

# Product data sheet

Specifications



## Motor circuit breaker, TeSys Deca, 3P, 62-73 A, thermal magnetic, EverLink terminals

GV3P73

### Main

Range of product	TeSys GV3
Range	TeSys TeSys Deca
Device short name	GV3P
Product name	TeSys GV3 TeSys Deca
Product or component type	Circuit breaker
Device application	Motor
Trip unit technology	Thermal-magnetic

### Complementary

Poles description	3P
Network type	AC
Utilisation category	AC-3 conforming to IEC 60947-4-1 Category A conforming to IEC 60947-2
Network frequency	50/60 Hz
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws)
Operating position	Any position
Motor power kW	37 kW at 400/415 V AC 50/60 Hz 55 kW at 690 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz
Breaking capacity	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 65 kA Icu at 230/240 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 knob
[In] rated current	73 A
Thermal protection adjustment range	62...73 A
Magnetic tripping current	1120 A

<b>[Ue] rated operational voltage</b>	690 V AC 50/60 Hz
<b>[Ui] rated insulation voltage</b>	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>Power dissipation per pole</b>	8 W
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	20000 cycles for AC-3 at 415 V In
<b>Maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Tightening torque</b>	5 N.m on EverLink BTR screw connectors for cable 25 mm <sup>2</sup> 8 N.m on EverLink BTR screw connectors for cable 35 mm <sup>2</sup>
<b>Mechanical robustness</b>	Shocks: 30 Gn for 11 ms opened conforming to IEC 60068-2-27 Vibrations: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks: 5 Gn for 11 ms closed conforming to IEC 60068-2-27
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Height</b>	132 mm
<b>Width</b>	55 mm
<b>Depth</b>	136 mm
<b>Net weight</b>	0.96 kg
<b>Colour</b>	Dark grey Green (SE GREEN 2)

## Environment

<b>Standards</b>	EN/IEC 60947-2 EN/IEC 60947-4-1 CSA C22.2 No 60947-4-1 UL 60947-4-1
<b>Product certifications</b>	IECEE CB Scheme UL CSA CCC EAC ATEX BV LROS (Lloyds register of shipping) DNV-GL ABS UKCA
<b>Protective treatment</b>	TC
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>IK degree of protection</b>	IK09
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Ambient air temperature for storage</b>	-40...80 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-1
<b>Operating altitude</b>	0...3000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	1.004 kg
<b>Package 1 Height</b>	6.8 cm

Package 1 width	14.8 cm
Package 1 Length	16 cm
Unit Type of Package 2	P06
Number of Units in Package 2	120
Package 2 Weight	130.48 kg
Package 2 Height	75 cm
Package 2 width	60 cm
Package 2 Length	80 cm

### Offer Sustainability

Sustainable offer status Green Premium product

REACH Regulation

EU RoHS Directive

Mercury free Yes

RoHS exemption information

China RoHS Regulation

Environmental Disclosure

WEEE The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### Contractual warranty

Warranty 18 months

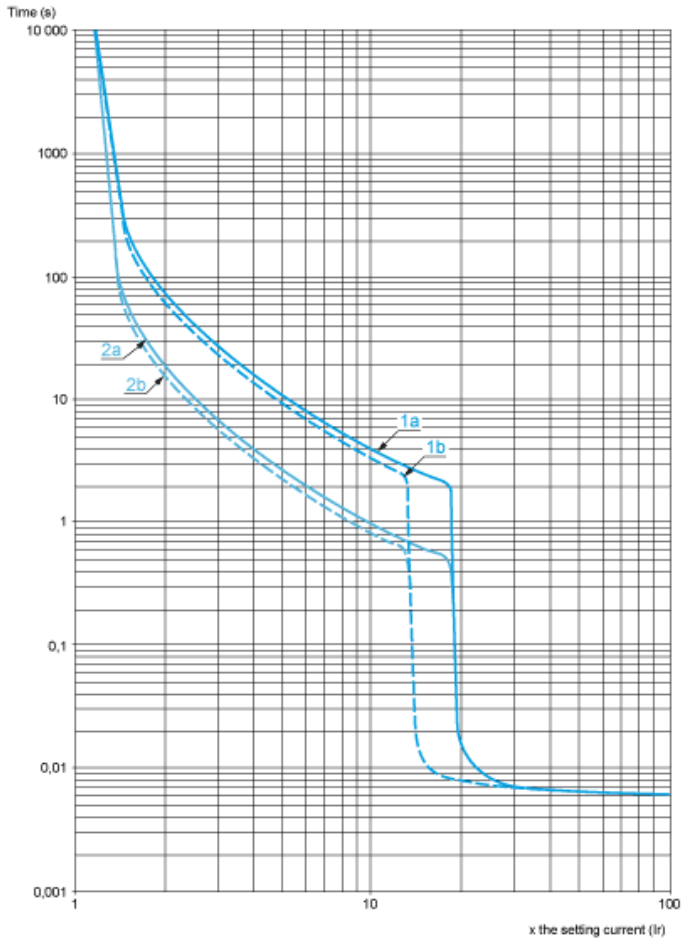
# Product data sheet

## Performance Curves

# GV3P73

### Thermal-Magnetic Tripping Curves

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

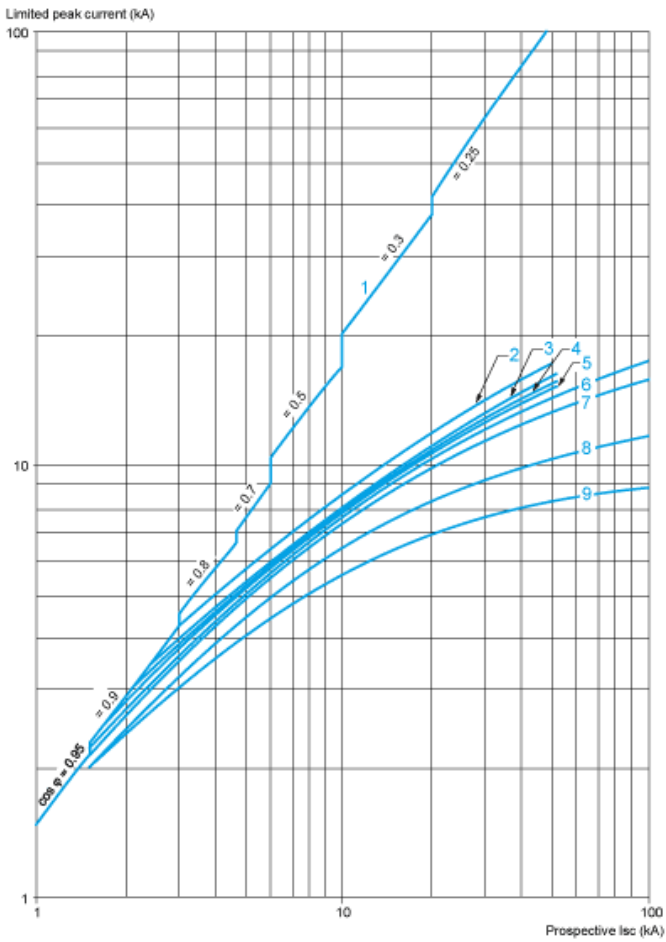


- 1a** 3 poles from cold state (Ir minimum): GV3P
- 1b** 3 poles from cold state (Ir maximum): GV3P
- 2a** 3 poles from hot state (Ir minimum): GV3P
- 2b** 3 poles from hot state (Ir maximum): GV3P

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

#### Dynamic Stress

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

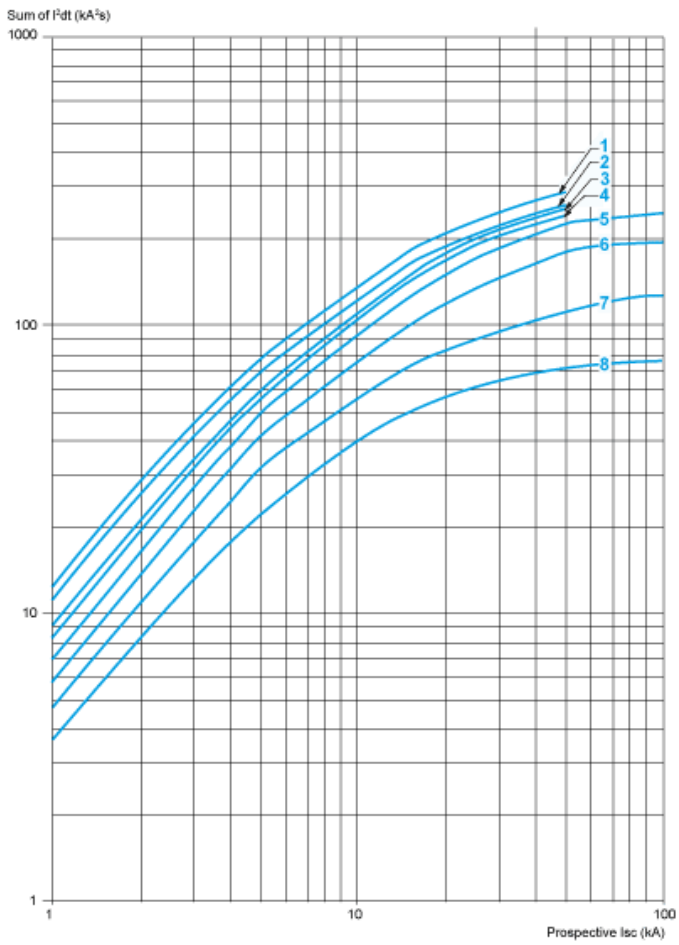


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

**Maximum Thermal Limit on Short-Circuit**

**Thermal Limit in kA<sup>2</sup>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)

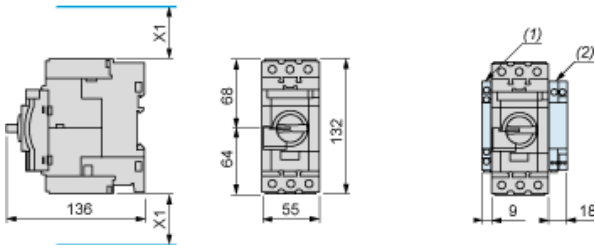
# Product data sheet

## Dimensions Drawings

# GV3P73

### GVI3L, GV3P

#### Dimensions

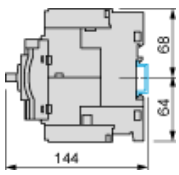


- (1) Blocks GVAN.., GVAD.. and GVAM11.
- (2) Blocks GV3AU.. and GV3AS..

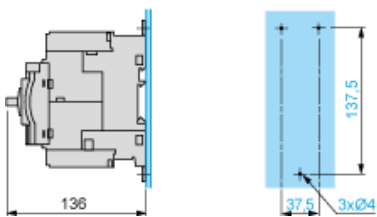
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

**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.

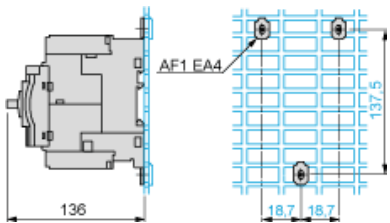
#### Mounting on Rail AM1 DE200 or AM1 ED201



#### Panel Mounting, using M4 Screws



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



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## Connections and Schema

# GV3P73

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