

# Product data sheet

Specifications



## Motor circuit breaker, TeSys GV4, 3P, 25A, Icu 100kA, thermal magnetic, lugs terminals

GV4PE25S6

 **Discontinued on:** Dec 29, 2023

 **Discontinued**

### 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      | Electronic<br>Thermal-magnetic |

### Complementary

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Poles Description         | 3P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Utilisation Category      | Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Operating Position        | Any position                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Motor Power Kw            | 7.5 kW at 660...690 V AC 50/60 Hz<br>5.5 kW at 400...415 V AC 50/60 Hz<br>7.5 kW at 500 V AC 50/60 Hz<br>9 kW at 660...690 V AC 50/60 Hz<br>11 kW at 660...690 V AC 50/60 Hz<br>7.5 kW at 400...415 V AC 50/60 Hz<br>9 kW at 400...415 V AC 50/60 Hz<br>11 kW at 400...415 V AC 50/60 Hz<br>9 kW at 500 V AC 50/60 Hz<br>11 kW at 500 V AC 50/60 Hz<br>15 kW at 500 V AC 50/60 Hz<br>15 kW at 660...690 V AC 50/60 Hz<br>18.5 kW at 660...690 V AC 50/60 Hz                                                                                                                                                                   |
| Breaking Capacity         | 120 kA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>70 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA at 208Y/120 V AC 50/60 Hz conforming to UL 60947<br>100 kA at 240 V AC 50/60 Hz conforming to UL 60947<br>65 kA at 480Y/277 V AC 50/60 Hz conforming to UL 60947<br>10 kA Icu at 660...690 V AC 50/60 Hz conforming to IEC 60947-2<br>25 kA at 600Y/347 V AC 50/60 Hz conforming to UL 60947 |
| Control Type              | Toggle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [In] Rated Current        | 25 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Magnetic Tripping Current | 425 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                             |                                                                                                                                                                                  |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [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                                                                                                                                      |
| [Ith] Conventional Free Air 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>20000 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 16...95 mm²<br>5 N.m for cable 1.5...10 mm²                                                                                                                      |
| Mechanical Robustness                       | Vibrations: +/- 1 mm 2...13.2 Hz conforming to IEC 60068-2-6<br>Vibrations: 0.7 gn 13.2...100 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<br>EN/IEC 60947-4-1<br>EN/IEC 60947-2 |
| Product Certifications                | IEC<br>UL<br>CSA<br>CCC<br>EAC<br>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   | -50...85 °C                                                                  |
| Fire Resistance                       | 960 °C conforming to IEC 60695-2-11                                          |
| Operating Altitude                    | 5000 m                                                                       |
| Ambient Air Temperature For Operation | -25...70 °C                                                                  |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type Of Package 1       | PCE      |
| 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             | 1.424 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 | 216      |
| Package 3 Height             | 110 cm   |
| Package 3 Width              | 80 cm    |
| Package 3 Length             | 120 cm   |
| Package 3 Weight             | 328 kg   |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

# Sustainability

**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class 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

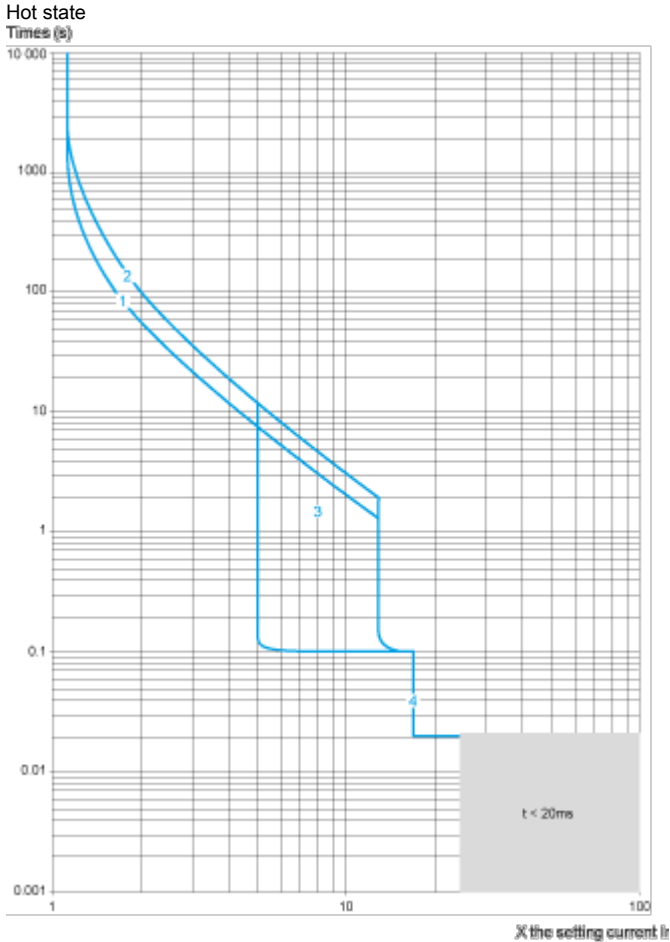
|   |                                    |     |
|---|------------------------------------|-----|
| ✓ | Mercury Free                       |     |
| ✓ | Rohs Exemption Information         | Yes |
| ✓ | Pvc Free                           |     |
| ✓ | Halogen Free Plastic Parts Product |     |

## Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive        | Compliant with Exemptions                                                                                                   |
| 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 |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                                     |

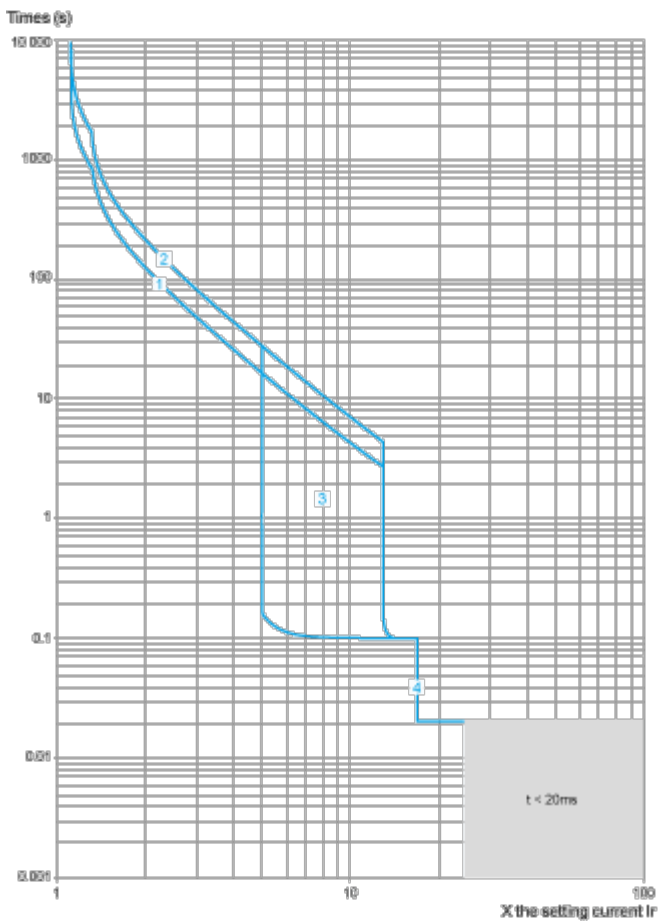
Performance Curves

Thermal-Magnetic Tripping Curves for GV4P, GV4PE, GV4PEM  
Average Operating Times at 20 °C Related to Multiples of the Setting Current



- 1 Class 10
- 2 Class 20
- 3  $I_{sd} = 5 \dots 13 \times I_r$
- 4  $I_i = 17 I_r$

Cold state

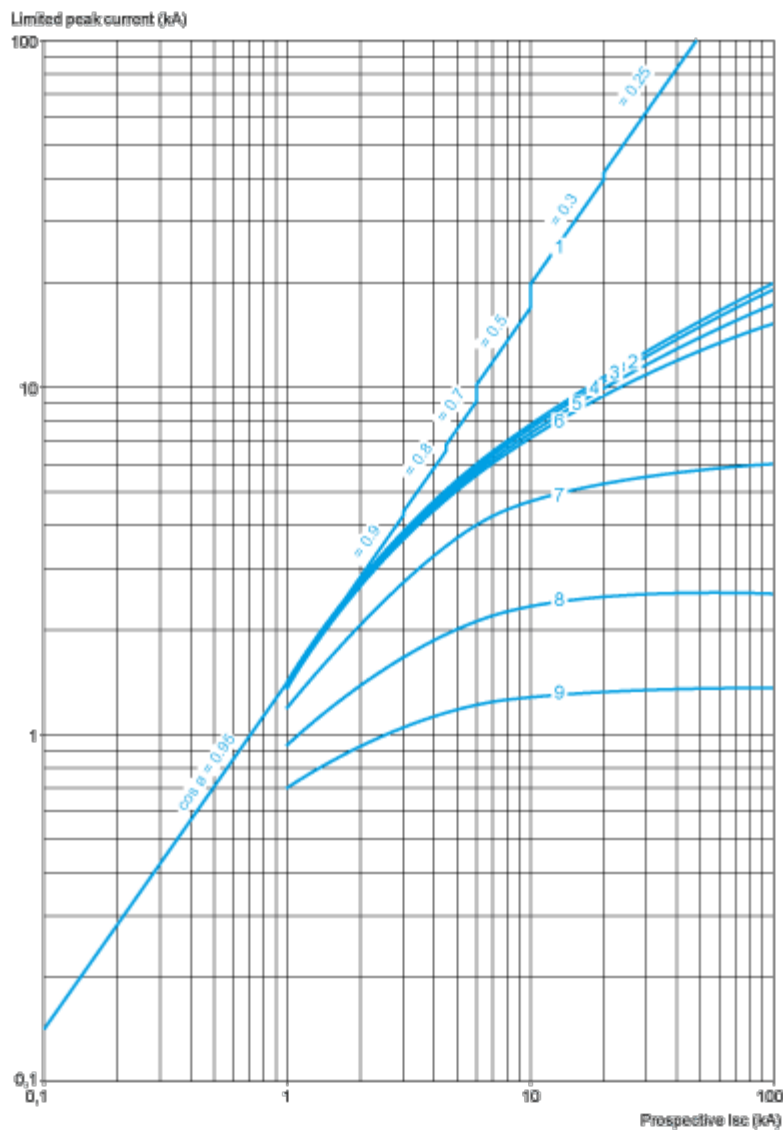


- 1 Class 10
- 2 Class 20
- 3  $I_{sd} = 5 \dots 13 \times I_r$
- 4  $I_i = 17 I_n$

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

Dynamic Stress

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

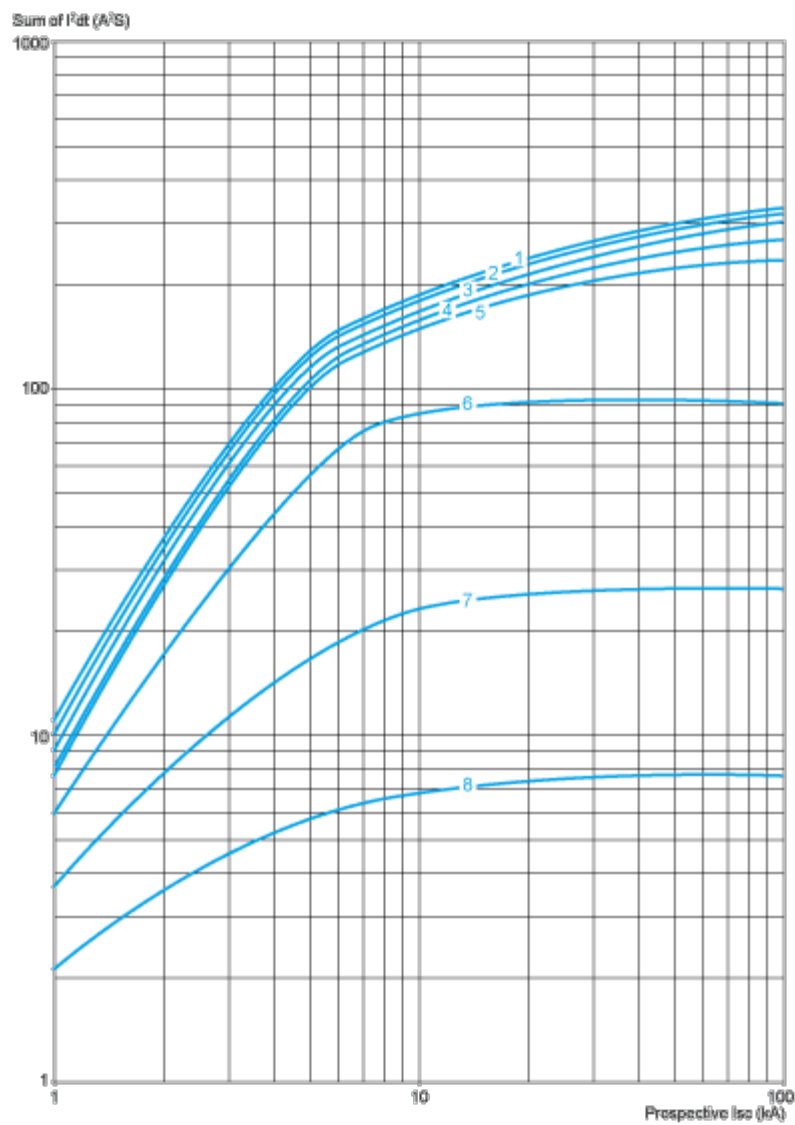


- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

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

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

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

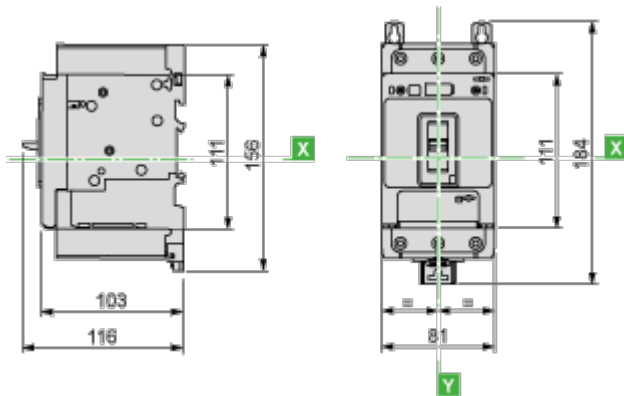


- 1 GV4P115
- 2 GV4P80
- 3 GV4P50
- 4 GV4P25
- 5 GV4P12
- 6 GV4P07
- 7 GV4P03
- 8 GV4P02

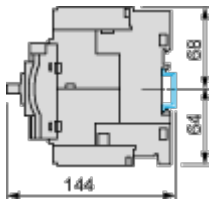


Dimensions Drawings

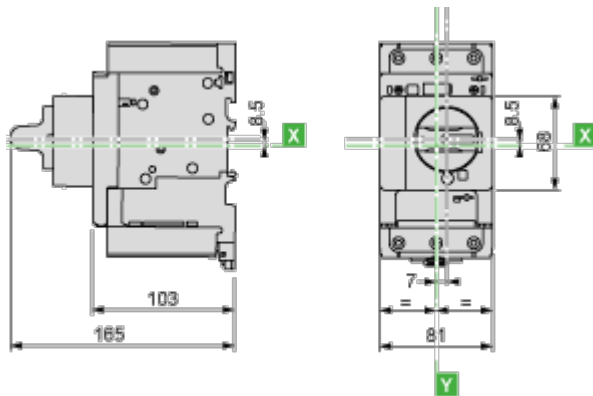
GV4 with Toggle: GV4LE, GV4PE, GV4PEM  
With EverLink® Connector



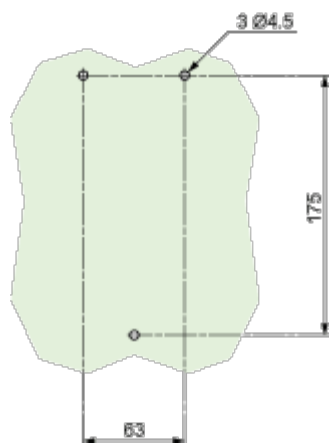
With Crimp Lug Connector



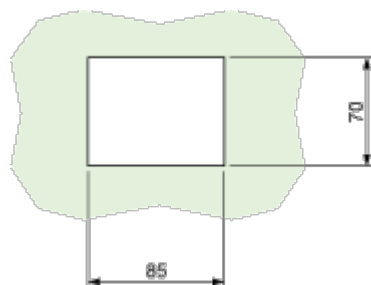
GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle  
Dimensions



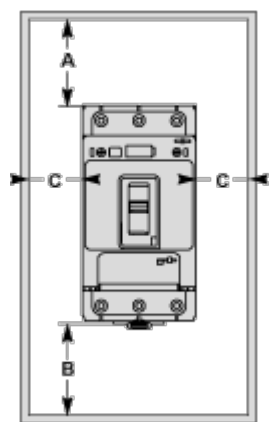
GV4L, GV4P, GV4LE, GV4PE, GV4PEM  
Panel Mounting with M4 Screws



Door Cut-Out for Rotary Handle



Minimum Safety Clearance



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

|                      | Painted Sheet Metal |   |   | Bare Sheet Metal |   |   |
|----------------------|---------------------|---|---|------------------|---|---|
|                      | A                   | B | C | A                | B | C |
| 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 |

Connections and Schema

Magnetic Motor Circuit Breakers  
GV4P, GV4PE, GV4PEM

