Product datasheet

Specifications

Motor circuit breaker,TeSys Deca frame 3,3P,37-50A,thermal magnetic,lugs terminals

GV3P506

Main

Range	TeSys Deca
Product Name	TeSys GV3 TeSys Deca
Product Or Component Type	Motor circuit breaker
Device Short Name	GV3P
Device Application	Motor protection
Trip Unit Technology	Thermal-magnetic

Complementary

Poles Description	3P
Network Type	AC
Utilisation Category	AC-3 conforming to IEC 60947-4-1
Network Frequency	50/60 Hz conforming to IEC 60947-4-1
Fixing Mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws)
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
[Ics] 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	37…50 A conforming to IEC 60947-4-1
Magnetic Tripping Current	700 A
[Ith] Conventional Free Air Thermal Current	50 A conforming to IEC 60947-4-1
[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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	Continuous conforming to IEC 60947-4-1
Tightening Torque	6 N.m - on lugs-ring terminals
Width	55 mm
Height	132 mm
Depth	136 mm
Net Weight	0.96 kg
Colour	Dark grey
Connection Pitch	17.5 mm without spreaders

Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product Certifications	CCC UL 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	-40…80 °C
Fire Resistance	960 °C conforming to IEC 60695-2-11
Ambient Air Temperature For Operation	-20…60 °C
Mechanical Robustness	Shocks: 15 Gn for 11 ms contactor open Shocks: 30 Gn for 11 ms contactor closed Vibrations: 4 Gn, 5...300 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	921.000 g
Unit Type Of Package 2	P06
Number Of Units In Package 2	60

Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	68.260 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

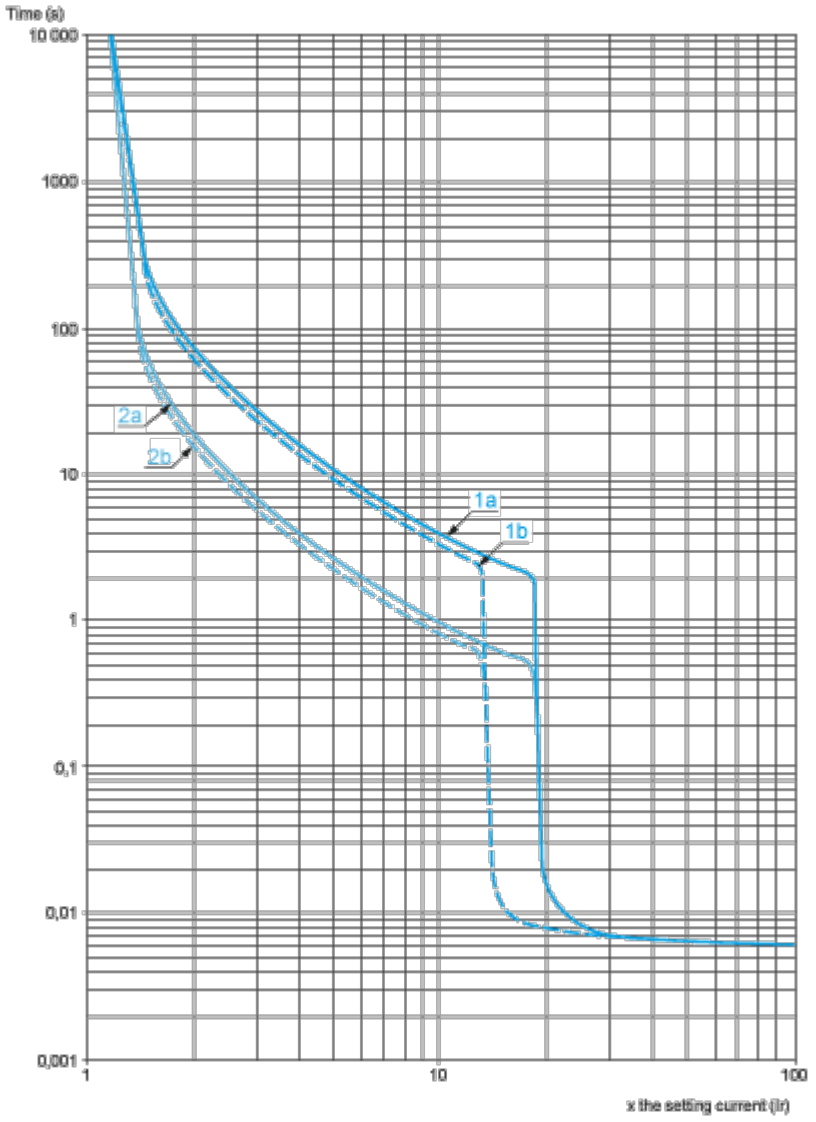
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Performance Curves

Thermal-Magnetic Tripping Curves

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

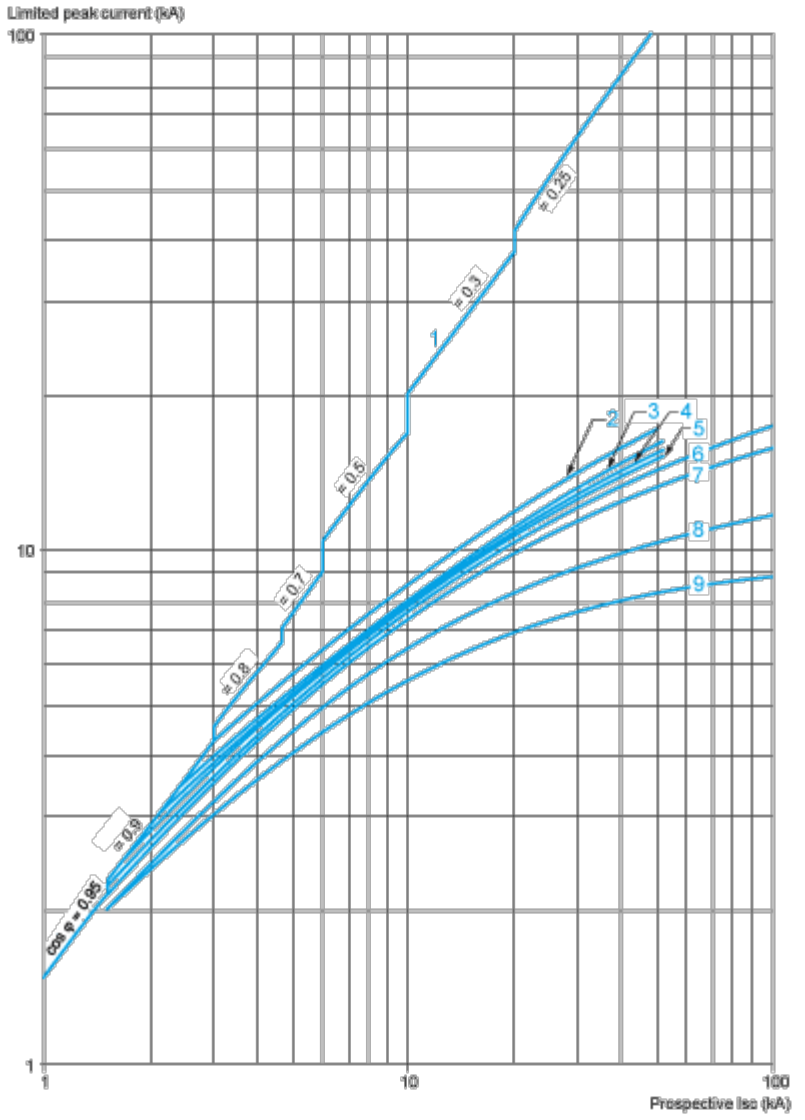


1a	3 poles from cold state (Ir minimum): GV3P
1b	3 poles from cold state (Ir maximum): GV3P
2a	3 poles from hot state (Ir minimum): GV3P
2b	3 poles from hot state (Ir maximum): GV3P

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)

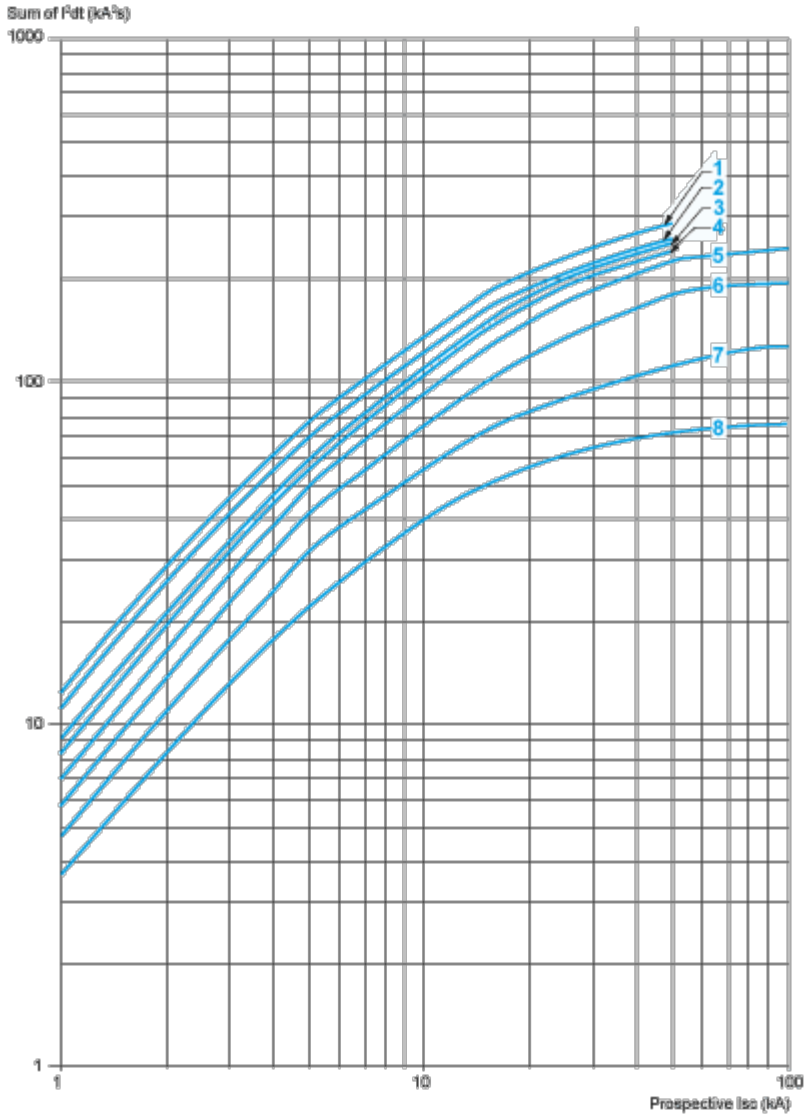
8 12-18 A (GV3P18)

9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

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

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



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)

6 17-25 A (GV3P25)

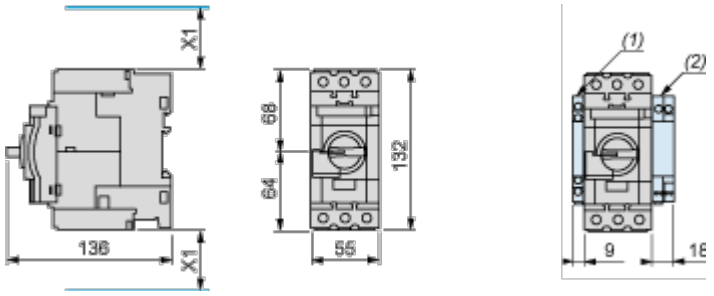
7 12-18 A (GV3P18)

8 9-13 A (GV3P13)

Dimensions Drawings

GVI3L, GV3P

Dimensions



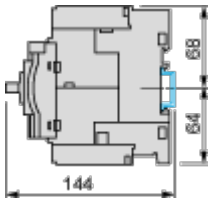
(1) Blocks GVAN••, GVAD•• and GVAM11.

(2) Blocks GV3AU•• and GV3AS••.

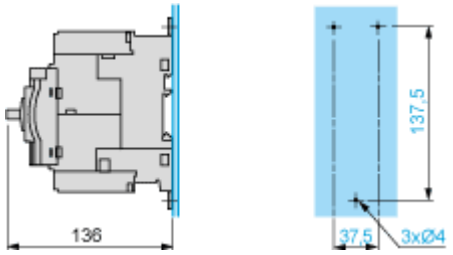
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

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.

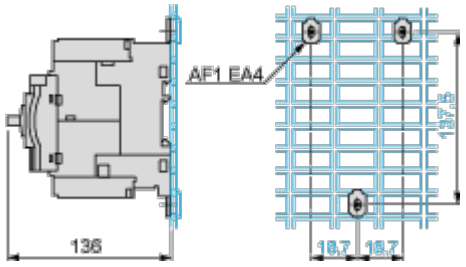
Mounting on Rail AM1 DE200 or AM1 ED201

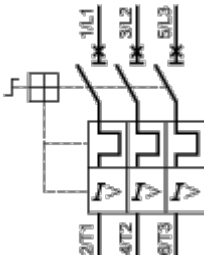


Panel Mounting, using M4 Screws



Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••