# **Product datasheet**





## Motor circuit breaker, TeSys GV4, 3P, 2A, Icu 50kA, thermal magnetic, lugs terminals

GV4PE02N6

## Main

| Range Of Product          | TeSys GV4                   |
|---------------------------|-----------------------------|
| Range                     | TeSys Deca<br>TeSys Deca    |
| Device Short Name         | GV4PE                       |
| Product Name              | TeSys GV4<br>TeSys Deca     |
| Product Or Component Type | Motor circuit breaker       |
| Device Application        | Motor protection            |
| Trip Unit Technology      | Thermal-magnetic Electronic |

#### Complementary

| Poles Description              | 3P   |
|--------------------------------|--|
| Utilisation Category           | Category A conforming to IEC 60947-2                         |
|                                | AC-3 conforming to IEC 60947-4-1                             |
| Operating Position             | Any position   |
| Motor Power Kw                 | 0.25 kW at 400415 V AC 50/60 Hz                              |
|                                | 0.37 kW at 400415 V AC 50/60 Hz                              |
|                                | 0.55 kW at 400415 V AC 50/60 Hz                              |
|                                | 0.75 kW at 400415 V AC 50/60 Hz                              |
|                                | 0.37 kW at 500 V AC 50/60 Hz                                 |
|                                | 0.55 kW at 500 V AC 50/60 Hz                                 |
|                                | 0.75 kW at 500 V AC 50/60 Hz                                 |
|                                | 1.1 kW at 500 V AC 50/60 Hz                                  |
|                                | 0.55 kW at 660690 V AC 50/60 Hz                              |
|                                | 0.75 kW at 660690 V AC 50/60 Hz                              |
|                                | 1.1 kW at 660690 V AC 50/60 Hz                               |
|                                | 1.5 kW at 660690 V AC 50/60 Hz                               |
| Breaking Capacity              | 100 kA Icu at 220240 V AC 50/60 Hz conforming to IEC 60947-2 |
|                                | 50 kA Icu at 380415 V AC 50/60 Hz conforming to IEC 60947-2  |
|                                | 50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2     |
|                                | 15 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2     |
|                                | 65 kA at 208Y/120 V AC 50/60 Hz conforming to UL 60947       |
|                                | 65 kA at 240 V AC 50/60 Hz conforming to UL 60947            |
|                                | 35 kA at 480Y/277 V AC 50/60 Hz conforming to UL 60947       |
|                                | 8 kA Icu at 660690 V AC 50/60 Hz conforming to IEC 60947-2   |
|                                | 25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2     |
|                                | 18 kA at 600Y/347 V AC 50/60 Hz conforming to UL 60947       |
| Control Type                   | Toggle   |
| [In] Rated Current             | 2 A  |
| Magnetic Tripping Current      | 34 A   |
| [Ue] Rated Operational Voltage | 690 V AC 50/60 Hz conforming to IEC 60947-2                  |
| [Ui] Rated Insulation Voltage  | 800 V AC 50/60 Hz conforming to IEC 60947-2                  |

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| [Ith] Conventional Free Air<br>Thermal Current | 115 A conforming to IEC 60947-4-1  |
|--|--|
| [Uimp] Rated Impulse Withstand Voltage         | 8 kV conforming to IEC 60947-2   |
| Power Dissipation Per Pole                     | 4.6 W  |
| Mechanical Durability                          | 40000 cycles   |
| Electrical Durability                          | 40000 cycles for AC-3 at 440 V In/2<br>40000 cycles for AC-3 at 440 V In   |
| Maximum Operating Rate                         | 25 cyc/h   |
| Rated Duty                                     | Continuous conforming to IEC 60947-4-1   |
| Connection Pitch                               | 27 mm without spreaders<br>35 mm with spreaders  |
| Connections - Terminals                        | Lugs-ring terminals  |
| Tightening Torque                              | 9 N.m for cable 1695 mm <sup>2</sup><br>5 N.m for cable 1.510 mm <sup>2</sup>  |
| Mechanical Robustness                          | Vibrations: +/- 1 mm 213.2 Hz conforming to IEC 60068-2-6<br>Vibrations: 0.7 gn 13.2100 Hz conforming to IEC 60068-2-6<br>Shocks: 15 gn 11 ms conforming to IEC 60068-2-27 |
| Phase Failure Sensitivity                      | Yes conforming to IEC 60947-4-1  |
| Height   | 155 mm   |
| Width  | 81 mm  |
| Depth  | 116 mm   |
| Net Weight                                     | 1.45 kg  |
| Colour   | Grey (RAL 7016)  |
| Suitability For Isolation                      | Yes conforming to IEC 60947-1  |
| Environment                                    |  |
| Standards                                      | CSA C22.2 No 60947-4-1<br>UL 60947-4-1   |
|  | EN/IEC 60947-4-1<br>EN/IEC 60947-2   |
| Product Certifications                         | IEC<br>UL  |
|  | CSA  |
|  | CCC  |
|  | EAC  |
|  | ATEX<br>EU-RO MR   |
| Climatic Withstand                             | conforming to IACS E10   |
| Ik Degree Of Protection                        | IK07 conforming to IEC 62262   |
| Pollution Degree                               | 3  |
| Ip Degree Of Protection                        | IP40 conforming to IEC 60529   |
| Ambient Air Temperature For Storage            | -5085 °C   |
| Fire Resistance                                | 960 °C conforming to IEC 60695-2-11  |
| Operating Altitude                             | 5000 m   |
| Ambient Air Temperature For<br>Operation       | -2570 °C   |
| Packing Units                                  |  |
| Helt Torre Of Berliner 4                       |  |

PCE

Unit Type Of Package 1

| Number Of Units In Package 1 | 1        |
|------------------------------|----------|
| Package 1 Height             | 16.5 cm  |
| Package 1 Width              | 11 cm    |
| Package 1 Length             | 22 cm    |
| Package 1 Weight             | 1.478 kg |
| Unit Type Of Package 2       | S03      |
| Number Of Units In Package 2 | 5        |
| Package 2 Height             | 30 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 9.5 kg   |
| Unit Type Of Package 3       | PAL      |
| Number Of Units In Package 3 | 256      |
| Package 3 Height             | 110 cm   |
| Package 3 Width              | 80 cm    |
| Package 3 Length             | 120 cm   |
| Package 3 Weight             | 396 kg   |

## **Contractual warranty**

Warranty 18 months



**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance

| <b>Ø</b> | Mercury Free                       |
|----------|------------------------------------|
| <b>⊘</b> | Rohs Exemption Information Yes     |
| <b>Ø</b> | Pvc Free                           |
| <b>⊘</b> | Halogen Free Plastic Parts Product |

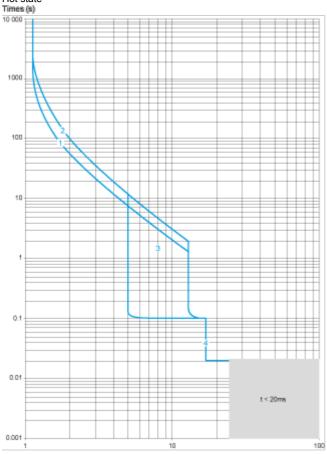
### **Certifications & Standards**

| Reach Regulation         | REACh Declaration   |
|--------------------------|---|
| Eu Rohs Directive        | Compliant with Exemptions   |
| China Rohs Regulation    | China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information                         |
| Environmental Disclosure | Product Environmental Profile   |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | End of Life Information   |

#### Performance Curves

## Thermal-Magnetic Tripping Curves for GV4P, GV4PE, GV4PEM

Average Operating Times at 20  $^{\circ}\text{C}$  Related to Multiples of the Setting Current Hot state



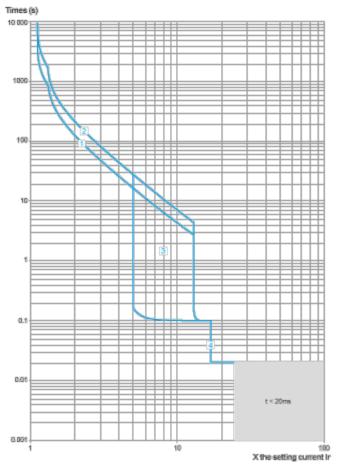
X the setting current in

- 1 Class 10
- 2 Class 20
- 3 lsd = 5...13x lr
- 4 li = 17 ln

Cold state

## **Product datasheet**

#### GV4PE02N6

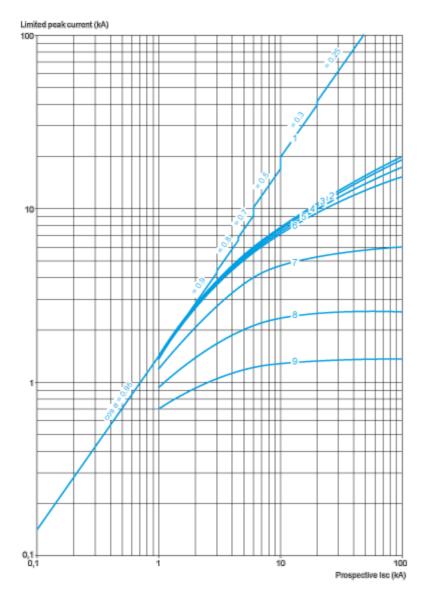


- 1 Class 10
- 2 Class 20
- 3 Isd = 5...13x Ir
- 4 li = 17 ln

## Current Limitation on Short-Circuit for GV4P, GV4PE, GV4PEM (3-Phase 400/415 V)

#### **Dynamic Stress**

I peak = f (prospective lsc) at 1.05 Ue = 435 V



- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

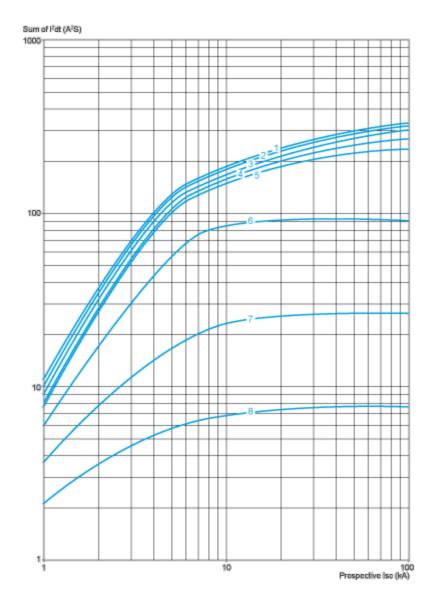
#### Thermal Limit on Short-Circuit for GV4P, GV4PE, GV4PEM

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

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

## **Product datasheet**

## GV4PE02N6

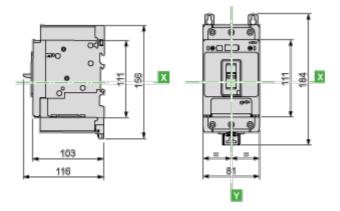


- GV4P115
- GV4P80 2
- GV4P50 3
- 4 GV4P25
- 5 GV4P12
- GV4P07 6
- GV4P03 7
- GV4P02 8

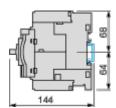
#### **Dimensions Drawings**

#### GV4 with Toggle: GV4LE, GV4PE, GV4PEM

With EverLink® Connector

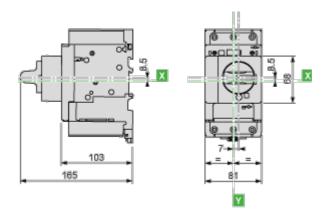


#### With Crimp Lug Connector



# GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

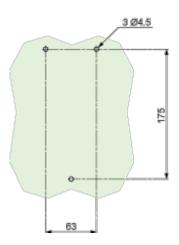
Dimensions



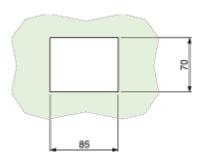
#### GV4L, GV4P, GV4LE, GV4PE, GV4PEM

Panel Mounting with M4 Screws

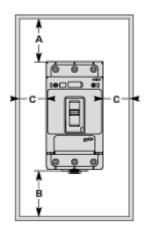
## GV4PE02N6



#### **Door Cut-Out for Rotary Handle**



#### **Minimum Safety Clearance**



Toggle-type, rotary handle-type: identical clearance values.

| Safety Clearance (mm) |                     |   |   |                  |   |   |
|-----------------------|---------------------|---|---|------------------|---|---|
|                       | Painted Sheet Metal |   |   | Bare Sheet Metal |   |   |
|                       | Α                   | В | С | Α                | В | С |
| No accessory          | 30                  | 0 | 0 | 40               | 0 | 5 |
| Interphase barriers   | 0                   | 0 | 0 | 0                | 0 | 5 |
| Long terminal shield  | 0                   | 0 | 0 | 0                | 0 | 5 |

## GV4PE02N6

#### Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM

