Specifications



# Motor circuit breaker, TeSys GV4, 3P, 115A, Icu 25kA, thermal magnetic, lugs terminals

GV4P115B6

### Main

Range of product	TeSys GV4
Range	TeSys Deca
Device short name	GV4P
product name	TeSys GV4
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 400415 V AC 50/60 Hz 55 kW at 400415 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz 55 kW at 500 V AC 50/60 Hz 75 kW at 600 V AC 50/60 Hz 90 kW at 660690 V AC 50/60 Hz 110 kW at 660690 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	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 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	10000 cycles for AC-3 at 440 V In/2 5000 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 35 mm with spreaders				
Connections - terminals	Lugs-ring terminals				
Tightening torque	9 N.m for cable 1695 mm <sup>2</sup> 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 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	10.500 cm
Package 1 Width	21.000 cm
Package 1 Length	22.000 cm

Package 1 Weight	1.544 kg
Unit Type of Package 2	S03
Number of Units in Package 2	3
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.018 kg
Unit Type of Package 3	P12
Number of Units in Package 3	24
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	52.144 kg

## **Contractual warranty**

Warranty

18 months

## 🜔 Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

${\mathcal O}$ Environmental footprint	
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Environmental Disclosure

Product Environmental Profile

#### **Use Better**

⊗ Materials and Packaging	
Recycled metal content at CR level	0
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	1b259a2c-3a3c-401a-acdd-f0837efd4018
Halogen content performance	Halogen free plastic parts product
PVC free	Yes

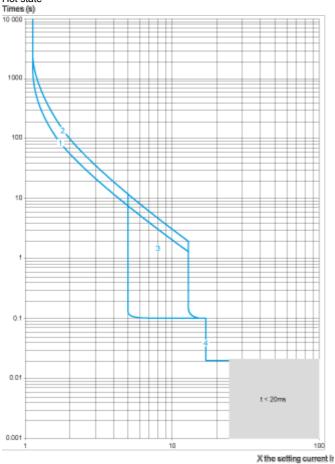
#### Use Again

$^{\circlearrowright}$ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

#### Performance Curves

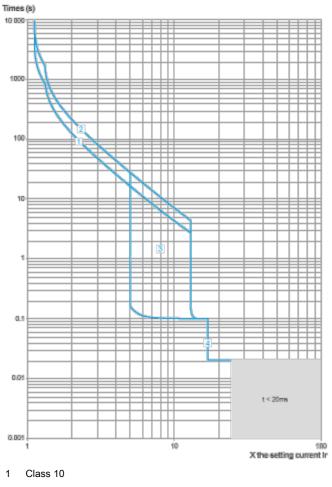
#### Thermal-Magnetic Tripping Curves for GV4P, GV4PE, GV4PEM

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

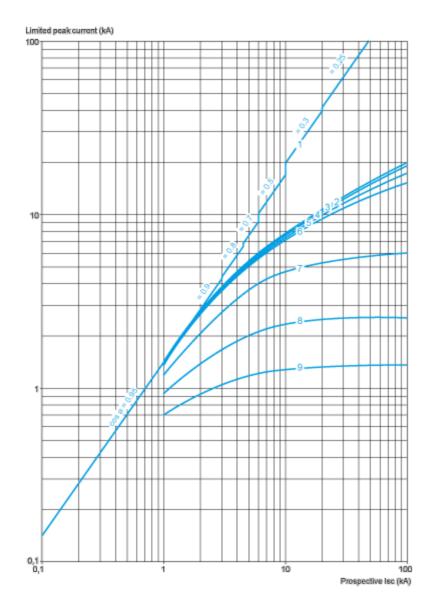
Cold state



- 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

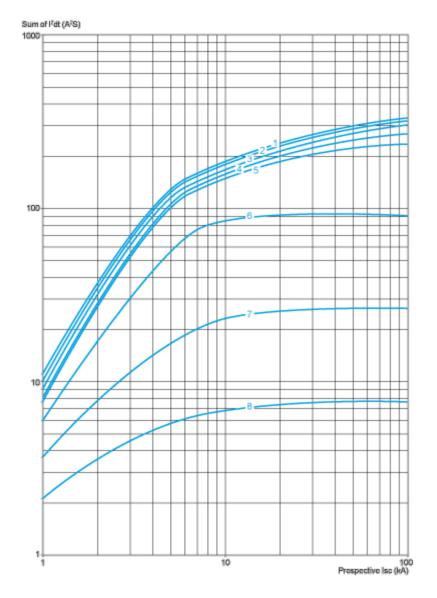
I peak = f (prospective lsc) at 1.05 Ue = 435 V



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

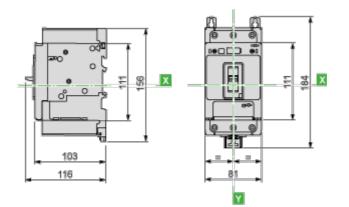
#### Thermal Limit on Short-Circuit for GV4P, GV4PE, GV4PEM

Thermal Limit in kA<sup>2</sup>2s in the Magnetic Operating Zone Sum of  $I^{2}$ dt = f (prospective Isc) at 1.05 Ue = 435 V

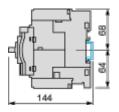


- 1 GV4P115
- 2 GV4P80
- 3 GV4P50
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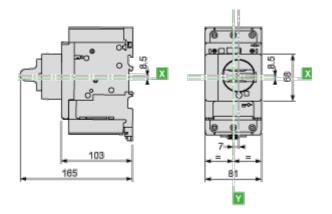
#### GV4 with Toggle: GV4LE, GV4PE, GV4PEM With EverLink® Connector



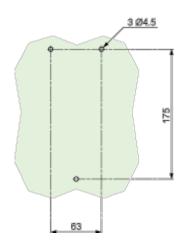
With Crimp Lug Connector



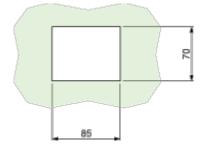
GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle Dimensions



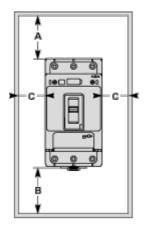
GV4L, GV4P, GV4LE, GV4PE, GV4PEM Panel Mounting with M4 Screws



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

Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM