

## Product data sheet

### Characteristics

# GV2P04

Motor circuit breaker, TeSys Deca, 3P, 0.4 to 0.63A, thermal magnetic, screw clamp terminals, rotary handle



### Main

|                           |                         |
|---------------------------|-------------------------|
| Range                     | TeSys Deca              |
| Product name              | TeSys GV2<br>TeSys Deca |
| Product or component type | Motor circuit breaker   |
| Device short name         | GV2P                    |
| Device application        | Motor protection        |
| Trip unit technology      | Thermal-magnetic        |

### Complementary

|   |   |
|---|---|
| Poles description                                   | 3P  |
| Network type  | AC  |
| Utilisation category                                | Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1  |
| 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)  |
| Motor power kW                                      | 0.12 kW at 400/415 V AC 50/60 Hz<br>0.18 kW at 400/415 V AC 50/60 Hz<br>0.37 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 230/240 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>100 % at 440 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 690 V AC 50/60 Hz conforming to IEC 60947-2                          |
| Control type  | Rotary handle   |
| [In] rated current                                  | 0.63 A  |
| Thermal protection adjustment range                 | 0.4...0.63 A conforming to IEC 60947-4-1  |
| Magnetic tripping current                           | 8 A   |
| [Ith] conventional free air thermal current         | 0.63 A conforming to IEC 60947-4-1  |
| [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   |
| [Uimp] rated impulse withstand voltage              | 6 kV conforming to IEC 60947-2  |
| Phase failure sensitivity                           | Yes conforming to IEC 60947-4-1   |
| Suitability for isolation                           | Yes conforming to IEC 60947-1 § 7-1-6   |
| Power dissipation per pole                          | 2.5 W   |
| Mechanical durability                               | 100000 cycles   |
| Electrical durability                               | 100000 cycles for AC-3 at 415 V In  |
| Rated duty  | Continuous conforming to IEC 60947-4-1  |
| Tightening torque                                   | 1.7 N.m - on screw clamp terminal   |

|        |           |
|--------|-----------|
| Width  | 45 mm     |
| Height | 89 mm     |
| Depth  | 97 mm     |
| Colour | Dark grey |

## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | EN/IEC 60947-2<br>EN/IEC 60947-4-1  |
| Product certifications                | CCC<br>UL<br>CSA<br>EAC<br>ATEX<br>LROS (Lloyds register of shipping)<br>BV<br>RINA<br>DNV-GL<br>UKCA |
| IK degree of protection               | IK04  |
| IP degree of protection               | IP20 conforming to IEC 60529  |
| Climatic withstand                    | Conforming to IACS E10  |
| Ambient air temperature for storage   | -40...80 °C   |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-11   |
| Ambient air temperature for operation | -20...60 °C   |
| Mechanical robustness                 | Shocks: 30 Gn for 11 ms<br>Vibrations: 5 Gn, 5...150 Hz   |
| Operating altitude                    | 2000 m  |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | Db        |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 9.300 cm  |
| Package 1 Width              | 10.000 cm |
| Package 1 Length             | 4.600 cm  |
| Package 1 Weight             | 269.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 20        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 5.585 kg  |

## Offer Sustainability

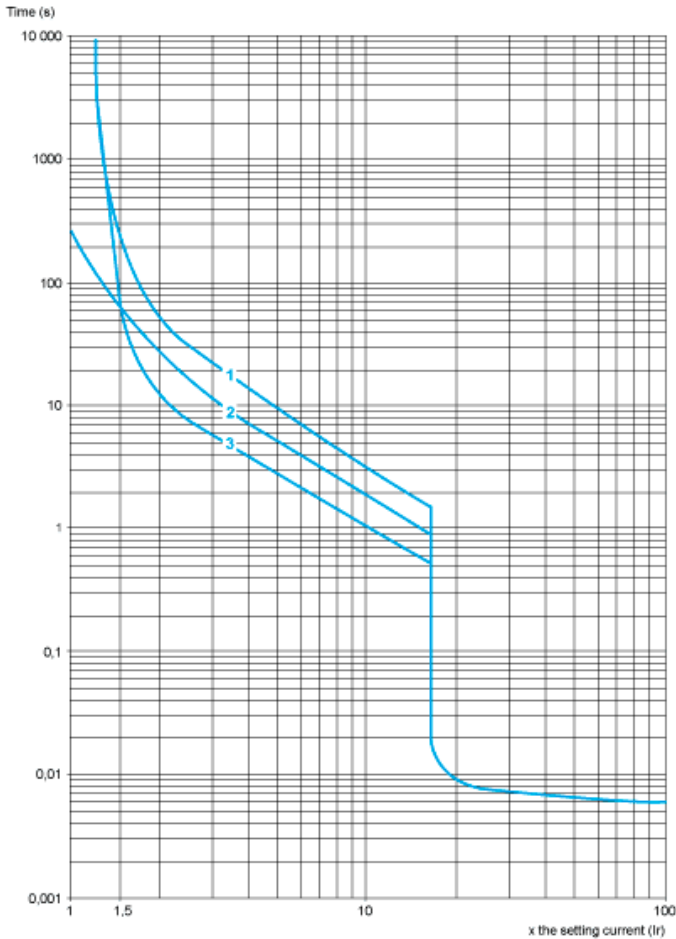
|                            |   |
|----------------------------|---|
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</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

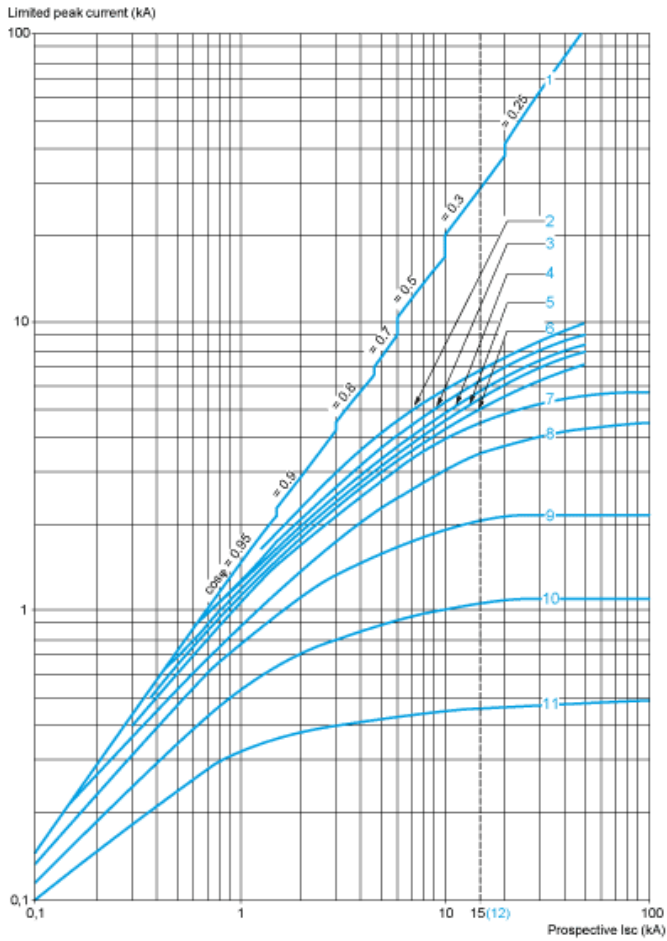


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

Current Limitation on Short-Circuit for GV2ME and GV2P (3-Phase 400/415 V)

Dynamic Stress

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

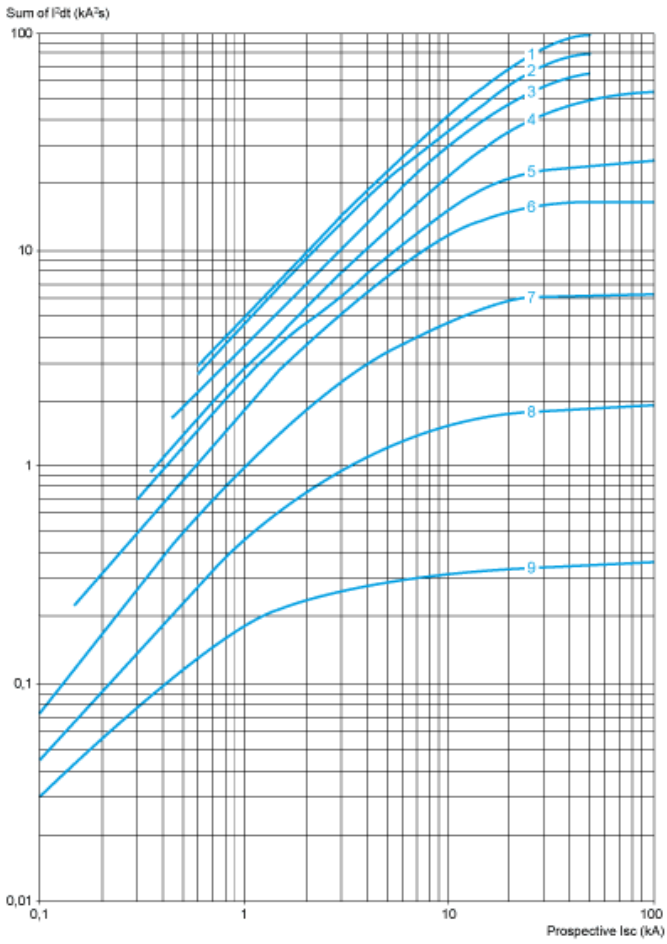


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2P

Thermal Limit in  $kA^2s$  in the Magnetic Operating Zone

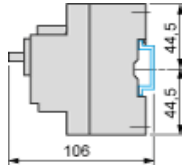
Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 V$



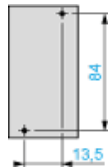
- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
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GV2P

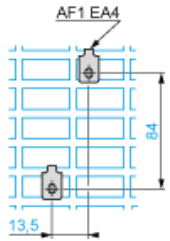
On rail AM1 DE200, ED200 (35 x 15)



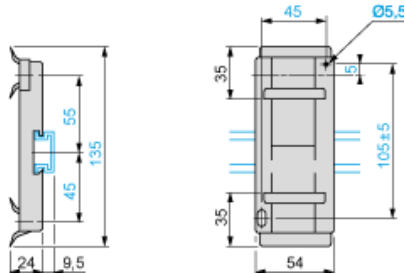
Panel mounted



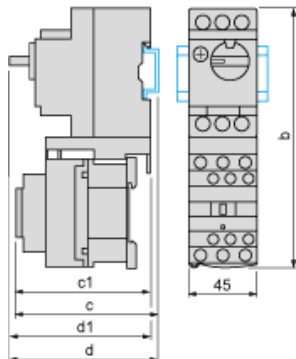
On pre-slotted plate AM1 PA



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

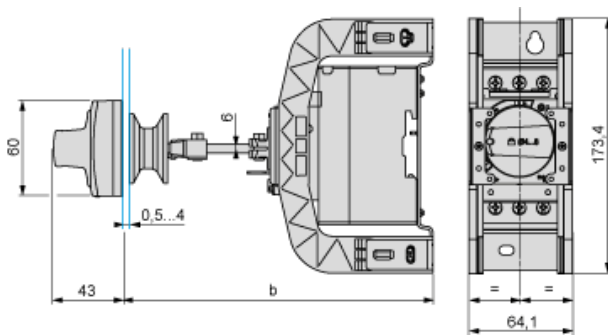


Door cut-out



(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••

