

Product data sheet

Specifications



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

GV4PE80B

Main

Range	TeSys
Device short name	GV4PE
Product name	TeSys GV4
Product or component type	Circuit breaker
Device application	Motor protection
Trip unit technology	Thermal-magnetic Electronic

Complementary

Poles description	3P
Utilisation category	Category A
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
Control type	Toggle
[In] rated current	80 A
[Ue] rated operational voltage	690 V AC 50/60 Hz conforming to IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2
Electrical durability	14000 cycles for AC-3 at 440 V In/2 7000 cycles for AC-3 at 440 V In
Mechanical robustness	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
Suitability for isolation	Yes conforming to IEC 60947-1
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)
--------	-----------------

Environment

Product certifications	IEC UL CSA CCC EAC ATEX EU-RO MR
------------------------	--

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	1.67 kg
Package 1 Height	11 cm
Package 1 width	17 cm
Package 1 Length	22 cm
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Weight	9 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
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
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

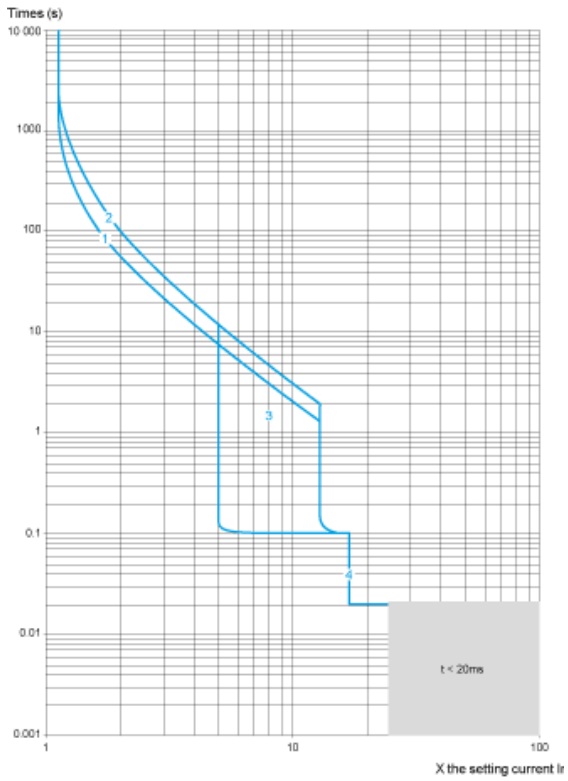
Contractual warranty

Warranty	18 months
----------	-----------

Thermal-Magnetic Tripping Curves for GV4P, GV4PE, GV4PEM

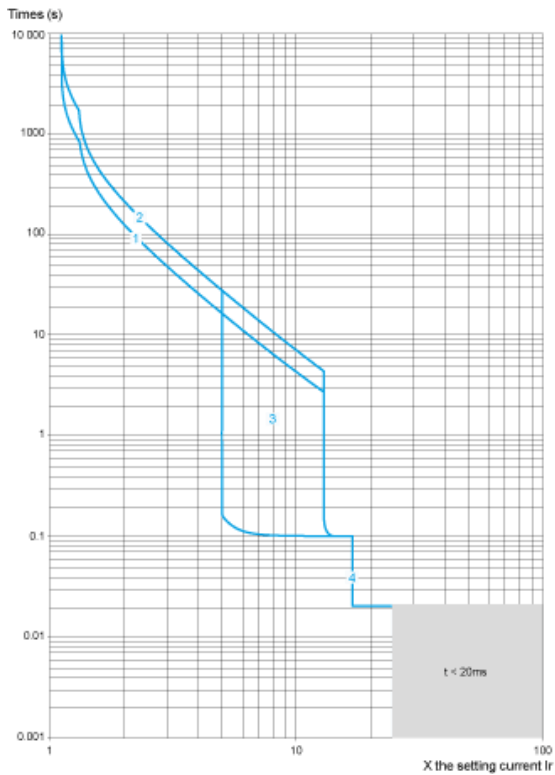
Average Operating Times at 20 °C Related to Multiples of the Setting Current

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

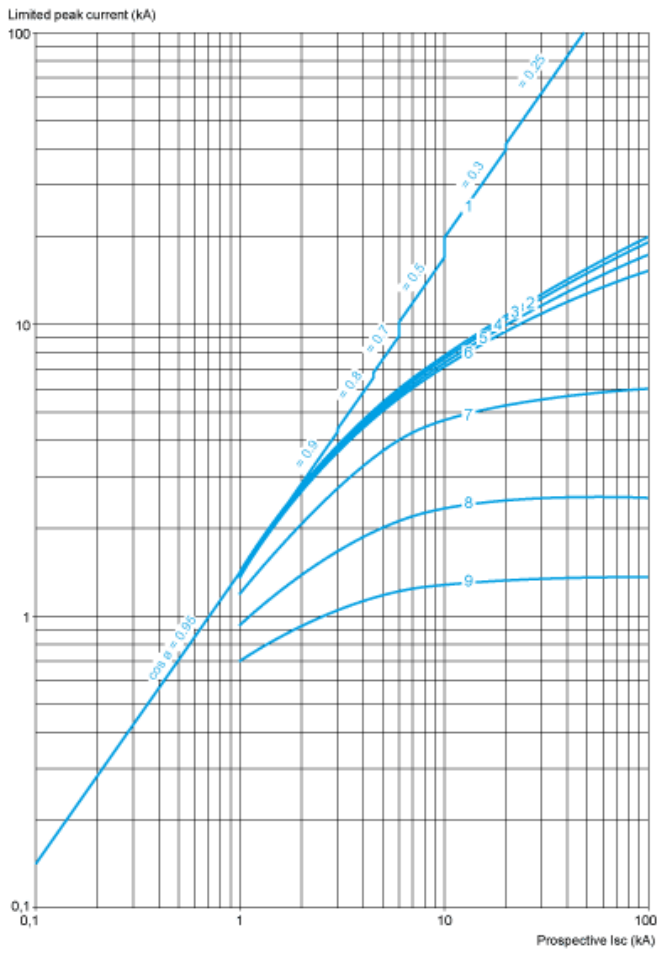


- 1 Class 10
- 2 Class 20
- 3 $I_{sd} = 5 \dots 13 \times I_r$
- 4 $I_i = 17 I_n$

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

Dynamic Stress

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

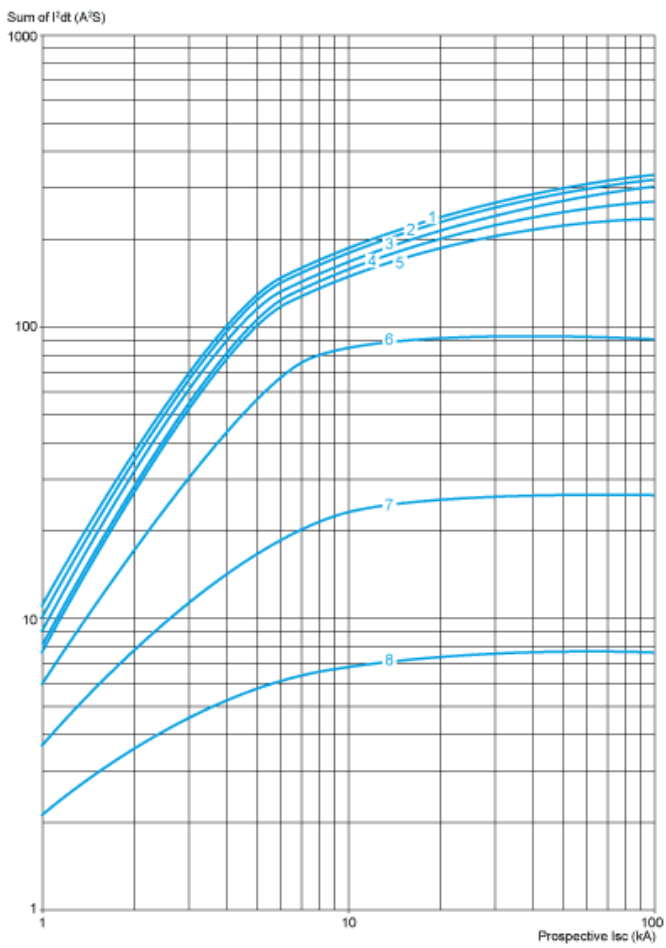


- 1 Maximum peak current
- 2 GV4P115
- 3 GV4P80
- 4 GV4P50
- 5 GV4P25
- 6 GV4P12
- 7 GV4P07
- 8 GV4P03
- 9 GV4P02

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

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

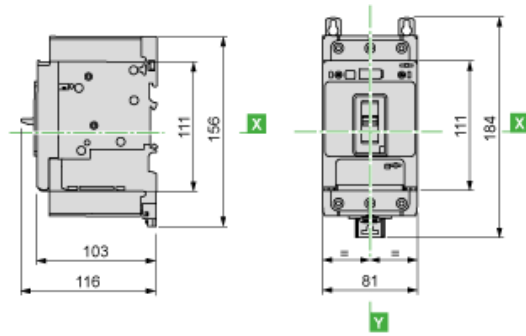
Sum of $I^2dt = f$ (prospective Isc) at $1.05 U_e = 435 \text{ V}$



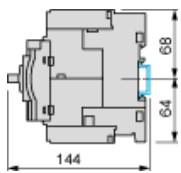
- 1 GV4P115
- 2 GV4P80
- 3 GV4P50
- 4 GV4P25
- 5 GV4P12
- 6 GV4P07
- 7 GV4P03
- 8 GV4P02

GV4 with Toggle: GV4LE, GV4PE, GV4PEM

With EverLink® Connector

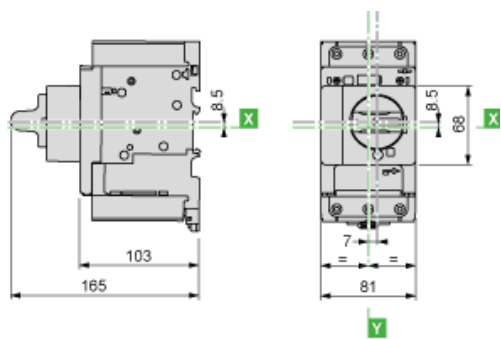


With Crimp Lug Connector



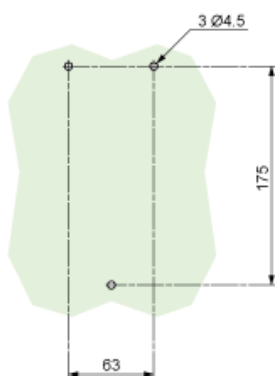
GV4 with Rotary Handle: GV4L, GV4P, or GV4LE, GV4PE, GV4PEM with GV4ADN01, GV4ADN02 Direct Mounting Rotary Handle

Dimensions

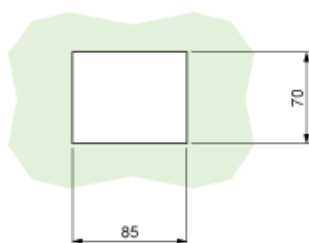


GV4L, GV4P, GV4LE, GV4PE, GV4PEM

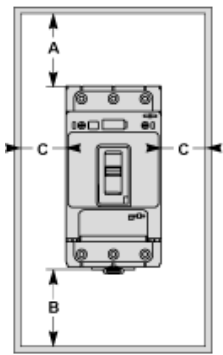
Panel Mounting with M4 Screws



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		
	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

