# **Product datasheet**

Specifications



Motor circuit breaker, TeSys GV4, 3P, 115A, Icu 100kA, thermal magnetic multifunction, Everlink terminals

GV4PEM115S

### Main

| Range Of Product          | TeSys GV4                      |
|---------------------------|--------------------------------|
| Range                     | TeSys Deca<br>TeSys Deca       |
| Device Short Name         | GV4PEM                         |
| Product Name              | TeSys GV4<br>TeSys Deca        |
| Product Or Component Type | Motor circuit breaker          |
| Device Application        | Motor protection               |
| Trip Unit Technology      | Thermal-magnetic<br>Electronic |

## Complementary

| Poles Description                              | 3P<br>Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1   |  |  |  |
|--|--|--|--|--|
| Utilisation Category                           |  |  |  |  |
| Operating Position                             | Any position   |  |  |  |
| Motor Power Kw                                 | 37 kW at 400415 V AC 50/60 Hz<br>45 kW at 400415 V AC 50/60 Hz<br>55 kW at 400415 V AC 50/60 Hz<br>45 kW at 500 V AC 50/60 Hz<br>55 kW at 500 V AC 50/60 Hz<br>75 kW at 500 V AC 50/60 Hz<br>75 kW at 660690 V AC 50/60 Hz<br>110 kW at 660690 V AC 50/60 Hz   |  |  |  |
| Breaking Capacity                              | 120 kA Icu at 220240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 380415 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 660690 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                             | 115 A  |  |  |  |
| Magnetic Tripping Current                      | 1955 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  |  |  |  |
| [Ith] Conventional Free Air<br>Thermal Current | 115 A conforming to IEC 60947-4-1  |  |  |  |

| [Uimp] Rated Impulse Withstand<br>Voltage | 8 kV conforming to IEC 60947-2   |  |  |  |  |
|---|--|--|--|--|--|
| Power Dissipation Per Pole                | 4.6 W  |  |  |  |  |
| Mechanical Durability                     | 40000 cycles   |  |  |  |  |
| Electrical Durability                     | 10000 cycles for AC-3 at 440 V In/2<br>5000 cycles for AC-3 at 440 V In  |  |  |  |  |
| Maximum Operating Rate                    | 25 cyc/h   |  |  |  |  |
| Rated Duty                                | Continuous conforming to IEC 60947-4-1   |  |  |  |  |
| Connections - Terminals                   | EverLink BTR screw connectors (top) 1 cable(s) 1.570 mm <sup>2</sup> - solid<br>EverLink BTR screw connectors (top) 1 cable(s) 1.550 mm <sup>2</sup> - flexible<br>EverLink BTR screw connectors (bottom) 1 cable(s) 2.595 mm <sup>2</sup> - solid<br>EverLink BTR screw connectors (bottom) 1 cable(s) 2.570 mm <sup>2</sup> - flexible |  |  |  |  |
| 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<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<br>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**

| Unit Type Of Package 1       | PCE     |
|------------------------------|---------|
| Number Of Units In Package 1 | 1       |
| Package 1 Height             | 12.5 cm |

| Package 1 Width  | 9.0 cm   |
|------------------|----------|
| Package 1 Length | 22.0 cm  |
| Package 1 Weight | 1.669 kg |

## **Contractual warranty**

Warranty

18 months

## Sustainability

**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.

Learn more >

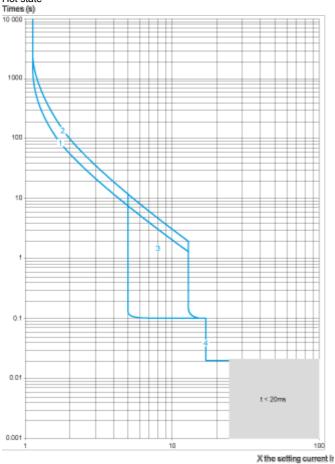
### Well-being performance

| Mercury Free                       |   |
|------------------------------------|---|
| Rohs Exemption Information         | Yes   |
| Pvc Free                           |   |
| Halogen Free Plastic Parts Product |   |
|                                    |   |
| 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   |
| Weee                               | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

#### Performance Curves

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

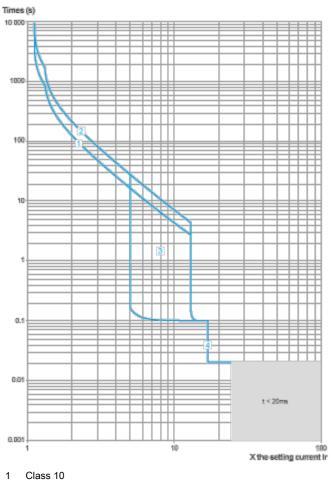
Average Operating Times at 20 °C Related to Multiples of the Setting Current Hot state



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

Cold state

## Product datasheet

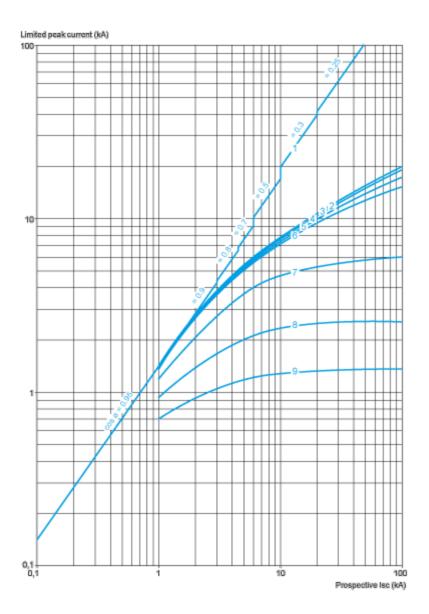


- 2 Class 20
- 3 Isd = 5...13x Ir
- 4 li = 17 ln

# 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

## Product datasheet GV4PEM115S



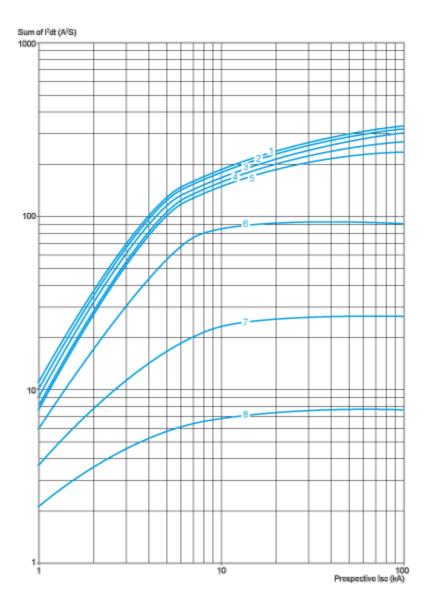
- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

#### 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 Isc) at 1.05 Ue = 435 V

Life Is On Schneider

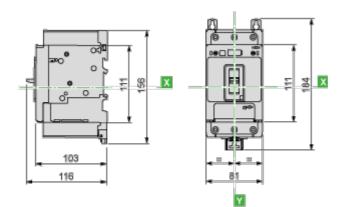
# Product datasheet GV4PEM115S



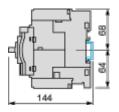
- GV4P115 1
- GV4P80 2
- GV4P50 3
- 4 GV4P25
- 5 GV4P12
- GV4P07 6
- GV4P03 7
- GV4P02 8

Dimensions Drawings

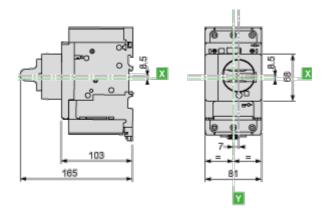
GV4 with Toggle: GV4LE, GV4PE, GV4PEM With EverLink® Connector



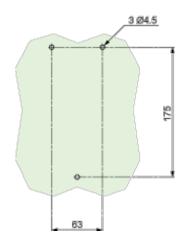
With Crimp Lug Connector



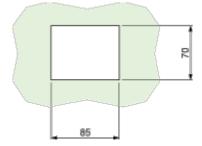
GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle Dimensions



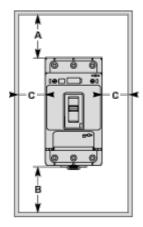
GV4L, GV4P, GV4LE, GV4PE, GV4PEM Panel Mounting with M4 Screws



Door Cut-Out for Rotary Handle



#### Minimum Safety Clearance



Toggle-type, rotary handle-type: identical clearance values. Safety Clearance (mm)

| Salety Clearance (mm) |                     |   |   |                  |   |   |
|-----------------------|---------------------|---|---|------------------|---|---|
|                       | Painted Sheet Metal |   |   | Bare Sheet Metal |   |   |
|                       | A                   | В | С | A                | 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 |

## Product datasheet GV4PEM115S

Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM

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