

Product datasheet

Specifications



TeSys GV3P thermal-magn motor circuit breaker 70-80A EverLink

GV3P80

EAN Code: 3606481304568

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 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	45 kW at 400/415 V AC 50/60 Hz maximum peak current 750 A 45 kW at 500 V AC 50/60 Hz maximum peak current 750 A 55 kW at 690 V AC 50/60 Hz maximum peak current 750 A
Breaking capacity	65 kA Icu at 230/240 V AC 50/60 Hz 50 kA Icu at 400/415 V AC 50/60 Hz 50 kA Icu at 440 V AC 50/60 Hz 12 kA Icu at 500 V AC 50/60 Hz 6 kA Icu at 690 V AC 50/60 Hz
[Ics] rated service short-circuit breaking capacity	100 % at 230/240 V AC 50/60 Hz 60 % at 400/415 V AC 50/60 Hz 60 % at 440 V AC 50/60 Hz 50 % at 500 V AC 50/60 Hz 50 % at 690 V AC 50/60 Hz
Control type	Rotary handle
[In] rated current	80 A
Thermal protection adjustment range	70...80 A conforming to IEC 60947-2
Magnetic tripping current	1120 A
[Ith] conventional free air thermal current	80 A conforming to IEC 60947-2
[Ue] rated operational voltage	690 V AC 50/60 Hz
[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

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	20000 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
Product weight	0.96 kg
Colour	Dark grey

Environment

Standards	EN/IEC 60947-2 EN/IEC 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	-40...80 °C
Fire resistance	960 °C conforming to IEC 60695-2-11
Ambient air temperature for operation	-20...60 °C
Mechanical robustness	Shocks: 5 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	6.500 cm
Package 1 Width	14.500 cm
Package 1 Length	16.000 cm
Package 1 Weight	1.020 kg
Unit Type of Package 2	S06

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	135.500 kg

Logistical informations

Country of origin	FR
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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

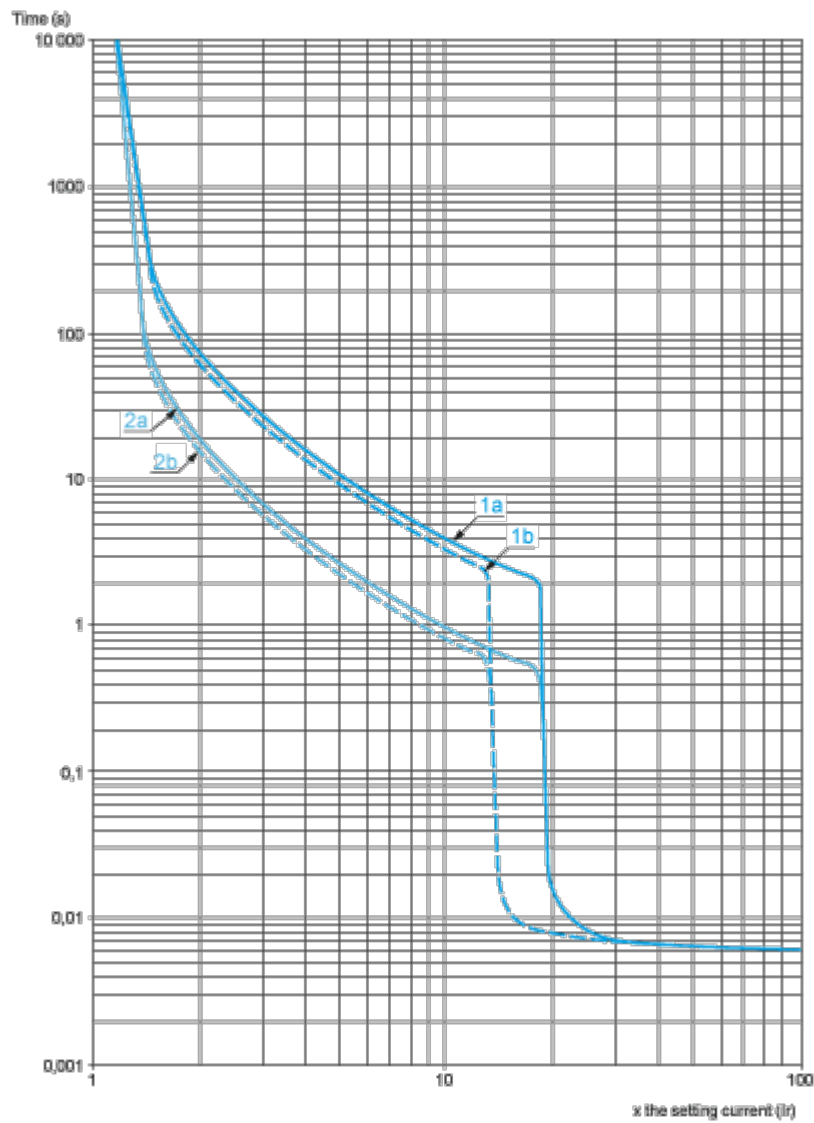


Repack and remanufacture

Recyclability potential, in %	58
End of life manual availability	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

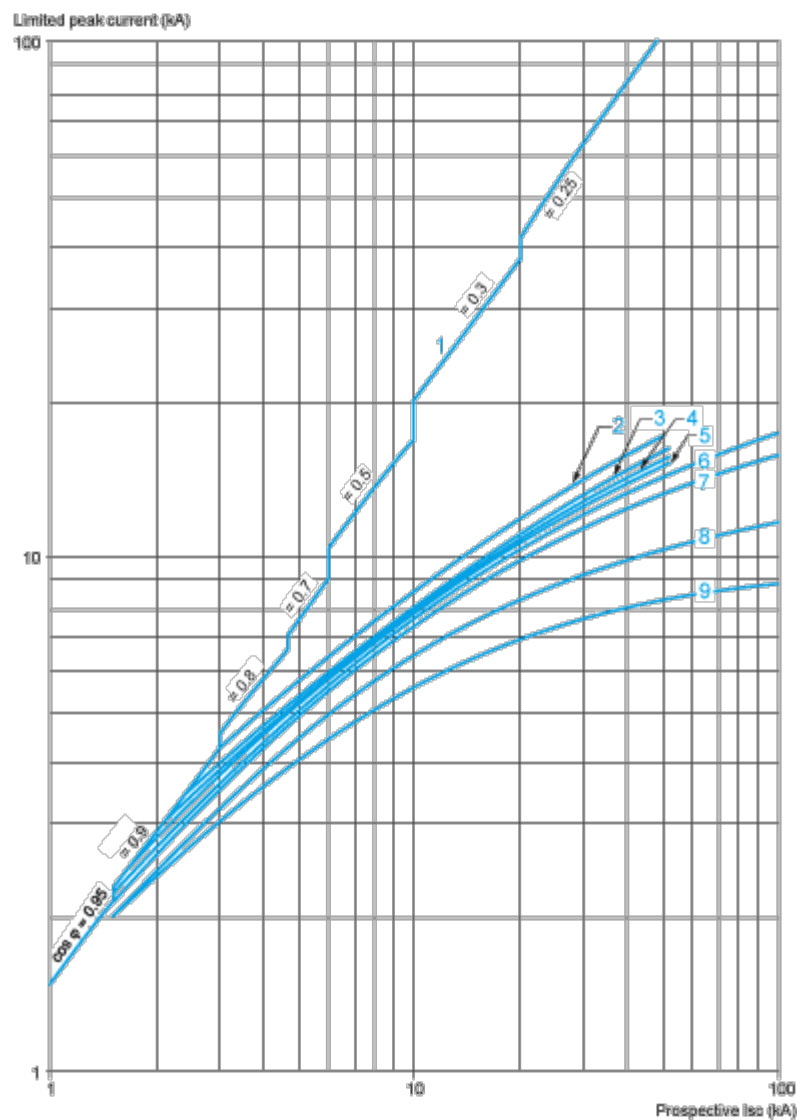
Performance Curves

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

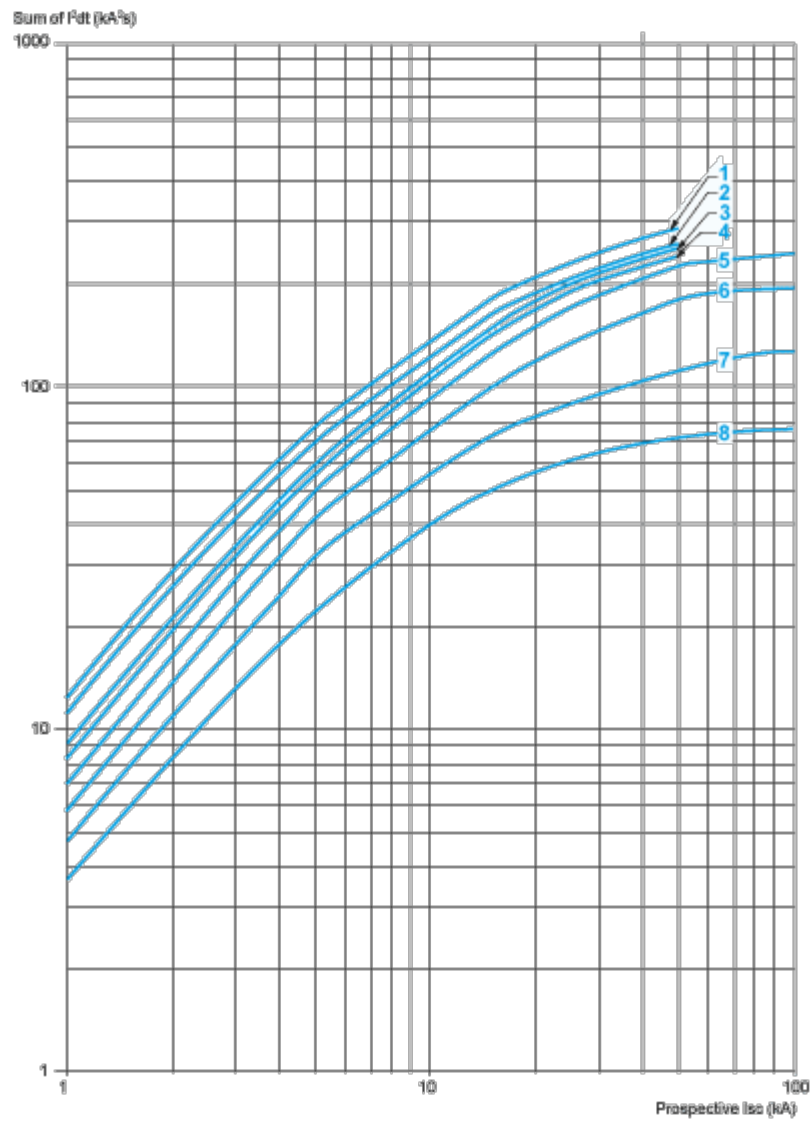


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

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

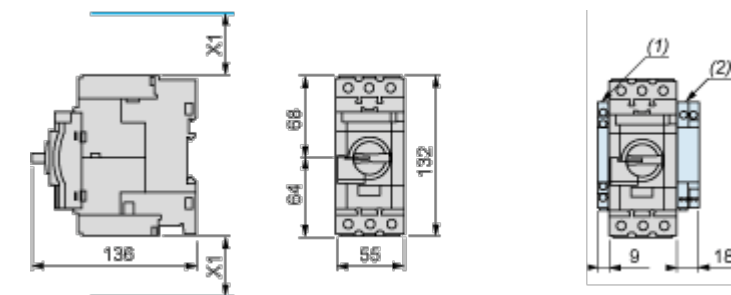
Sum of $I^2dt = f$ (prospective Isc) at 1.05 Ue = 435 V



- 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)

GV13L, GV3P

Dimensions



- (1)

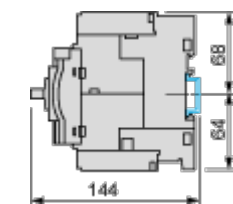
Blocks GVAN_{..}, GVAD_{..} and GVAM11.
- (2)

Blocks GV3AU_{..} and GV3AS_{..}.

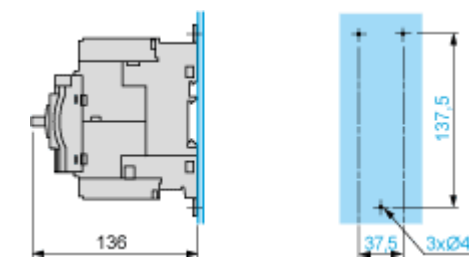
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

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.

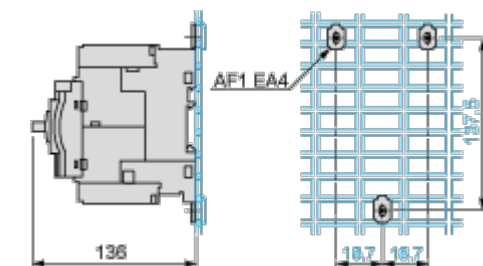
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws

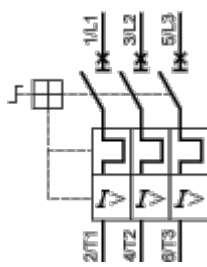


Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••



Offer Marketing Illustration

Product benefits / Features



TeSys Deca Motor
Circuit Breakers
Range Accessories



Auxiliary
contact blocks



Comb busbar



Current limiter



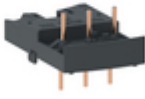
Energy Sensor



Large
spacing cover



Terminal block



Combination block



Extended
rotary handle

Offer Marketing Illustration

Product benefits / Features

A black TeSys Deca Motor Circuit Breaker (GV3P80) is shown against a green circular background. The device has a rotary handle on the front face, labeled 'TeSys' and 'Schneider Electric'. It features three main terminals at the top and bottom, and a central terminal for the handle. The handle is currently in the 'Stop' position.

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

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.

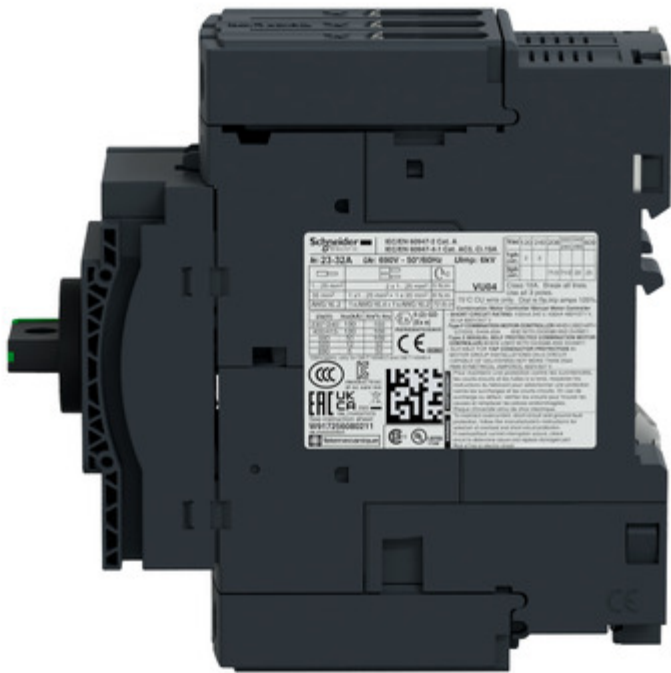
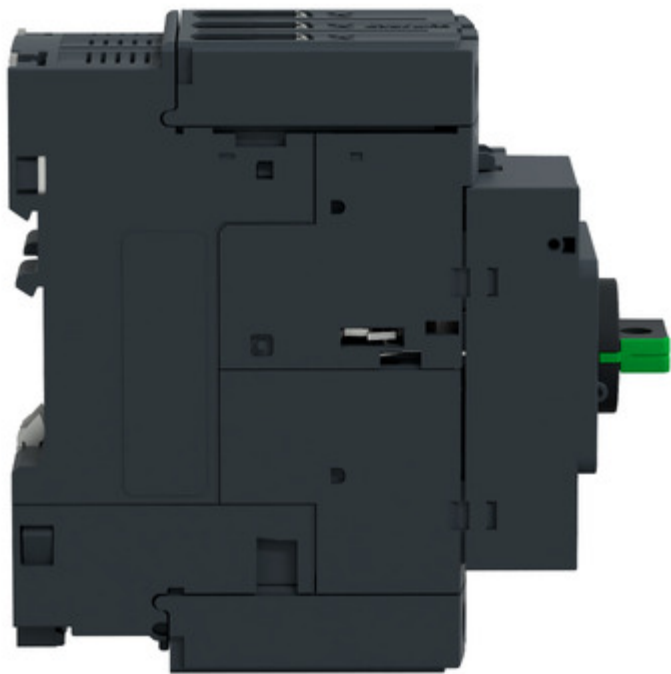


Universal Integration

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

Image of product / Alternate images

Alternative





Technical Illustration

Assembly's dimensions

