



## 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 IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-4-1
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with 3 x M4 screws)
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
Line Rated Current	50 A
Thermal protection adjustment range	37...50 A IEC 60947-4-1
Magnetic tripping current	700 A
[I <sub>th</sub> ] conventional free air thermal current	50 A IEC 60947-4-1
[U <sub>e</sub> ] rated operational voltage	690 V AC 50/60 Hz IEC 60947-2
[U <sub>i</sub> ] rated insulation voltage	690 V AC 50/60 Hz IEC 60947-2
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV IEC 60947-2
Phase failure sensitivity	Yes IEC 60947-4-1
Suitability for isolation	Yes IEC 60947-1
Power dissipation per pole	8 W
Mechanical durability	50000 cycles
Electrical durability	50000 cycles AC-3 415 V In
Rated duty	Continuous IEC 60947-4-1
Tightening torque	44.25 lbf.in (5 N.m) screw clamp terminal
Width	2.17 in (55 mm)
Height	5.20 in (132 mm)

Depth	5.35 in (136 mm)
Net Weight	2.12 lb(US) (0.96 kg)
Color	Dark grey

## Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product Certifications	CCC[RETURN]JUL[RETURN]CSA[RETURN]EAC[RETURN]ATEX[RETURN]LROS (Lloyds register of shipping)[RETURN]BV[RETURN]ABS[RETURN]DNV- GL[RETURN]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	9842.52 ft (3000 m)

## Packing Units

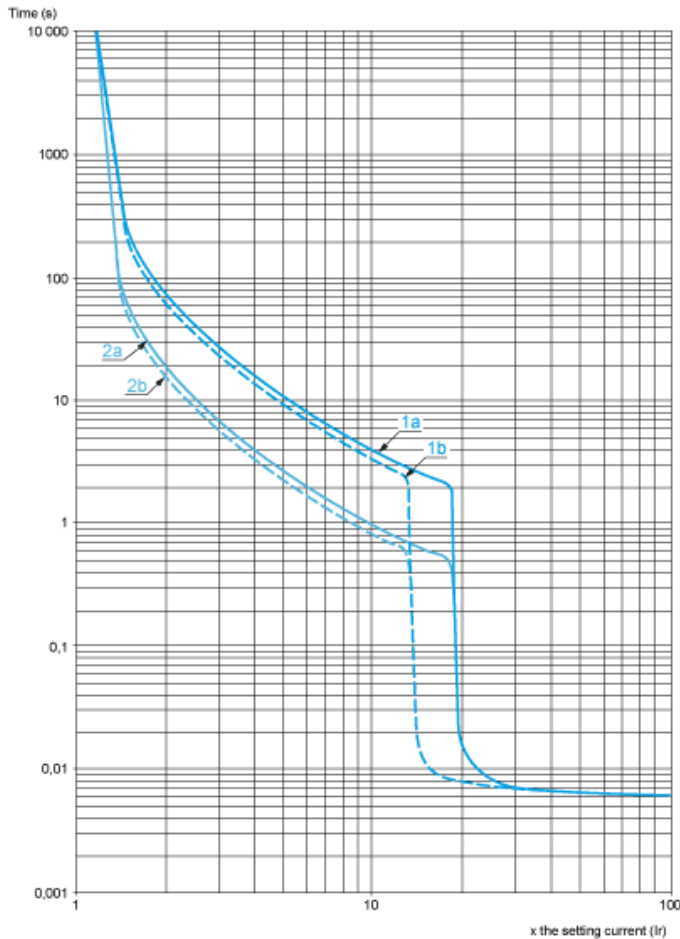
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.75 in (14.600 cm)
Package 1 Width	2.56 in (6.500 cm)
Package 1 Length	6.10 in (15.500 cm)
Package 1 Weight	32.87 oz (932.000 g)
Unit Type of Package 2	P06
Number of Units in Package 2	60
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)
Package 2 Weight	151.94 lb(US) (68.920 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
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.

Thermal-Magnetic Tripping Curves

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

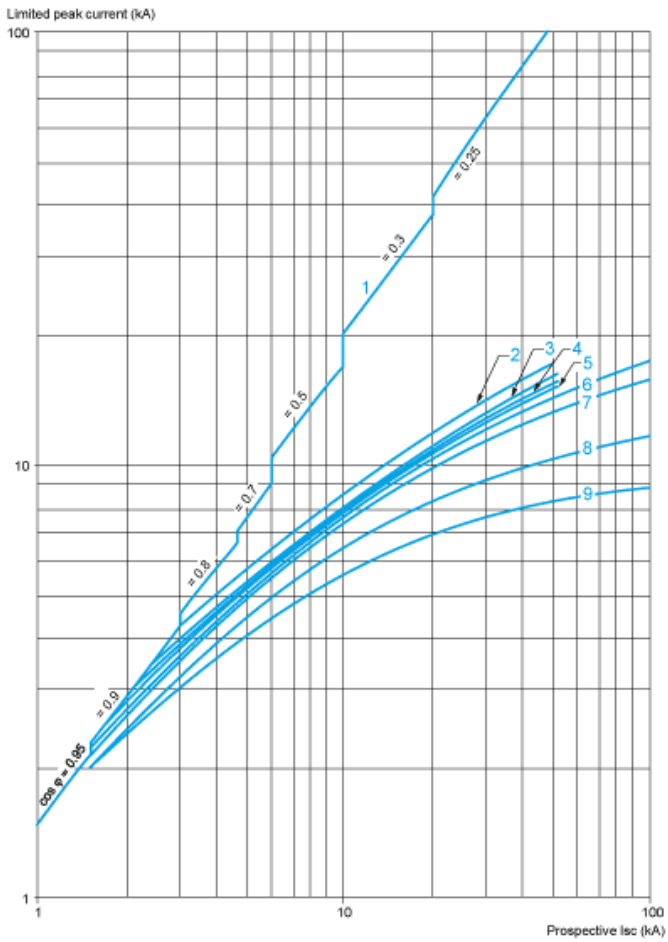


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

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

Dynamic Stress

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

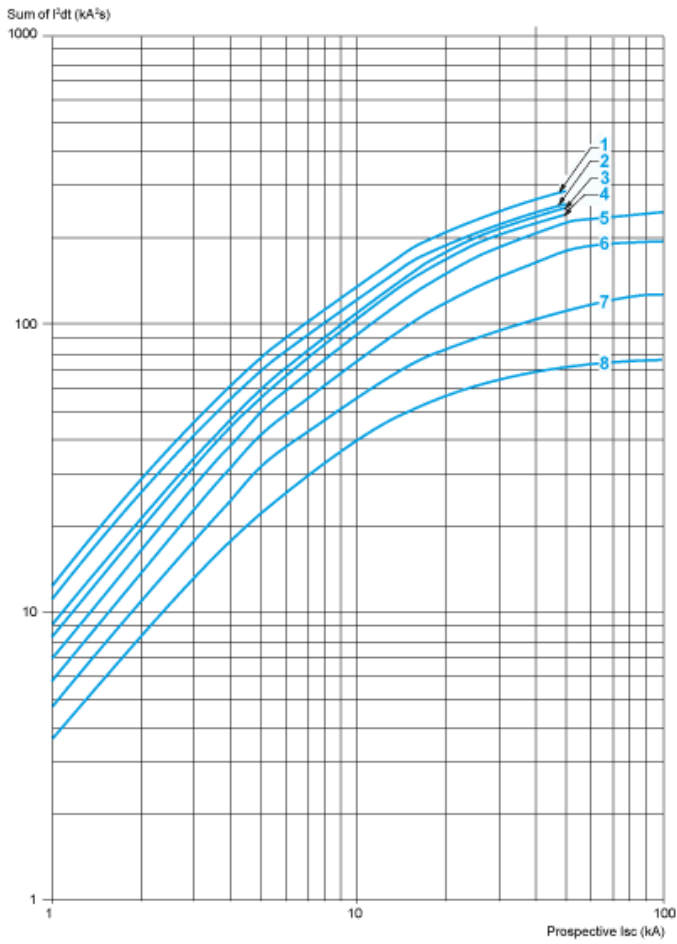


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

**Maximum Thermal Limit on Short-Circuit**

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

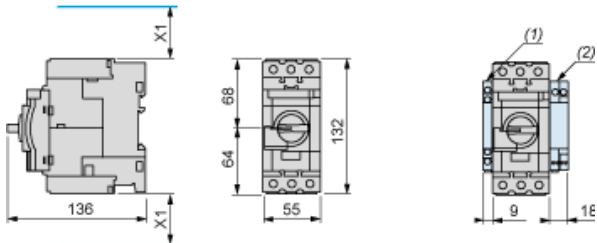
Sum of  $I^2dt = f$  (prospective Isc) at  $1.05 U_e = 435 V$



- 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)

GVI3L, GV3P

Dimensions



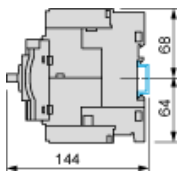
(1) Blocks GVAN... GVAD... and GVAM11.

(2) Blocks GV3AU... and GV3AS...

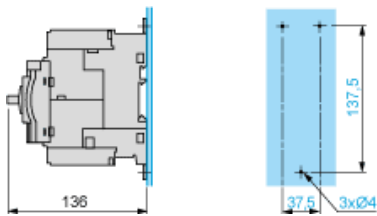
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

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.

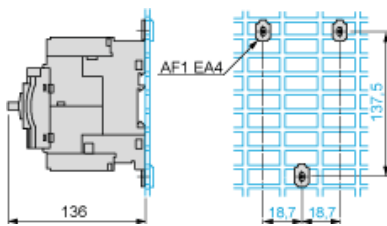
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws



Mounting on Pre-Slotted Plate AM1 PA



GV3P••

