Product datasheet

Specifications



Motor circuit breaker,TeSys Deca frame 3,3P,37-50A,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

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
[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 60947-2
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

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 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 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	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 (in months)	18

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

Use Better

Materials and Substances

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

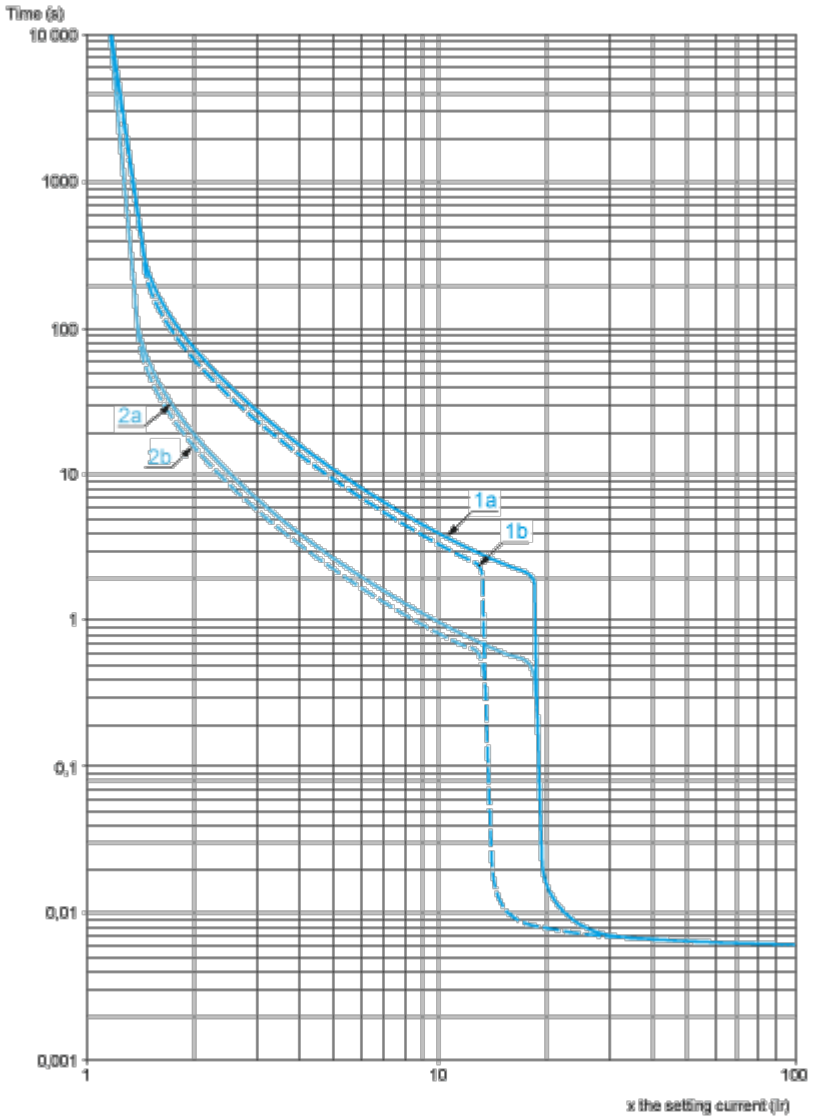
Repack and remanufacture

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

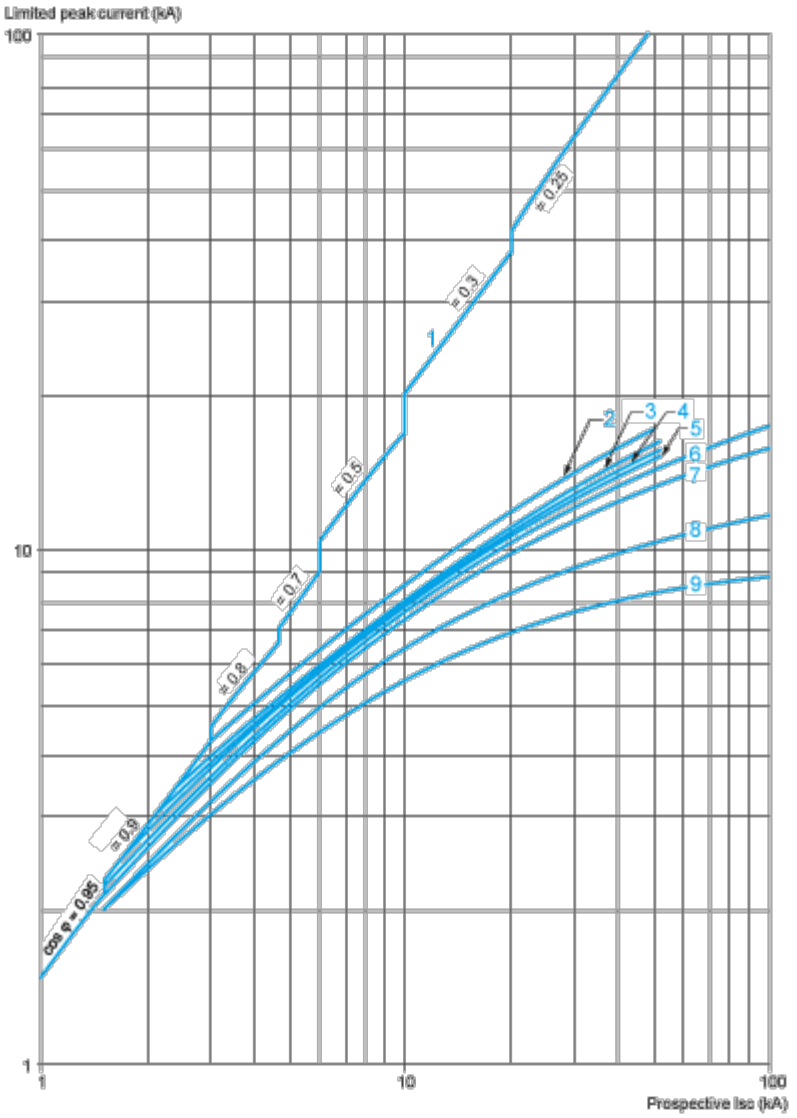
2a 3 poles from hot state (Ir minimum): GV3P

2b 3 poles from hot state (Ir maximum): GV3P

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

Dynamic Stress

I peak = f (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)

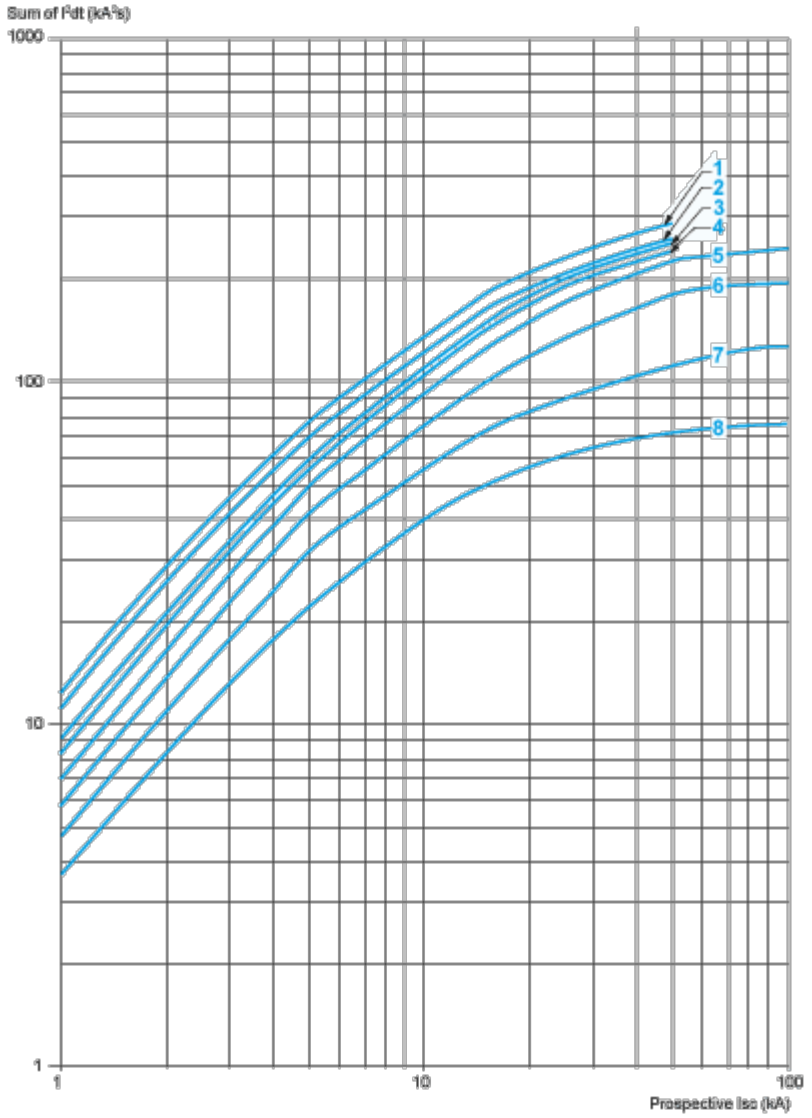
8 12-18 A (GV3P18)

9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

Thermal Limit in kA^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)

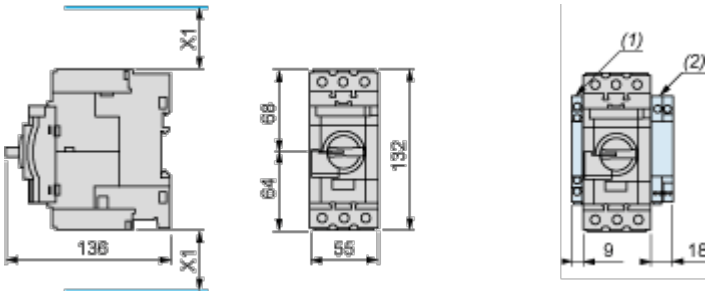
7 12-18 A (GV3P18)

8 9-13 A (GV3P13)

Dimensions Drawings

GVI3L, GV3P

Dimensions



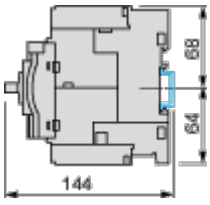
(1) Blocks GVAN●●, GVAD●● and GVAM11.

(2) Blocks GV3AU●● and GV3AS●●.

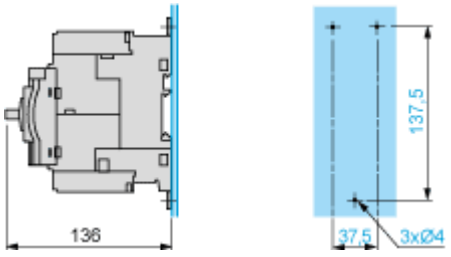
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

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.

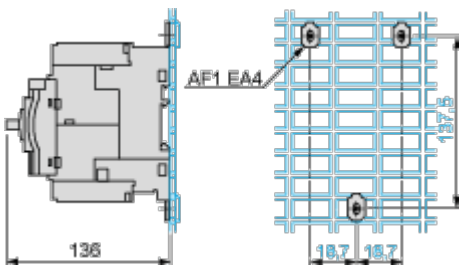
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws

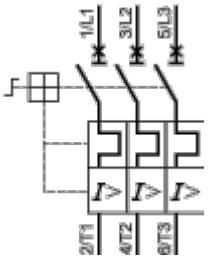


Mounting on Pre-Slotted Plate AM1 PA



Connections and Schema

GV3P••



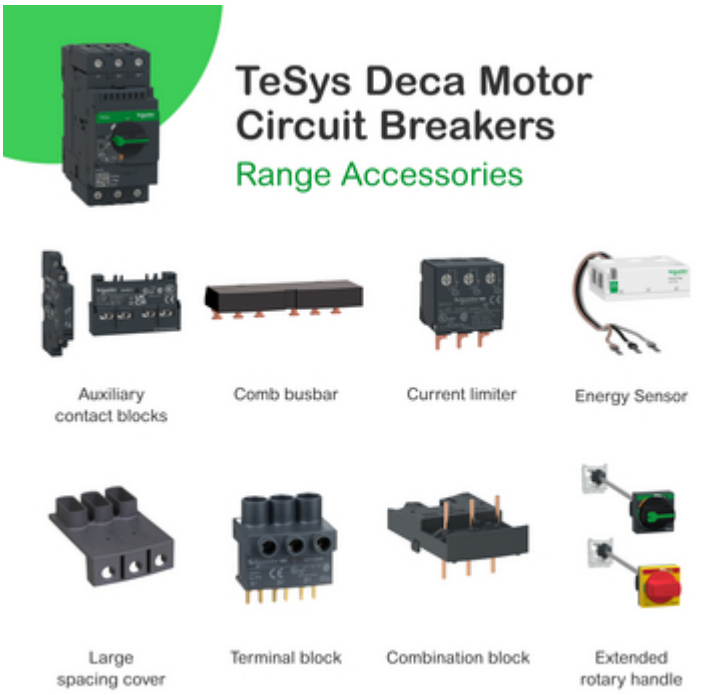
Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

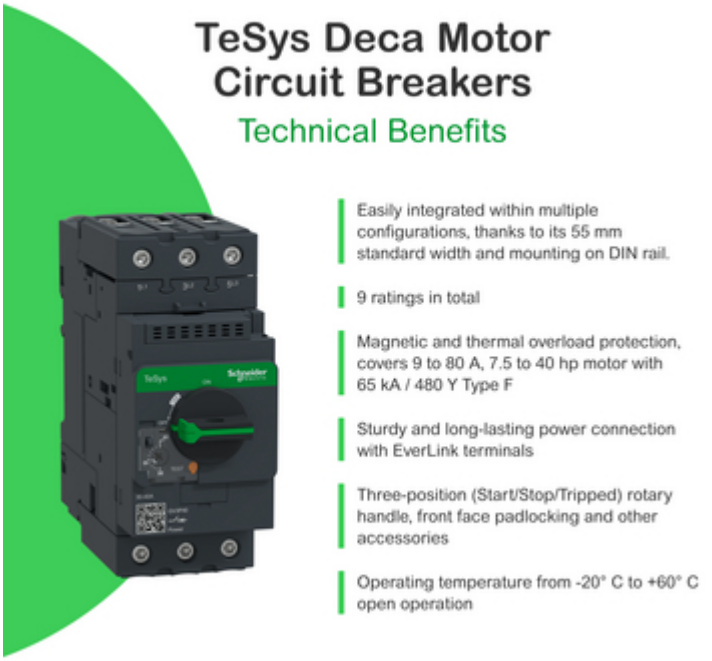
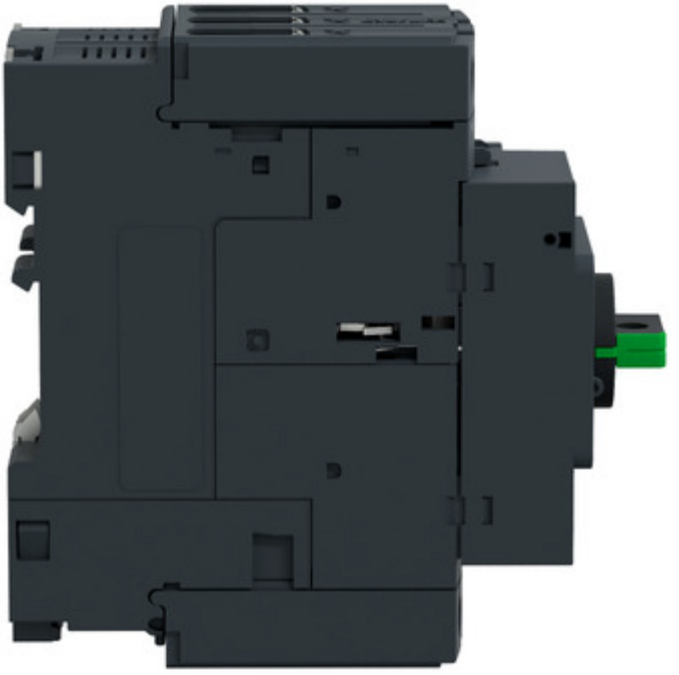
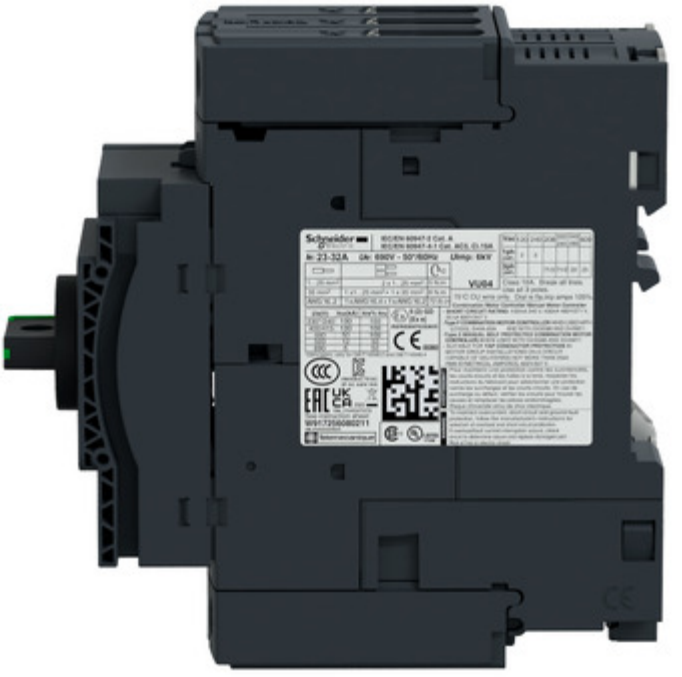


Image of product / Alternate images

Alternative






37.5
137.5
M4

Technical Illustration

Assembly's dimensions

