

Product datasheet

Specifications



Motor circuit breaker, TeSys GV2, 3P, 17-23 A, thermal magnetic, screw clamp terminals

GV2P21

Main

| | |
|---------------------------|-------------------------|
| Range | TeSys Deca |
| Product name | TeSys GV2 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 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 Panel: screwed (with 2 x M4 screws) |
| Motor power kW | 9 kW at 400/415 V AC 50/60 Hz 11 kW at 500 V AC 50/60 Hz 18.5 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 50 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 20 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 4 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 50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Control type | Rotary handle |
| [In] rated current | 23 A |
| Thermal protection adjustment range | 17...23 A conforming to IEC 60947-4-1 |
| Magnetic tripping current | 327 A |
| [Ith] conventional free air thermal current | 23 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 EN/IEC 60947-4-1 |
| Product certifications | CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL 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 Vibrations: 5 Gn, 5...150 Hz |
| Operating altitude | 2000 m |

Packing Units

| | |
|------------------------------|--------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.3 cm |
| Package 1 Width | 4.8 cm |
| Package 1 Length | 10 cm |
| Package 1 Weight | 338 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 20 |
| Package 2 Height | 15 cm |
| Package 2 Width | 30 cm |

| | |
|------------------------------|-----------|
| Package 2 Length | 40 cm |
| Package 2 Weight | 7.094 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 320 |
| Package 3 Height | 75 cm |
| Package 3 Width | 60 cm |
| Package 3 Length | 80 cm |
| Package 3 Weight | 123.94 kg |

Offer Sustainability

| | |
|--------------------------|---|
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| China RoHS Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| 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)

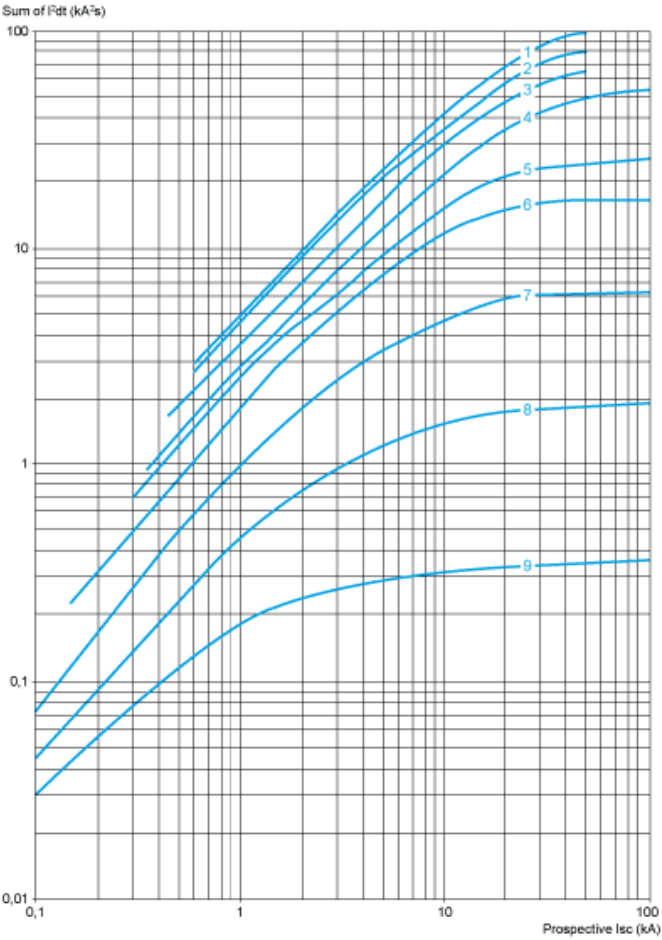
Dynamic Stress

I peak = f (prospective I_{sc}) at 1.05 U_e = 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).

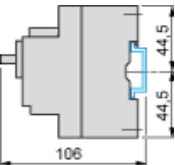
Thermal Limit on Short-Circuit for GV2P
Thermal Limit in kA²s in the Magnetic Operating Zone
Sum of I²dt = f (prospective Isc) at 1.05 Ue = 435 V



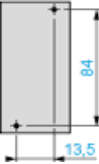
- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

GV2P

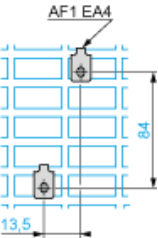
On rail AM1 DE200, ED200 (35 x 15)



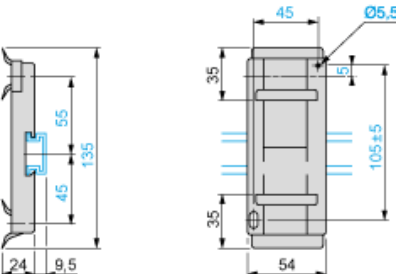
Panel mounted



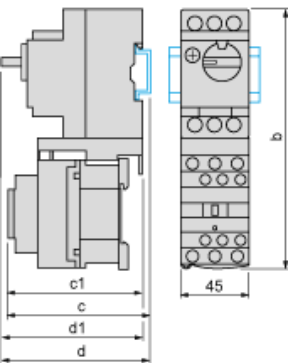
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



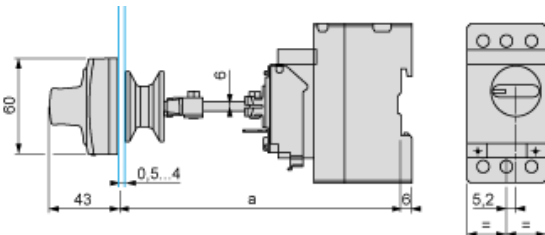
Combination GV2P + TeSys d contactor



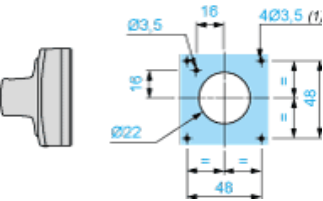
| GV2P + | LC1D09...D18 | LC1D25 and D32 |
|--------|--------------|----------------|
| b | 176.4 | 186.8 |
| c1 | 100.1 | 106.4 |
| c | 105.6 | 111.9 |
| d1 | 95 | 95 |
| d | 100.5 | 100.5 |

Mounting

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

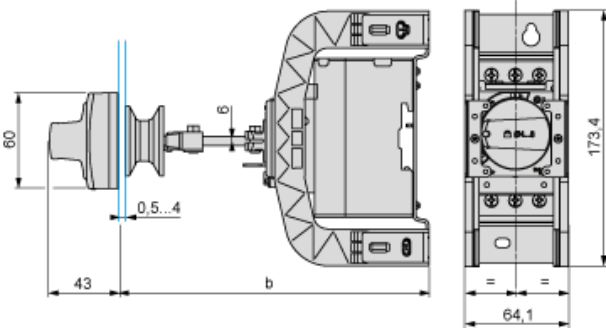


Door cut-out



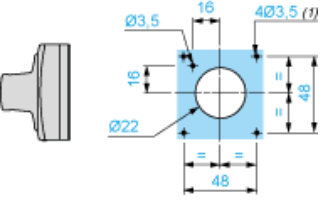
(1) For IP65 only.

Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2P



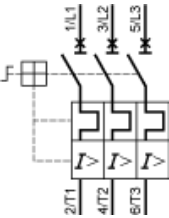
| | a | | b | |
|------------------------------|---------|---------|---------|---------|
| | Minimum | Maximum | Minimum | Maximum |
| GV2APN.. | 140 | 250 | – | – |
| GV2APN.. + GVAPH02 | – | – | 151 | 250 |
| GV2APN.. + GVAPK11 | 250 | 434 | – | – |
| GV2APN.. + GVAPH02 + GVAPK11 | – | – | 250 | 445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

Door cut-out



(1) For IP65 only.

GV2P••



Recommended replacement(s)