

Motor circuit breaker, TeSys GV3, 3P, 37-50 A, thermal magnetic, EverLink terminals

GV3P50

Main

Range	TeSys Deca	
product name	TeSys GV3	
Product or component type	Motor circuit breaker	
Device short name	GV3P	
Device application	Motor protection	
Trip unit technology	Thermal-magnetic	

Complementary

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Poles description	3P	
Network type	AC	
Utilisation category	Category A conforming to IEC 60947-2 AC-3 conforming to IEC 60947-4-1	
Network frequency	50/60 Hz conforming to IEC 60947-2	
Motor power kW	22 kW at 400/415 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 45 kW at 690 V AC 50/60 Hz	
Breaking capacity	100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 400/415 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 12 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 6 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2	
[lcs] rated service short-circuit breaking capacity	100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 690 V AC 50/60 Hz conforming to IEC 60947-2	
control type	Rotary handle	
[In] rated current	50 A	
Thermal protection adjustment range	3750 A conforming to IEC 60947-2	
Magnetic tripping current	700 A	
[Ith] conventional free air thermal current	50 A conforming to IEC 60947-2	
[Ue] rated operational voltage	690 V AC 50/60 Hz conforming to IEC 60947-2	
[Ui] rated insulation voltage	690 V AC 50/60 Hz conforming to IEC 60947-2	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-2	
Phase failure sensitivity	Yes conforming to IEC 60947-4-1	
Suitability for isolation	Yes conforming to IEC 60947-1	

Power dissipation per pole	8 W	
Mechanical durability	50000 cycles	
Electrical durability	50000 cycles for AC-3 at 415 V In	
Rated duty	Uninterrupted conforming to IEC 60947-4-1	
Tightening torque	5 N.m - on screw clamp terminal	
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws)	
Mounting position	Horizontal Vertical	
Width	55 mm	
Height	132 mm	
Depth	136 mm	
Net weight	0.96 kg	
Colour	Dark grey	

Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC/EN 60335-1:Clause 30.2	
	IEC/EN 60335-2-40:Annex JJ	
Product certifications	CCC	
	CSA	
	EAC	
	ATEX	
	LROS (Lloyds register of shipping)	
	BV	
	ABS	
	DNV-GL	
	UKCA	
IK degree of protection	IK09 enclosure	
IP degree of protection	IP20 conforming to IEC 60529	
Climatic withstand	conforming to IACS E10	
Ambient air temperature for storage	-4080 °C	
Fire resistance	960 °C conforming to IEC 60695-2-11	
Ambient air temperature for operation	-2060 °C	
Mechanical robustness	Shocks: 15 Gn for 11 ms contactor open	
	Shocks: 30 Gn for 11 ms contactor closed	
	Vibrations: 4 Gn, 5300 Hz	
Operating altitude	3000 m	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	16.000 cm
Package 1 Width	6.500 cm
Package 1 Length	14.500 cm
Package 1 Weight	1.008 kg

Unit Type of Package 2	P06
Number of Units in Package 2	120
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	136.960 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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	30
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant with Exemptions
SCIP Number	2057c252-f956-4ac1-a3d9-75119bc8a000
REACh Regulation	REACh Declaration

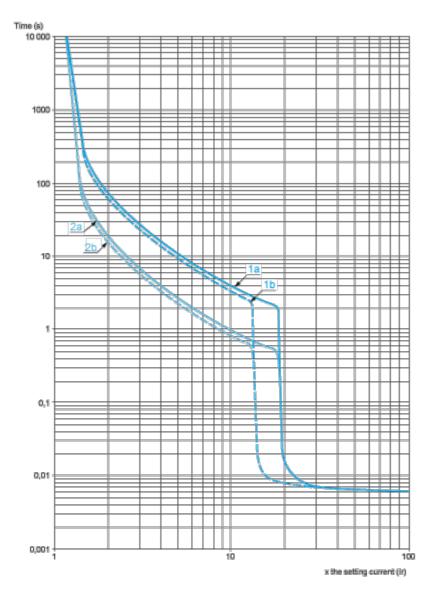
Use Again

○ 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

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

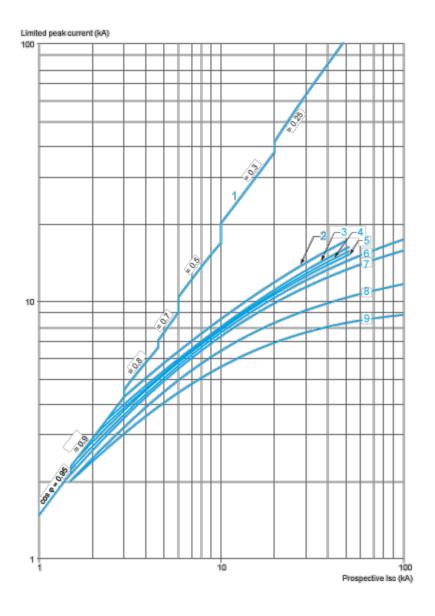


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

Current Limitation on Short-Circuit (3-Phase 400/415 V)

Dynamic Stress

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



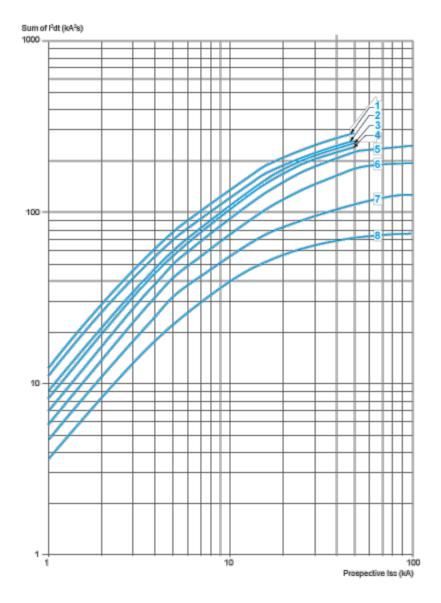
- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

Thermal Limit in ${\rm kA}^2{\rm s}$ in the Magnetic Operating Zone

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

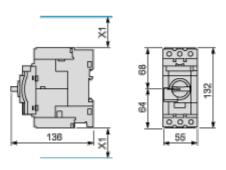
GV3P50

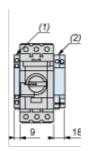


- 1 70-80 (GV3P80) 62-73 (GV3P73)
- 2 48-65 A (GV3P65)
- 3 37-50 A (GV3P50)
- 4 30-40 A (GV3P40)
- 5 23-32 A (GV3P32)
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- 7 12-18 A (GV3P18)
- 8 9-13 A (GV3P13)

Dimensions Drawings

GVI3L, GV3P Dimensions



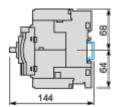


- (1) Blocks $\text{GVAN}_{\bullet \bullet}$, $\text{GVAD}_{\bullet \bullet}$ and GVAM11.
- Blocks GV3AU and GV3AS.

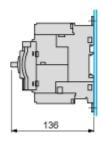
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

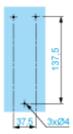
NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

Mounting on Rail AM1 DE200 or AM1 ED201

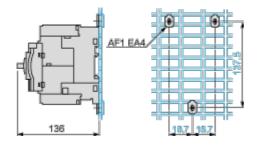


Panel Mounting, using M4 Screws



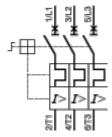


Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

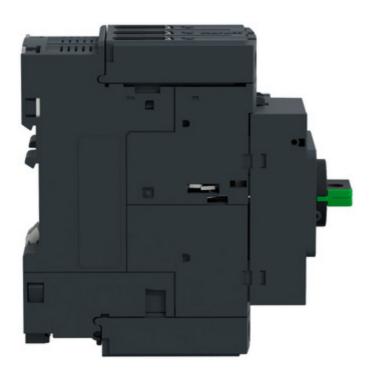


Product datasheet

GV3P50

Image of product / Alternate images

Alternative







Technical Illustration

Assembly's dimensions

