

# Bảng thông số sản phẩm

Thông số kỹ thuật



## Motor circuit breaker, TeSys GV4, 3P, 80A, Icu 25kA, thermal magnetic, Everlink terminals

GV4PE80B

### Main

Range of product	TeSys GV4
Range	TeSys Deca
Device short name	GV4PE
Product name	TeSys GV4
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	37 kW at 400...415 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz 22 kW at 400...415 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 37 kW at 660...690 V AC 50/60 Hz 45 kW at 660...690 V AC 50/60 Hz 55 kW at 660...690 V AC 50/60 Hz 30 kW at 400...415 V AC 50/60 Hz 37 kW at 500 V AC 50/60 Hz
Breaking capacity	50 kA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2 25 kA Icu at 380...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 35 kA at 208Y/120 V AC 50/60 Hz conforming to UL 60947 35 kA at 240 V AC 50/60 Hz conforming to UL 60947 18 kA at 480Y/277 V AC 50/60 Hz conforming to UL 60947 14 kA at 600Y/347 V AC 50/60 Hz conforming to UL 60947
Control type	Toggle
[In] rated current	80 A
Magnetic tripping current	1360 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 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

<b>Mechanical durability</b>	40000 cycles
<b>Electrical durability</b>	14000 cycles for AC-3 at 440 V In/2 7000 cycles for AC-3 at 440 V In
<b>Maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Connections - terminals</b>	EverLink BTR screw connectors (top) 1 cable(s) 1.5...70 mm <sup>2</sup> - solid EverLink BTR screw connectors (top) 1 cable(s) 1.5...50 mm <sup>2</sup> - flexible EverLink BTR screw connectors (bottom) 1 cable(s) 2.5...95 mm <sup>2</sup> - solid EverLink BTR screw connectors (bottom) 1 cable(s) 2.5...70 mm <sup>2</sup> - flexible
<b>Tightening torque</b>	9 N.m for cable 16...95 mm <sup>2</sup> 5 N.m for cable 1.5...10 mm <sup>2</sup>
<b>Mechanical robustness</b>	Vibrations: +/- 1 mm 2...13.2 Hz conforming to IEC 60068-2-6 Vibrations: 0.7 gn 13.2...100 Hz conforming to IEC 60068-2-6 Shocks: 15 gn 11 ms conforming to IEC 60068-2-27
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Height</b>	155 mm
<b>Width</b>	81 mm
<b>Depth</b>	116 mm
<b>Net weight</b>	1.45 kg
<b>Colour</b>	Grey (RAL 7016)
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1

## Environment

<b>Standards</b>	CSA C22.2 No 60947-4-1 UL 60947-4-1 EN/IEC 60947-4-1 EN/IEC 60947-2
<b>Product certifications</b>	IEC UL CSA CCC EAC ATEX EU-RO MR
<b>Climatic withstand</b>	conforming to IACS E10
<b>IK degree of protection</b>	IK07 conforming to IEC 62262
<b>Pollution degree</b>	3
<b>IP degree of protection</b>	IP40 conforming to IEC 60529
<b>Ambient air temperature for storage</b>	-50...85 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-11
<b>Operating altitude</b>	5000 m
<b>Ambient air temperature for operation</b>	-25...70 °C

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	17.0 cm
<b>Package 1 Width</b>	11.0 cm
<b>Package 1 Length</b>	22.0 cm

Package 1 Weight	1.67 kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.0 kg

## Contractual warranty

Warranty	18 months
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## Environmental Data

Schneider Electric nhắm đến việc đạt được vị trí Net Zero vào năm 2050 thông qua các quan hệ đối tác chuỗi cung ứng, giảm vật liệu tác động và sự tuần hoàn thông qua chiến dịch "Use Better, Use Longer, Use Again" đang diễn ra của chúng tôi để kéo dài tuổi thọ sản phẩm và khả năng tái chế.

[Dữ liệu môi trường đã giải thích >](#)

[Cách chúng tôi đánh giá tính bền vững của sản phẩm >](#)

### Ảnh hưởng môi trường

[Environmental Disclosure](#)

[Product Environmental Profile](#)

## Use Better

### Vật liệu và Bao bì

Packaging made with recycled cardboard **No**

Packaging without single use plastic **Yes**

EU RoHS Directive **Compliant with Exemptions**

SCIP Number **1b259a2c-3a3c-401a-acdd-f0837efd4018**

REACH Regulation [REACH Declaration](#)

China RoHS Regulation [China RoHS declaration](#)

PVC free **Yes**

## Use Again

### Đóng gói lại và tái sản xuất

[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

Halogen content performance

**Halogen free plastic parts product**

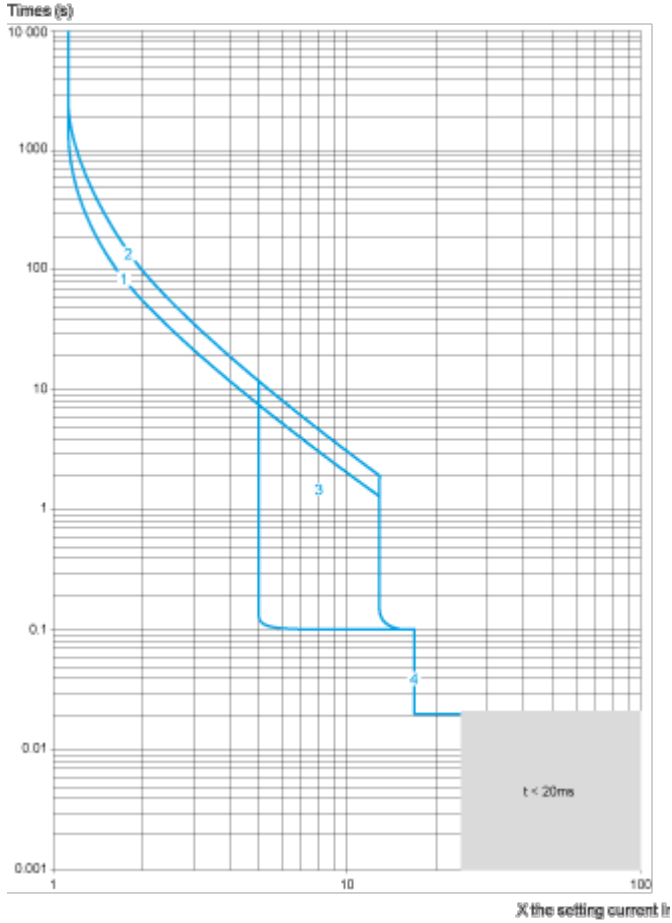
Take-back

**No**

## Performance Curves

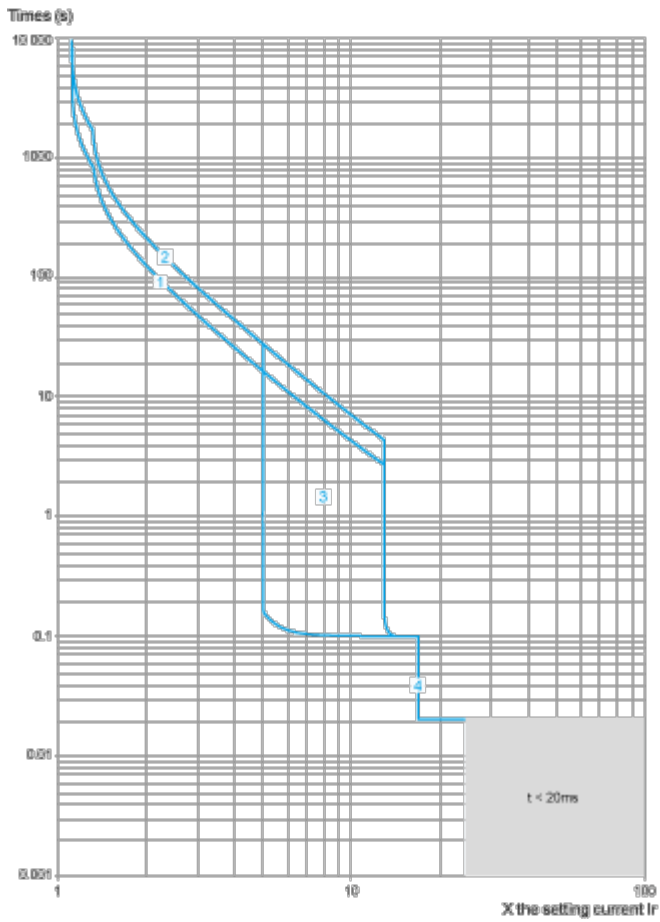
### Thermal-Magnetic Tripping Curves for GV4P, GV4PE, GV4PEM Average Operating Times at 20 °C Related to Multiples of the Setting Current

Hot state



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

Cold state

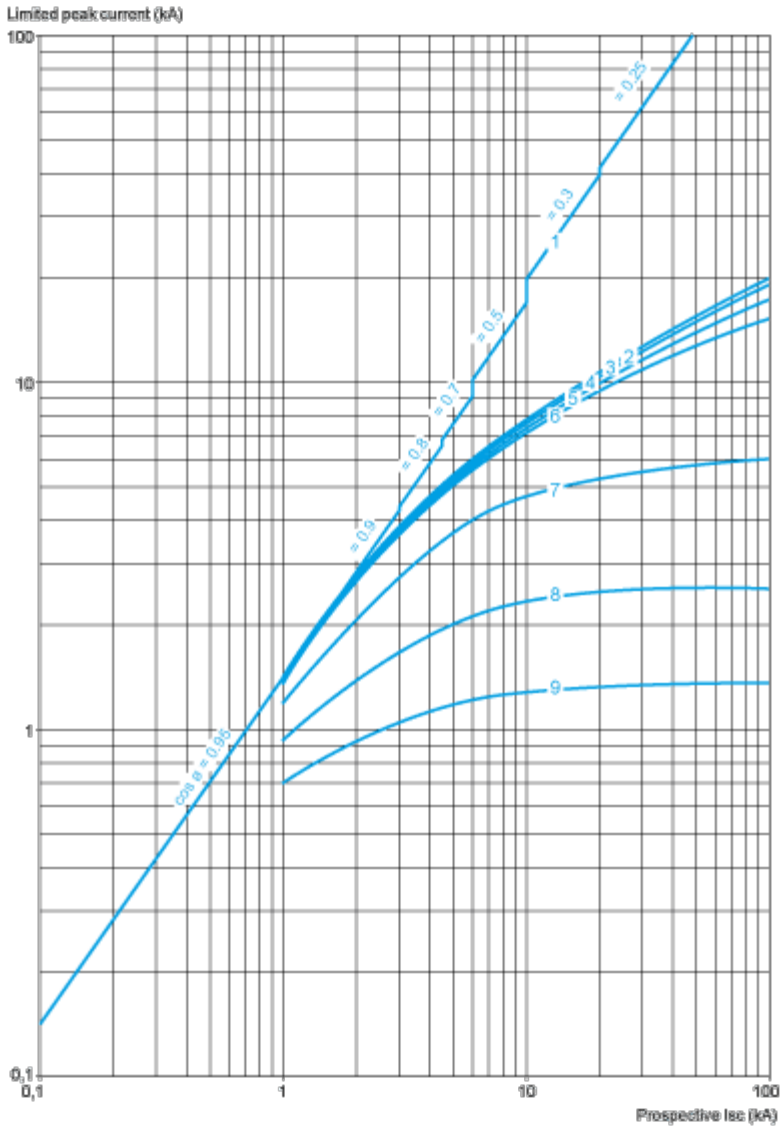


- 1 Class 10
- 2 Class 20
- 3  $I_{sd} = 5 \dots 13 \times I_r$
- 4  $I_i = 17 I_n$

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

**Dynamic Stress**

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



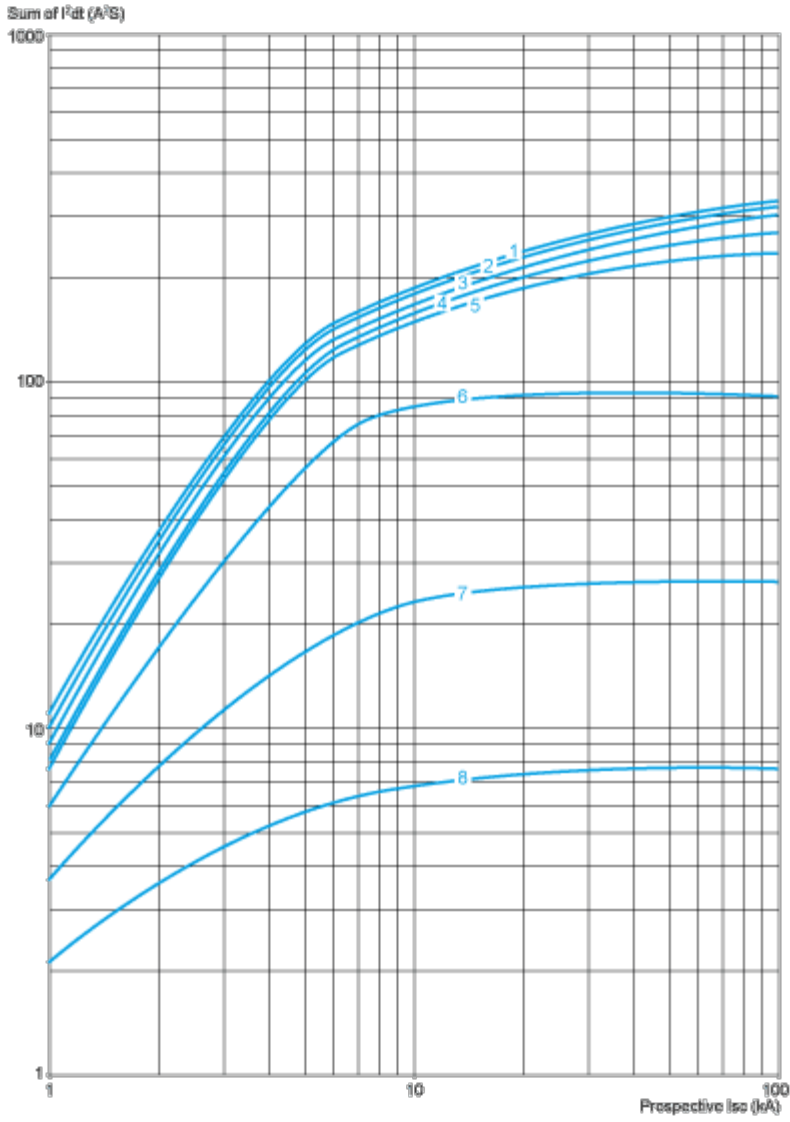
- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

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

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

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



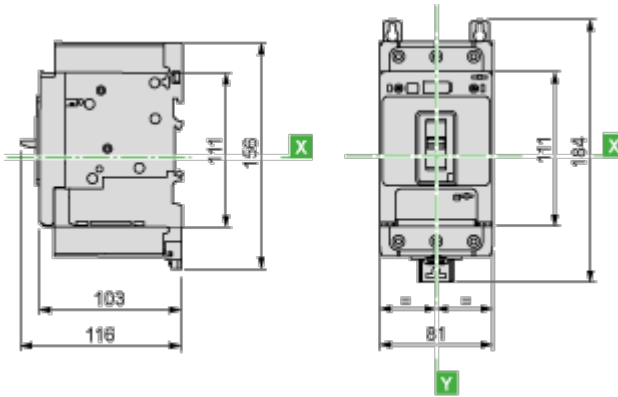


- 1 GV4P115
- 2 GV4P80
- 3 GV4P50
- 4 GV4P25
- 5 GV4P12
- 6 GV4P07
- 7 GV4P03
- 8 GV4P02

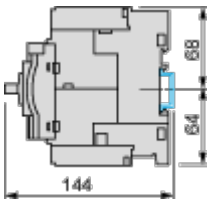
## Dimensions Drawings

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

With EverLink® Connector

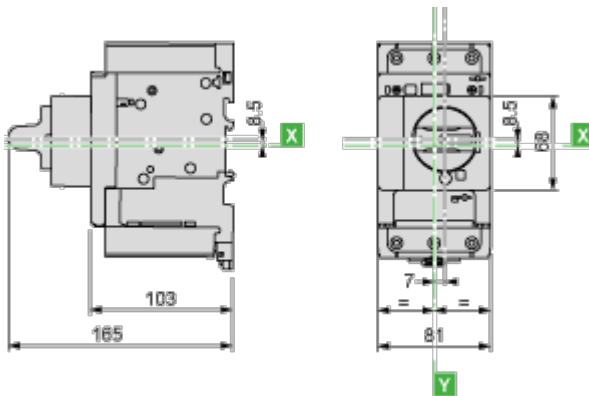


### With Crimp Lug Connector



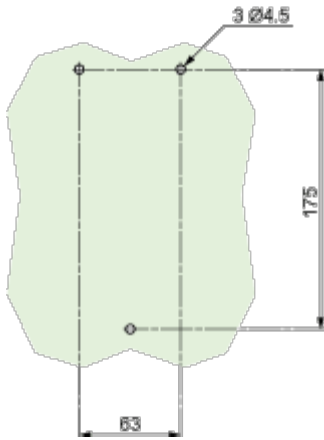
### GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

Dimensions

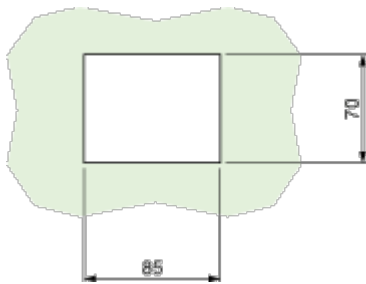


### GV4L, GV4P, GV4LE, GV4PE, GV4PEM

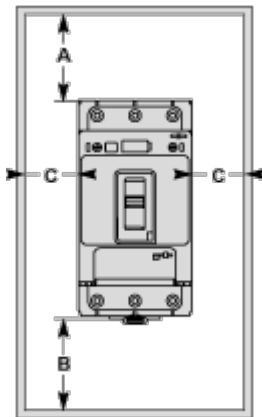
Panel Mounting with M4 Screws



**Door Cut-Out for Rotary Handle**



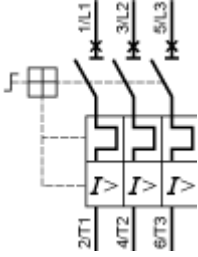
**Minimum Safety Clearance**



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

### Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM



Offer Marketing Illustration

**Product benefits / Features**

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## TeSys Deca Motor Circuit Breakers



### Increase safety

Featuring EverLink technology, double rotary contact system, and Reflex tripping mechanism to ensure your operations run smoothly and securely.



### Improve efficiency

With a compact design, hassle-free installation with one-click spring terminal accessories, while easy monitoring with visible auxiliaries.



### Save time


Simple to specify, install and use for all applications and easy access to facilitate maintenance on site.



Offer Marketing Illustration

**Product benefits / Features**

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**TeSys Deca Motor Circuit Breakers**  
Technical Benefits

- Combines a circuit breaker and overload relay in a single device.
- Gives great detection accuracy, as well as alarming and advanced protections for refs.
- Magnetic, electronic thermal-magnetic, or electronic thermal magnetic versions with advanced protection.
- Patented EverLink creep-compensating technology.
- Spring-based system ensures a long lasting connection.
- Electronic core for high-accuracy, wide settings, dual motor class 10/20.

Offer Marketing Illustration

**Product benefits / Features**

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