

|                                             |                                             |
|---------------------------------------------|---------------------------------------------|
| Magnetic tripping current                   | 13 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 | 1 A conforming to IEC 60947-4-1             |
| [Uimp] rated impulse withstand voltage      | IEC 60947-2 6 kV                            |
| Power dissipation per pole                  | 2.5 W                                       |
| Mechanical durability                       | 100000 cycles                               |
| Electrical durability                       | 100000 cycles for AC-3 at 440 V             |
| Maximum operating rate                      | 25 cyc/h                                    |
| Rated duty                                  | Continuous conforming to IEC 60947-4-1      |
| Tightening torque                           | 1.7 N.m on screw clamp terminals            |
| Suitability for isolation                   | Yes conforming to IEC 60947-1               |
| Phase failure sensitivity                   | Yes conforming to IEC 60947-4-1             |
| Height                                      | 89 mm                                       |
| Width                                       | 45 mm                                       |
| Depth                                       | 97 mm                                       |

## Environment

|                                       |                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 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 conforming to IEC 60529                                                                                     |
| IK degree of protection               | IK04                                                                                                             |
| 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                    | 2000 m                                                                                                           |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 264 g    |
| Package 1 Height             | 4.8 cm   |
| Package 1 width              | 9.3 cm   |
| Package 1 Length             | 10 cm    |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 20       |
| Package 2 Weight             | 5.612 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 320      |

|                  |            |
|------------------|------------|
| Package 3 Weight | 109.115 kg |
| Package 3 Height | 80 cm      |
| Package 3 width  | 80 cm      |
| Package 3 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 |

### 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

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

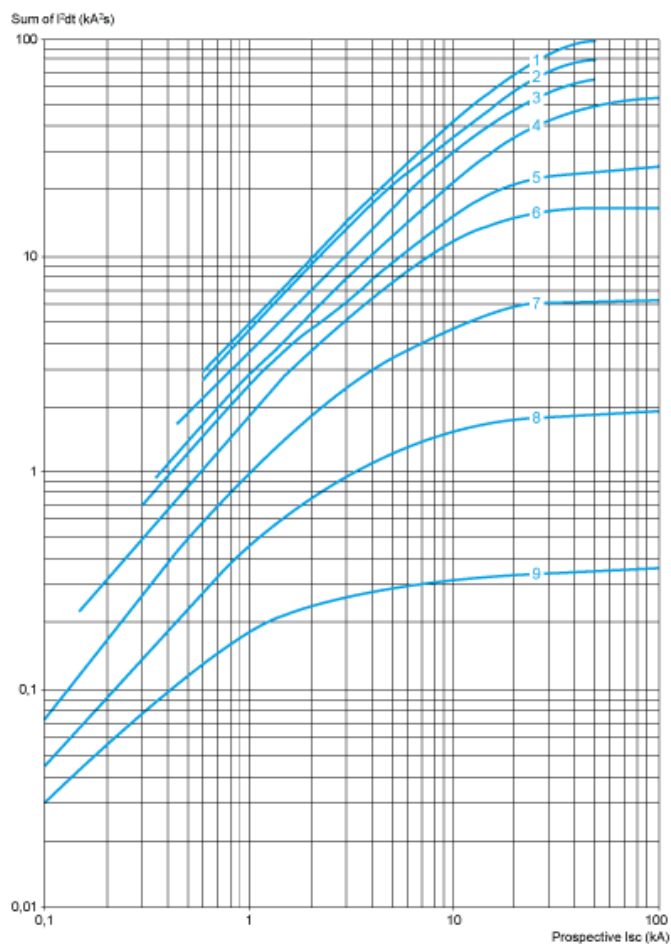


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2P

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

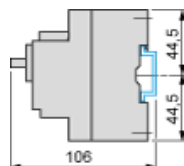
Sum of  $I^2dt = f$  (prospective  $I_{sc}$ ) at  $1.05 U_e = 435 \text{ V}$



- 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

## GV2P

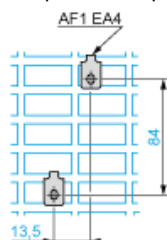
On rail AM1 DE200, ED200 (35 x 15)



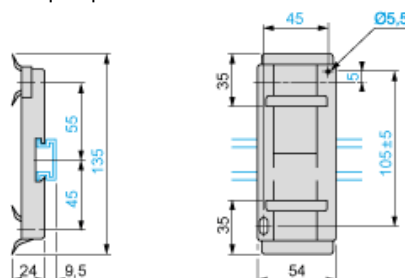
Panel mounted



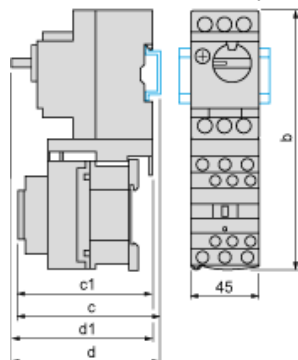
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



Combination GV2P + TeSys d contactor

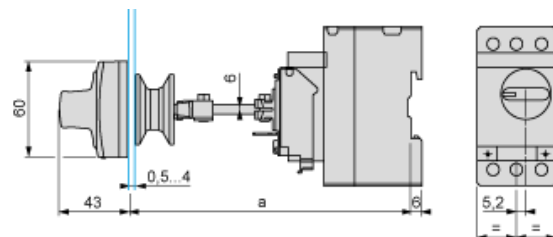


| GV2P + | LC1D09...D18 | LC1D25 and D32 |
|--------|--------------|----------------|
| b      | 176.4        | 186.8          |
| c1     | 100.1        | 106.4          |

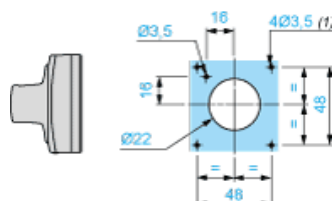
|        |              |                |
|--------|--------------|----------------|
| GV2P + | LC1D09...D18 | LC1D25 and D32 |
| c      | 105.6        | 111.9          |
| d1     | 95           | 95             |
| d      | 100.5        | 100.5          |

## Mounting

Mounting of External Operator GV2APN01, GV2APN02 or GV2APN04 for Motor Circuit Breakers GV2P

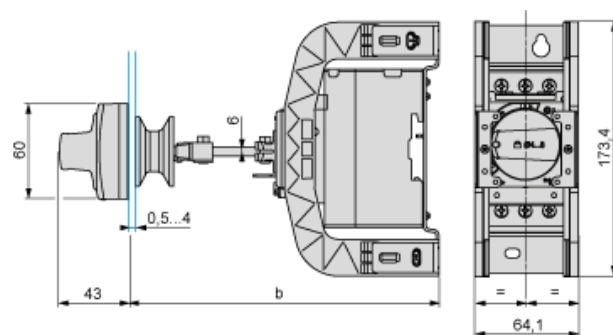


Door cut-out



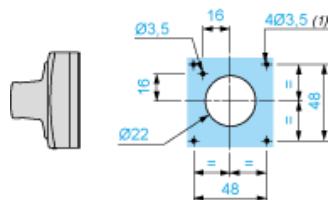
(1) For IP65 only.

Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2P



|                              | a       |         | b       |         |
|------------------------------|---------|---------|---------|---------|
|                              | Minimum | Maximum | Minimum | Maximum |
| GV2APN..                     | 140     | 250     | –       | –       |
| GV2APN.. + GVAPH02           | –       | –       | 151     | 250     |
| GV2APN.. + GVAPK11           | 250     | 434     | –       | –       |
| GV2APN.. + GVAPH02 + GVAPK11 | –       | –       | 250     | 445     |

Door cut-out



(1) For IP65 only.

GV2P••

