

# Product data sheet

Specifications



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

GV3P50

### 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

<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947-2
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1
<b>Power dissipation per pole</b>	8 W
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	50000 cycles for AC-3 at 415 V In
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Tightening torque</b>	5 N.m - on screw clamp terminal
<b>Width</b>	55 mm
<b>Height</b>	132 mm
<b>Depth</b>	136 mm
<b>Net weight</b>	0.96 kg
<b>Colour</b>	Dark grey

## Environment

<b>Standards</b>	EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
<b>Product certifications</b>	CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
<b>IK degree of protection</b>	IK09 enclosure
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Climatic withstand</b>	conforming to IACS E10
<b>Ambient air temperature for storage</b>	-40...80 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-11
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Mechanical robustness</b>	Shocks: 15 Gn for 11 ms contactor open Shocks: 30 Gn for 11 ms contactor closed Vibrations: 4 Gn, 5...300 Hz
<b>Operating altitude</b>	3000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	16.000 cm
<b>Package 1 Width</b>	6.500 cm
<b>Package 1 Length</b>	14.500 cm
<b>Package 1 Weight</b>	1.008 kg
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	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

## Offer Sustainability

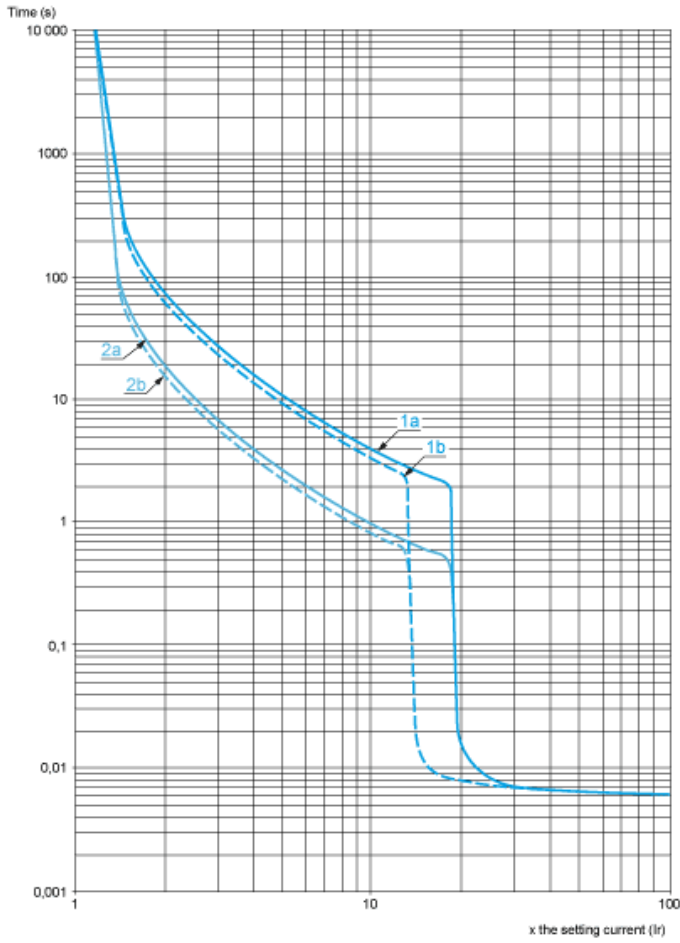
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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**Thermal-Magnetic Tripping Curves**

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

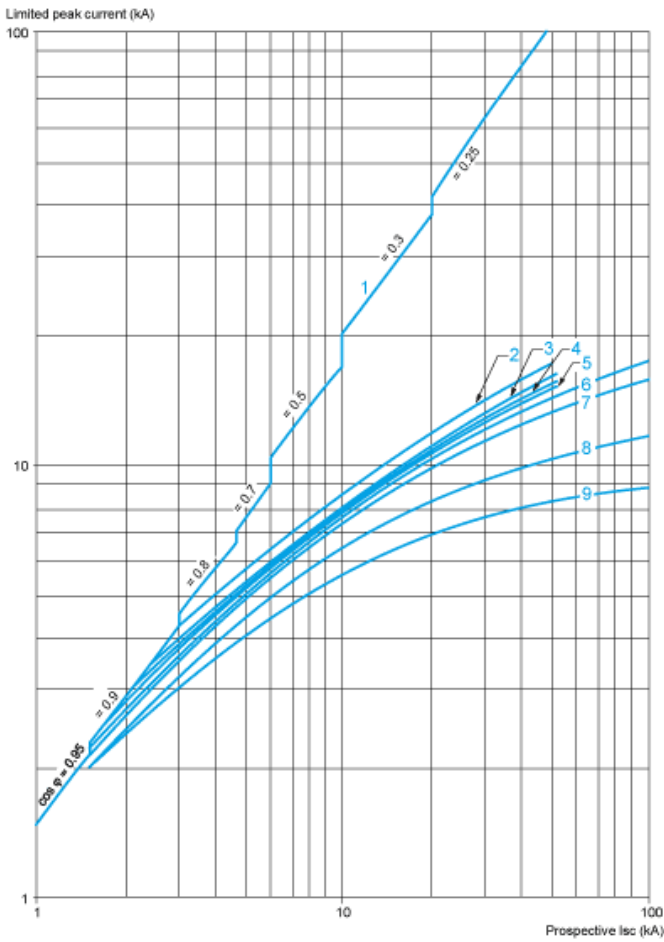


- 1a** 3 poles from cold state (Ir minimum): GV3P
- 1b** 3 poles from cold state (Ir maximum): GV3P
- 2a** 3 poles from hot state (Ir minimum): GV3P
- 2b** 3 poles from hot state (Ir maximum): GV3P

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

**Dynamic Stress**

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

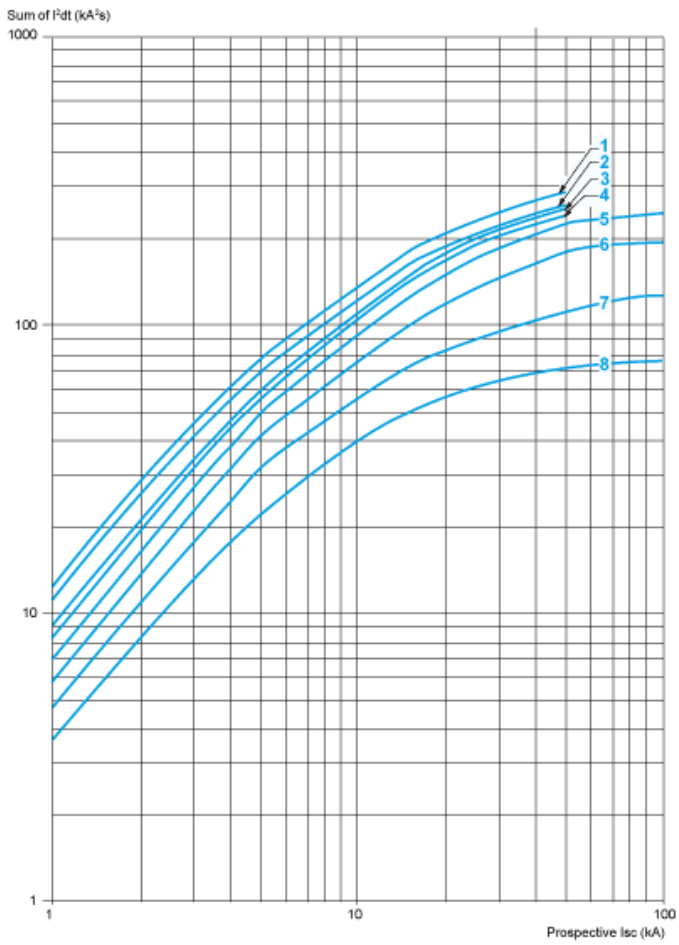


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

### Maximum Thermal Limit on Short-Circuit

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

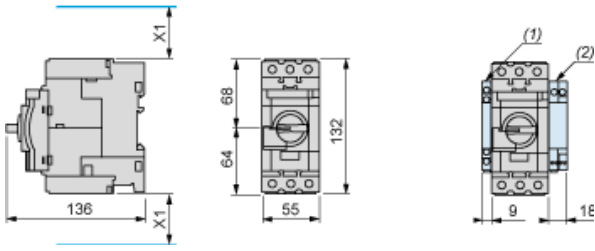
Sum of  $I^2dt = f(\text{prospective Isc})$  at  $1.05 U_e = 435 \text{ V}$



- 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)

**GVI3L, GV3P**

**Dimensions**

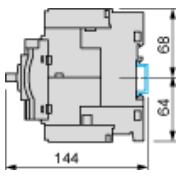


- (1) Blocks GVAN.., GVAD.. and GVAM11.
- (2) Blocks GV3AU.. and GV3AS..

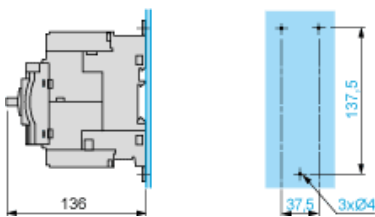
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

**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.

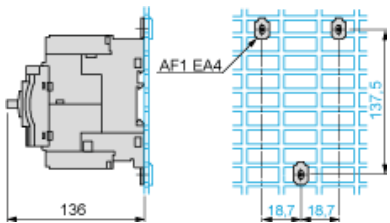
**Mounting on Rail AM1 DE200 or AM1 ED201**



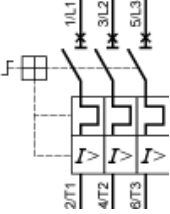
**Panel Mounting, using M4 Screws**



**Mounting on Pre-Slotted Plate AM1 PA**



**GV3P••**



**Recommended replacement(s)**