

Motor circuit breaker, TeSys GV4, 3P, 115A, Icu 50kA, thermal magnetic multifunction, Everlink terminals

GV4PEM115N

Main

Range of product	TeSys GV4
Range	TeSys Deca
Device short name	GV4PEM
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 500 V AC 50/60 Hz 75 kW at 500 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	100 kA Icu at 220240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 380415 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 15 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 65 kA at 208Y/120 V AC 50/60 Hz conforming to UL 60947 65 kA at 240 V AC 50/60 Hz conforming to UL 60947 35 kA at 480Y/277 V AC 50/60 Hz conforming to UL 60947 8 kA Icu at 660690 V AC 50/60 Hz conforming to IEC 60947-2 25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 18 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 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					
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	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					
	UL 60947-4-1 EN/IEC 60947-4-1 EN/IEC 60947-2					
Product certifications	UL 60947-4-1 EN/IEC 60947-4-1					
Product certifications Climatic withstand	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX					
	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR					
Climatic withstand	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10					
Climatic withstand IK degree of protection	UL 60947-4-1 EN/IEC 60947-2-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262					
Climatic withstand IK degree of protection pollution degree	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529 -5085 °C					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage Fire resistance	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529 -5085 °C 960 °C conforming to IEC 60695-2-11					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage Fire resistance Operating altitude Ambient air temperature for	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529 -5085 °C 960 °C conforming to IEC 60695-2-11 5000 m					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage Fire resistance Operating altitude Ambient air temperature for operation	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529 -5085 °C 960 °C conforming to IEC 60695-2-11 5000 m					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage Fire resistance Operating altitude Ambient air temperature for operation Packing Units	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 60229 -5085 °C 960 °C conforming to IEC 60695-2-11 5000 m -2570 °C					
Climatic withstand IK degree of protection pollution degree IP degree of protection Ambient air temperature for storage Fire resistance Operating altitude Ambient air temperature for operation Packing Units Unit Type of Package 1	UL 60947-4-1 EN/IEC 60947-2 IEC UL CSA CCC EAC ATEX EU-RO MR conforming to IACS E10 IK07 conforming to IEC 62262 3 IP40 conforming to IEC 60529 -5085 °C 960 °C conforming to IEC 60695-2-11 5000 m -2570 °C					

11.0 cm

Package 1 Width

Package 1 Length	22.0 cm
Package 1 Weight	1.66 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 kg

Contractual warranty

Warranty 18 months



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 >

☑ Environmental footprint

Environmental Disclosure

Product Environmental Profile

Use Better

Recycled metal content at CR level	0
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	1b259a2c-3a3c-401a-acdd-f0837efd4018
Halogen content performance	Halogen free plastic parts product
PVC free	Yes

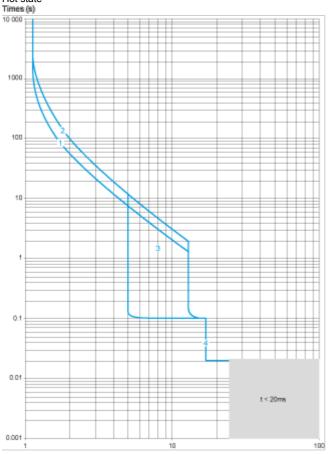
Use Again

○ 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 $^{\circ}\text{C}$ Related to Multiples of the Setting Current Hot state



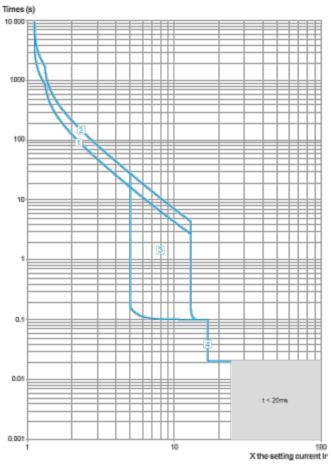
X the setting current in

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

Cold state

Product datasheet

GV4PEM115N

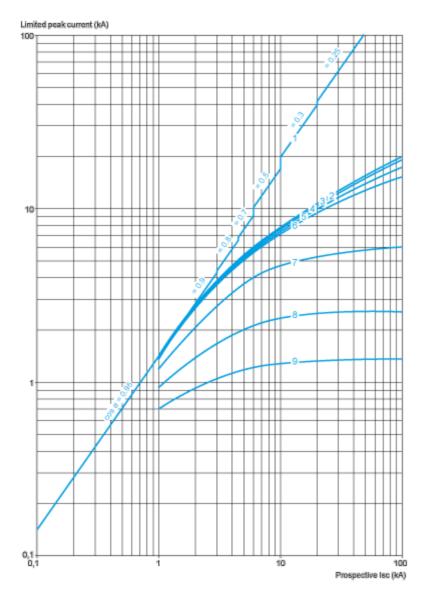


- 1 Class 10
- 2 Class 20
- 3 Isd = 5...13x Ir
- 4 li = 17 ln

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

Dynamic Stress

I peak = f (prospective Isc) 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

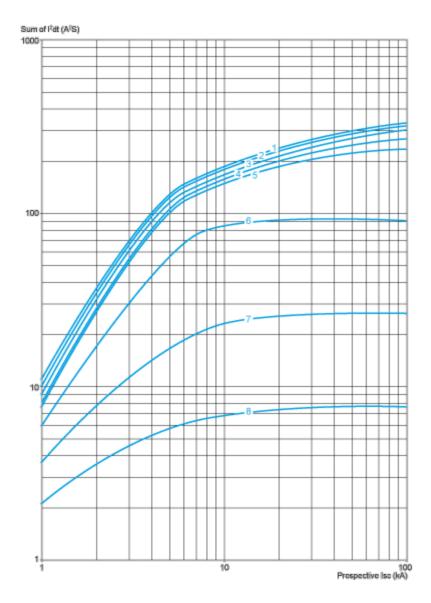
Thermal Limit on Short-Circuit for GV4P, GV4PE, GV4PEM

Thermal Limit in kA²2s in the Magnetic Operating Zone

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

Product datasheet

GV4PEM115N

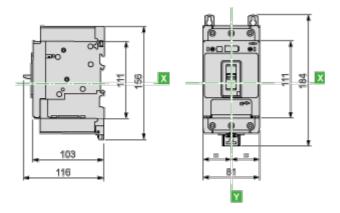


- GV4P115 1
- GV4P80 2
- GV4P50 3
- 4 GV4P25
- GV4P12 5
- GV4P07 6
- GV4P03 7
- GV4P02 8

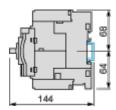
Dimensions Drawings

GV4 with Toggle: GV4LE, GV4PE, GV4PEM

With EverLink® Connector

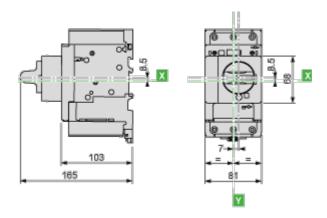


With Crimp Lug Connector



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

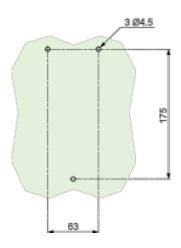
Dimensions



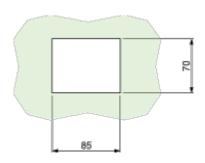
GV4L, GV4P, GV4LE, GV4PE, GV4PEM

Panel Mounting with M4 Screws

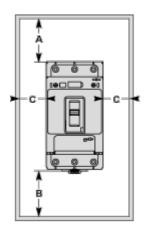
GV4PEM115N



Door Cut-Out for Rotary Handle



Minimum Safety Clearance



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

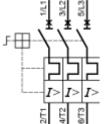
Safety Clearance (mm)						
	Painted She	Bare Sheet Metal				
	Α	В	С	Α	В	С
No accessory	30	0	0	40	0	5
Interphase barriers	0	0	0	0	0	5
Long terminal shield	0	0	0	0	0	5

Product datasheet

GV4PEM115N

Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM



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