

# Motor circuit breaker, TeSys GV4, 3P, 25A, Icu 100kA, thermal magnetic, Everlink terminals

GV4PE25S

# 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	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	7.5 kW at 660690 V AC 50/60 Hz
	5.5 kW at 400415 V AC 50/60 Hz
	7.5 kW at 500 V AC 50/60 Hz
	9 kW at 660690 V AC 50/60 Hz
	11 kW at 660690 V AC 50/60 Hz
	7.5 kW at 400415 V AC 50/60 Hz
	9 kW at 400415 V AC 50/60 Hz
	11 kW at 400415 V AC 50/60 Hz
	9 kW at 500 V AC 50/60 Hz
	11 kW at 500 V AC 50/60 Hz
	15 kW at 500 V AC 50/60 Hz
	15 kW at 660690 V AC 50/60 Hz
	18.5 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
	100 kA Icu at 380415 V AC 50/60 Hz conforming to IEC 60947-2
	70 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2
	30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2
	18 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2
	100 kA at 208Y/120 V AC 50/60 Hz conforming to UL 60947
	100 kA at 240 V AC 50/60 Hz conforming to UL 60947
	65 kA at 480Y/277 V AC 50/60 Hz conforming to UL 60947
	10 kA Icu at 660690 V AC 50/60 Hz conforming to IEC 60947-2
	25 kA at 600Y/347 V AC 50/60 Hz conforming to UL 60947
Control type	Toggle
[In] rated current	25 A
Magnetic tripping current	425 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	40000 cycles for AC-3 at 440 V In/2 20000 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	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			

PCE

Unit Type of Package 1

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	1.45 kg
Unit Type of Package 2	S03
Number of Units in Package 2	9
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	14.0 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 >

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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

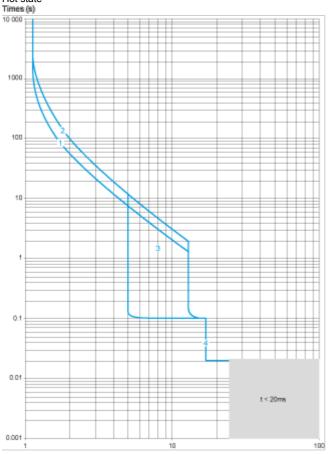
#### **Use Again**

○ 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



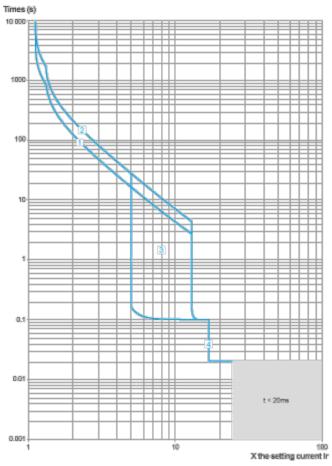
X the setting current in

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

Cold state

# **Product datasheet**

# **GV4PE25S**

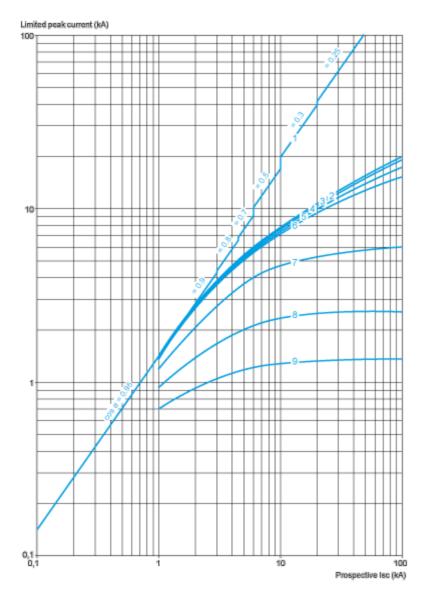


- 1 Class 10
- 2 Class 20
- 3 Isd = 5...13x Ir
- 4 li = 17 ln

# 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



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

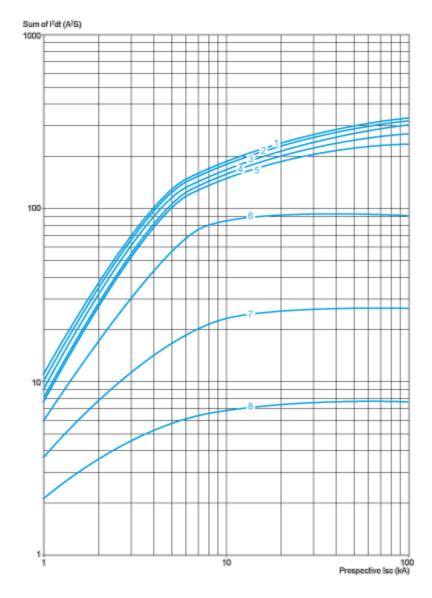
# Thermal Limit on Short-Circuit for GV4P, GV4PE, GV4PEM

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**

# **GV4PE25S**

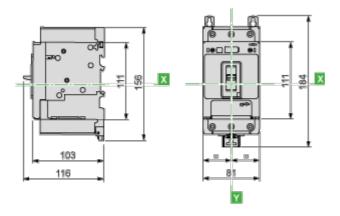


- 1 GV4P115
- 2 GV4P80
- 3 GV4P50
- 4 GV4P25
- 5 GV4P12
- 6 GV4P07
- 7 GV4P03
- 8 GV4P02

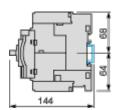
#### **Dimensions Drawings**

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

With EverLink® Connector

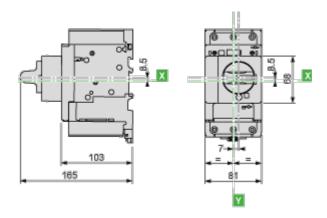


#### With Crimp Lug Connector



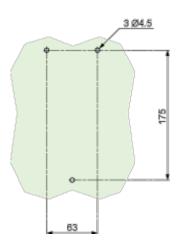
# GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

**Dimensions** 

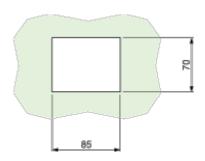


# GV4L, GV4P, GV4LE, GV4PE, GV4PEM

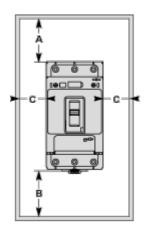
Panel Mounting with M4 Screws



**Door Cut-Out for Rotary Handle** 



#### **Minimum Safety Clearance**

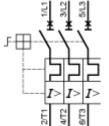


Toggle-type, rotary handle-type: identical clearance values.

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	

# Connections and Schema

Magnetic Motor Circuit Breakers GV4P, GV4PE, GV4PEM



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