

Product data sheet

Specifications



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

GV3P506

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

Poles description	3P
Network type	AC
Utilisation category	Category A IEC 60947-2 AC-3 IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-2
Motor power kW	22 kW 400/415 V AC 50/60 Hz 30 kW 500 V AC 50/60 Hz 45 kW 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2 50 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2 50 kA Icu 440 V AC 50/60 Hz IEC 60947-2 12 kA Icu 500 V AC 50/60 Hz IEC 60947-2 6 kA Icu 690 V AC 50/60 Hz IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % 230/240 V AC 50/60 Hz IEC 60947-2 100 % 400/415 V AC 50/60 Hz IEC 60947-2 100 % 440 V AC 50/60 Hz IEC 60947-2 50 % 500 V AC 50/60 Hz IEC 60947-2 50 % 690 V AC 50/60 Hz IEC 60947-2
Control type	Rotary handle
[In] rated current	50 A
Thermal protection adjustment range	37...50 A IEC 60947-2
Magnetic tripping current	700 A
[Ith] conventional free air thermal current	50 A IEC 60947-2
[Ue] rated operational voltage	690 V AC 50/60 Hz IEC 60947-2
[Ui] rated insulation voltage	690 V AC 50/60 Hz IEC 60947-2
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Phase failure sensitivity	Yes IEC 60947-4-1
Suitability for isolation	Yes IEC 60947-1

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

Power dissipation per pole	8 W
Mechanical durability	50000 cycles
Electrical durability	50000 cycles AC-3 415 V In
Rated duty	Uninterrupted IEC 60947-4-1
Tightening torque	53.1 lbf.in (6 N.m) lugs-ring terminals
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with 3 x M4 screws)
Mounting position	Horizontal Vertical
Width	2.2 in (55 mm)
Height	5.2 in (132 mm)
Depth	5.4 in (136 mm)
Net weight	2.12 lb(US) (0.96 kg)
Colour	Dark grey
Connection pitch	0.7 in (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 IEC/EN 60335-1:Clause 30.2 IEC/EN 60335-2-40:Annex JJ
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 IEC 60529
Climatic withstand	IACS E10
Ambient air temperature for storage	-40...176 °F (-40...80 °C)
Fire resistance	1760 °F (960 °C) IEC 60695-2-11
Ambient air temperature for operation	-4...140 °F (-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	6.299 in (16.000 cm)
Package 1 Width	2.559 in (6.500 cm)
Package 1 Length	5.709 in (14.500 cm)

Package 1 Weight	32.487 oz (921.000 g)
Unit Type of Package 2	P06
Number of Units in Package 2	60
Package 2 Height	29.528 in (75.000 cm)
Package 2 Width	23.622 in (60.000 cm)
Package 2 Length	31.496 in (80.000 cm)
Package 2 Weight	150.488 lb(US) (68.260 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

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

Total lifecycle Carbon footprint	30 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	5 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	21 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	2057c252-f956-4ac1-a3d9-75119bc8a000
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



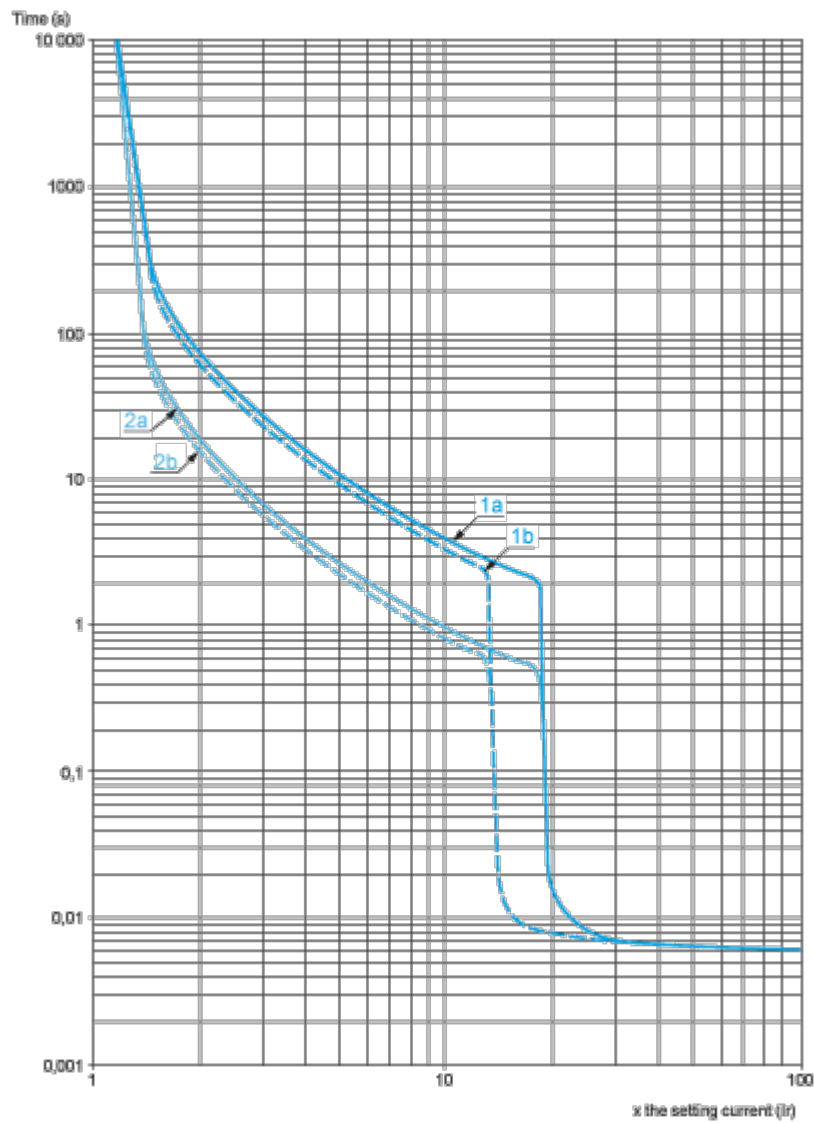
Repack and remanufacture

Recyclability potential, in %	58
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	 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

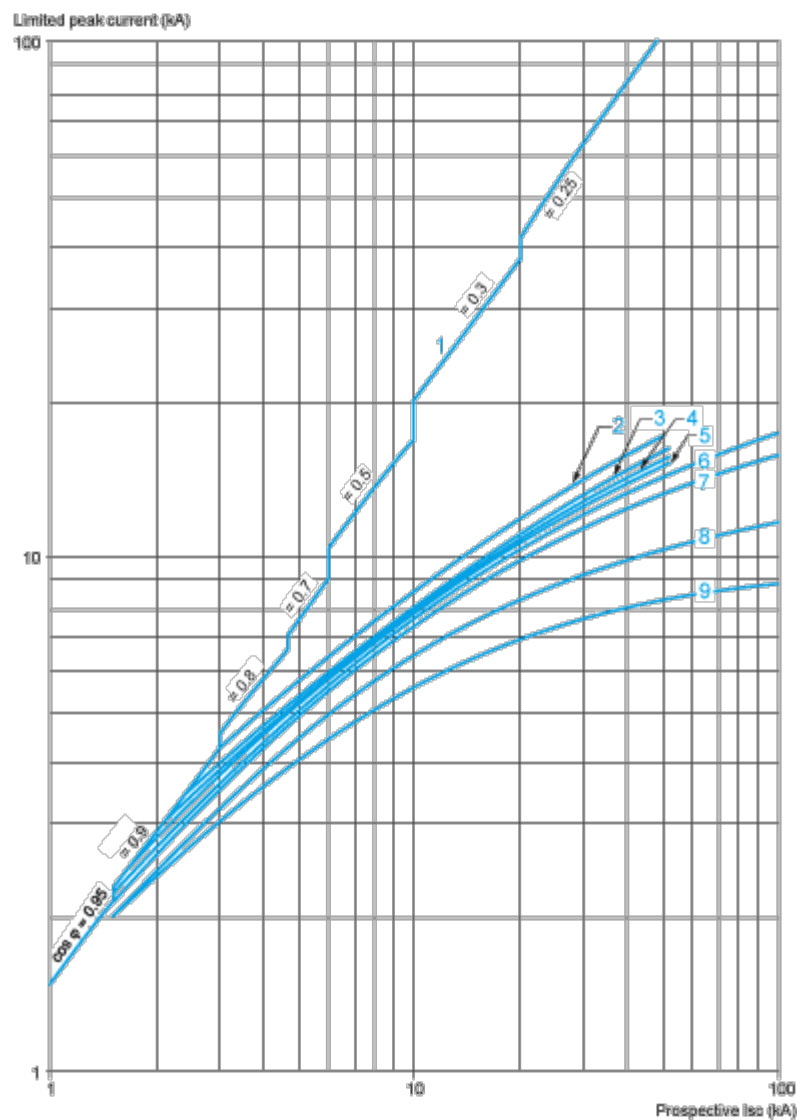


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

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

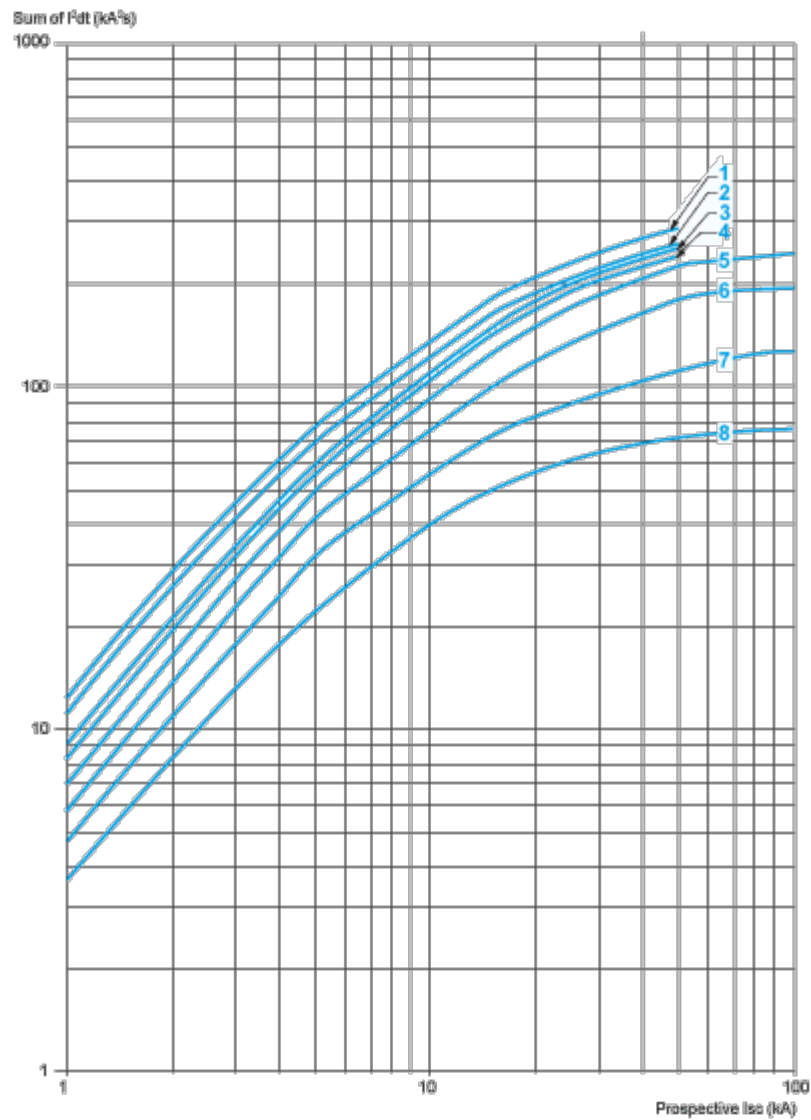
Dynamic Stress

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 kA²s in the Magnetic Operating Zone
Sum of I²dt = f (prospective Isc) at 1.05 Ue = 435 V

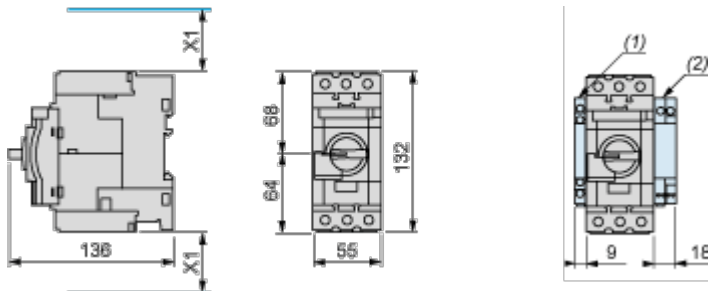


- 1 70-80 (GV3P80) - 62-73 (GV3P73)
- 2 48-65 A (GV3P65)
- 3 37-50 A (GV3P50)
- 4 30-40 A (GV3P40)
- 5 23-32 A (GV3P32)
- 6 17-25 A (GV3P25)
- 7 12-18 A (GV3P18)
- 8 9-13 A (GV3P13)

Dimensions Drawings

GV13L, GV3P

Dimensions

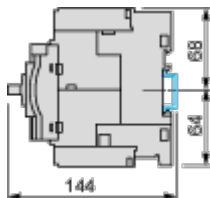


- (1) Blocks GVAN_{..}, GVAD_{..} and GVAM11.
- (2) Blocks GV3AU_{..} and GV3AS_{..}.

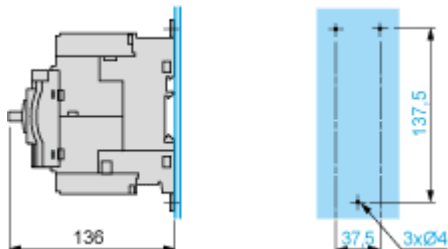
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

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.

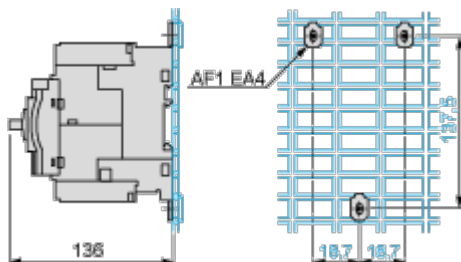
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws

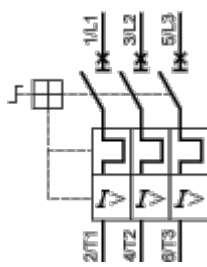


Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••



Offer Marketing Illustration

Product benefits / Features



TeSys Deca Motor Circuit Breakers

Range Accessories



Auxiliary
contact blocks



Comb busbar



Current limiter



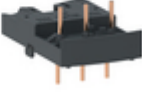
Energy Sensor



Large
spacing cover



Terminal block



Combination block



Extended
rotary handle

Offer Marketing Illustration

Product benefits / Features

TeSys Deca
Motor Circuit Breakers



Operation and maintenance

Digital customer experience for technical documents and maintenance guide via EcoStruxure™ Facility Expert



Build and commissioning

Easier to install and operate with multi-standard screws, safe and long-lasting power connection with EverLink terminals.



Universal Integration

Can be used for all type of applications across industry, infrastructure and buildings.

Offer Marketing Illustration

Product benefits / Features



The image shows a TeSys Deca Motor Circuit Breaker, a black industrial device with a green rotary handle. It is mounted on a DIN rail. The handle has a green indicator and is labeled 'TeSys' and 'Schneider Electric'. The device has three main terminals on top and three on the bottom. The background is a green semi-circle.

TeSys Deca Motor Circuit Breakers

Technical Benefits

- Easily integrated within multiple configurations, thanks to its 55 mm standard width and mounting on DIN rail.
- 9 ratings in total
- Magnetic and thermal overload protection, covers 9 to 80 A, 7.5 to 40 hp motor with 65 kA / 480 Y Type F
- Sturdy and long-lasting power connection with EverLink terminals
- Three-position (Start/Stop/Tripped) rotary handle, front face padlocking and other accessories
- Operating temperature from -20° C to +60° C open operation

Technical Illustration

Assembly's dimensions

