

# Product datasheet

Specifications



## Motor circuit breaker, TeSys GV2, 3P, 20-25 A, thermal magnetic, screw clamp terminals

Local distributor code: 20569042    GV2P22

### Main

|                           |                          |
|---------------------------|--------------------------|
| Range of product          | TeSys GV2                |
| Range                     | TeSys Deca<br>TeSys Deca |
| Device short name         | GV2P                     |
| Product name              | TeSys GV2<br>TeSys Deca  |
| Product or component type | Motor circuit breaker    |
| Device application        | Motor protection         |
| 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                                      | 11 kW at 400/415 V AC 50/60 Hz<br>15 kW at 500 V AC 50/60 Hz                                                                                                                                                                                                                                                     |
| Breaking capacity                                   | 100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>4 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2<br>20 kA Icu at 440 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 |
| [Ics] rated service short-circuit breaking capacity | 100 % at 690 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>75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2<br>75 % at 440 V AC 50/60 Hz conforming to IEC 60947-2                        |
| Control type                                        | Rotary handle                                                                                                                                                                                                                                                                                                    |
| [In] rated current                                  | 25 A                                                                                                                                                                                                                                                                                                             |
| Thermal protection adjustment range                 | 20...25 A                                                                                                                                                                                                                                                                                                        |
| Magnetic tripping current                           | 327 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 | 25 A conforming to IEC 60947-4-1                                                                       |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947-2                                                                         |
| Power dissipation per pole                  | 2.5 W                                                                                                  |
| Mechanical durability                       | 100000 cycles                                                                                          |
| Electrical durability                       | 100000 cycles for AC-3 at 415 V at 415 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                                                                       |
| Mechanical robustness                       | Shocks: 30 Gn conforming to IEC 60068-2-27<br>Vibrations: 5 Gn, 5...150 Hz conforming to IEC 60068-2-6 |
| Phase failure sensitivity                   | Yes conforming to IEC 60947-4-1                                                                        |
| Height                                      | 89 mm                                                                                                  |
| Width                                       | 45 mm                                                                                                  |
| Depth                                       | 97 mm                                                                                                  |
| Colour                                      | Dark grey                                                                                              |
| Suitability for isolation                   | Yes conforming to IEC 60947-1 § 7-1-6                                                                  |

## Environment

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1                                                                    |
| Product certifications                | CCC<br>UL<br>CSA<br>EAC<br>ATEX<br>BV<br>LROS (Lloyds register of shipping)<br>UKCA<br>DNV-GL<br>RINA |
| Climatic withstand                    | conforming to IACS E10                                                                                |
| IK degree of protection               | IK04                                                                                                  |
| IP degree of protection               | IP20 conforming to IEC 60529                                                                          |
| Ambient air temperature for storage   | -40...80 °C                                                                                           |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-11                                                                   |
| Operating altitude                    | 2000 m                                                                                                |
| Ambient air temperature for operation | -20...60 °C                                                                                           |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 339.0 g |
| Package 1 Height             | 4.6 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             | 7.106 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             | 124.26 kg |
| Package 3 Height             | 77 cm     |
| Package 3 width              | 60 cm     |
| Package 3 Length             | 80 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>                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</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 (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V

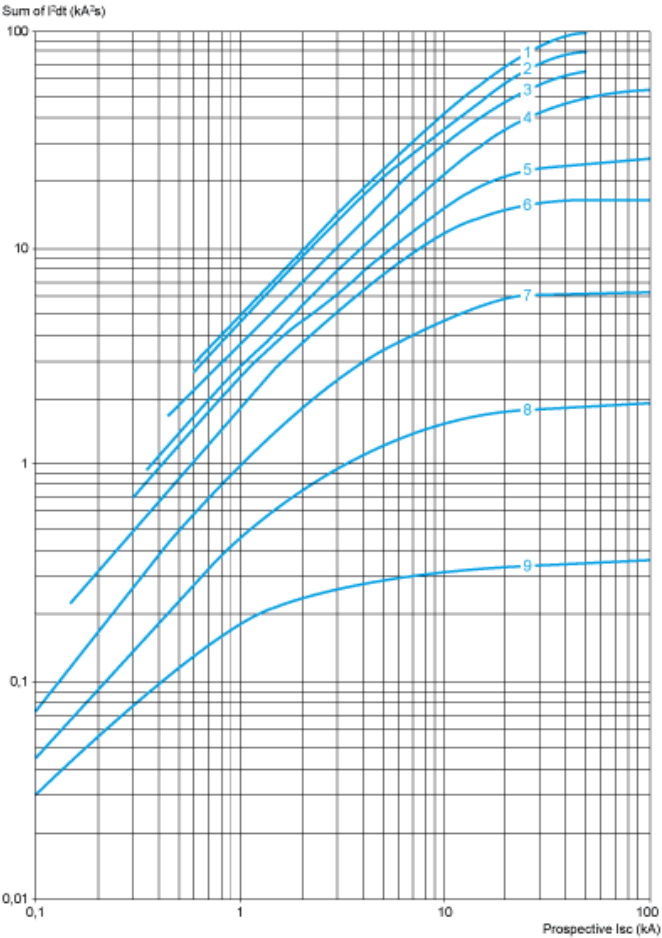


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2P

Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone

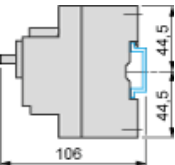
Sum of I<sup>2</sup>dt = f (prospective Isc) at 1.05 Ue = 435 V



- 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

GV2P

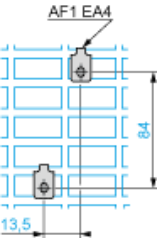
On rail AM1 DE200, ED200 (35 x 15)



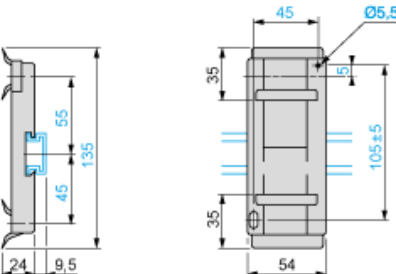
Panel mounted



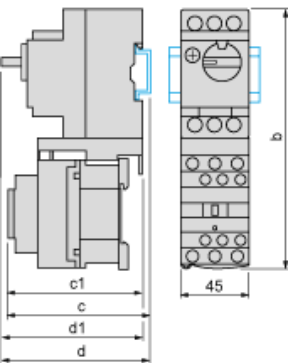
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



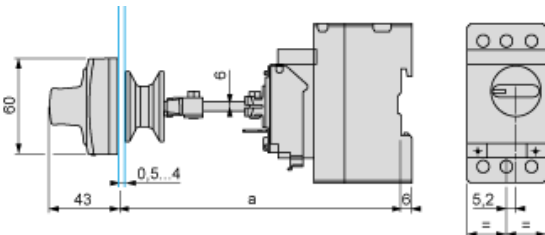
Combination GV2P + TeSys d contactor



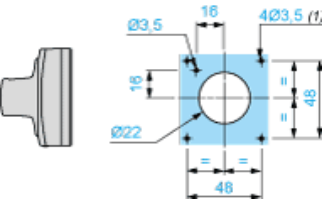
| GV2P + | LC1D09...D18 | LC1D25 and D32 |
|--------|--------------|----------------|
| b      | 176.4        | 186.8          |
| c1     | 100.1        | 106.4          |
| c      | 105.6        | 111.9          |
| d1     | 95           | 95             |
| d      | 100.5        | 100.5          |

Mounting

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

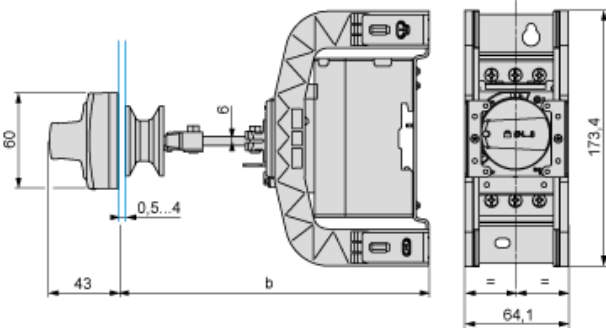


Door cut-out



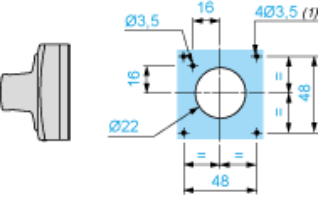
(1) For IP65 only.

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••

