

# TeSys GV4 - thermal magnetic circuit breaker - 80A 3P - with Everlink

Local distributor code:

407810453 GV4P80B

EAN Code: 3606481310132

#### Main

Range Of Product	TeSys GV4
Range	TeSys Deca TeSys Deca
Device Short Name	GV4P
Product Name	TeSys GV4 TeSys Deca
Product Or Component Type	Motor circuit breaker
Device Application	Motor protection
Trip Unit Technology	Electronic Thermal-magnetic

#### 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 400415 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz 22 kW at 400415 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 37 kW at 660690 V AC 50/60 Hz 45 kW at 660690 V AC 50/60 Hz 55 kW at 660690 V AC 50/60 Hz 30 kW at 400415 V AC 50/60 Hz 37 kW at 400415 V AC 50/60 Hz					
Breaking Capacity	50 kA Icu at 220240 V AC 50/60 Hz conforming to IEC 60947-2 25 kA Icu at 380415 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	Rotary handle					
[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						
Mechanical Durability	40000 cycles						
Electrical Durability	14000 cycles for AC-3 at 440 V In/2 7000 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 mm² - solid EverLink BTR screw connectors (top) 1 cable(s) 1.550 mm² - flexible EverLink BTR screw connectors (bottom) 1 cable(s) 2.595 mm² - solid EverLink BTR screw connectors (bottom) 1 cable(s) 2.570 mm² - flexible						
Tightening Torque	9 N.m for cable 1695 mm² 5 N.m for cable 1.510 mm²						
Mechanical Robustness	Vibrations: +/- 1 mm 213.2 Hz conforming to IEC 60068-2-6 Vibrations: 0.7 gn 13.2100 Hz conforming to IEC 60068-2-6 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	165 mm						
Net Weight	1.6 kg						
Colour	Grey (RAL 7016)						
Suitability For Isolation	Yes conforming to IEC 60947-1						
Environment Standards	CSA C22.2 No 60947-4-1 UL 60947-4-1 EN/IEC 60947-4-1						
	EN/IEC 60947-2						
Product Certifications	IEC UL CSA CCC EAC ATEX 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 Operation	-2570 °C						
Packing Units							
Unit Type Of Package 1	PCE						
Number Of Units In Package 1	1						
Package 1 Height	20.5 cm						

10.5 cm

Package 1 Width

Package 1 Length	22.0 cm
Package 1 Weight	1.8 kg
Unit Type Of Package 2	S03
Number Of Units In Package 2	3
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.786 kg

#### **Contractual warranty**

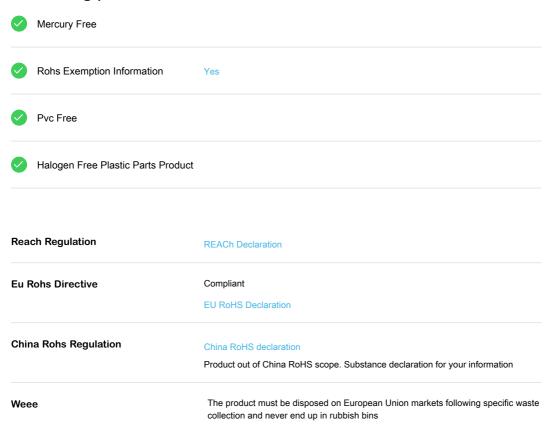
Warranty 18 months

#### **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 >

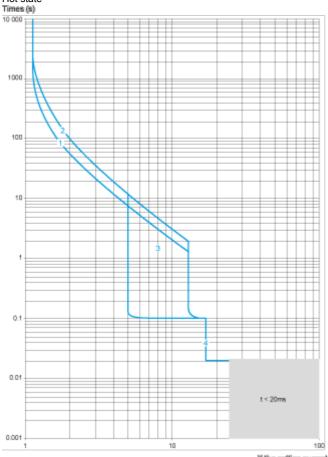
#### Well-being performance



#### 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

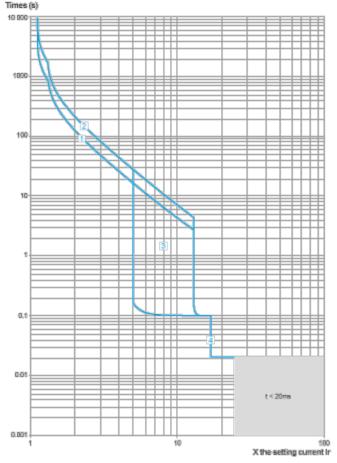


X the setting current in

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

Cold state

#### Product datasheet GV4P80B



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

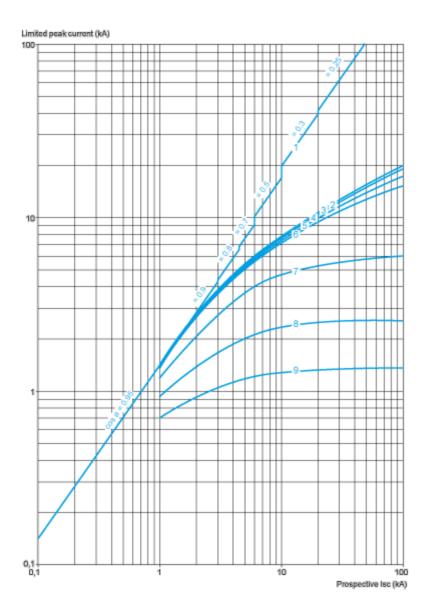
#### Current Limitation on Short-Circuit for GV4P, GV4PE, GV4PEM (3-Phase 400/415 V)

#### **Dynamic Stress**

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

#### **Product datasheet**

#### GV4P80B



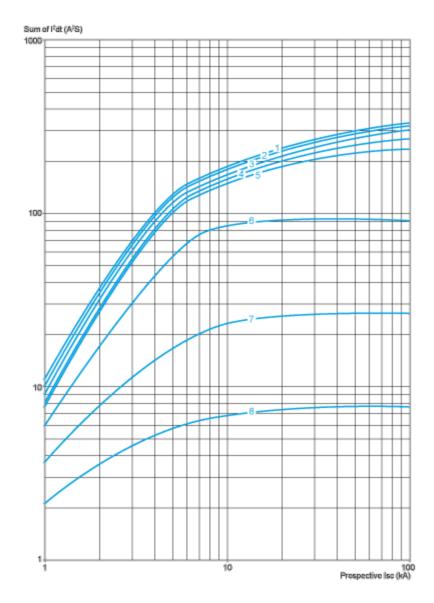
- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

#### 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 GV4P80B

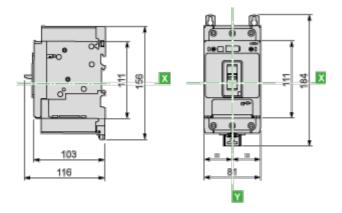


- GV4P115
- GV4P80 2
- GV4P50 3
- 4 GV4P25
- 5 GV4P12
- GV4P07 6
- GV4P03 7
- GV4P02 8

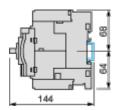
#### **Dimensions Drawings**

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

With EverLink® Connector

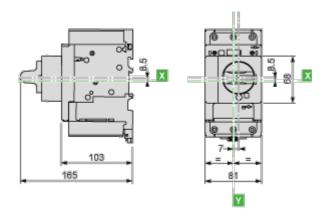


#### With Crimp Lug Connector



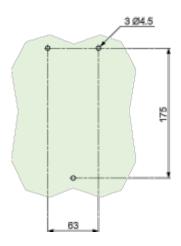
## GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

**Dimensions** 

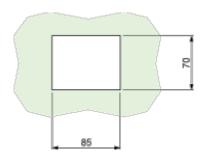


#### GV4L, GV4P, GV4LE, GV4PE, GV4PEM

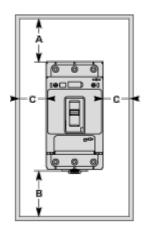
Panel Mounting with M4 Screws



**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			

#### **Product datasheet**

#### GV4P80B

#### Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM

