Product datasheet

Specifications

Green Premium™

Motor circuit breaker, TeSys GV3, 3P, 50 A, magnetic, rotary handle, EverLink terminals

Local distributor code:

389739982 GV3L50

EAN Code: 3389119405454

Main

Range	TeSys Deca
Product Name	TeSys GV3 TeSys Deca
Product Or Component Type	Motor circuit breaker
Device Short Name	GV3L
Device Application	Motor protection
Trip Unit Technology	Magnetic

Complementary

Poles Description	3P
Network Type	AC
Utilisation Category	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)
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 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 100 % at 400/415 V AC 50/60 Hz 100 % 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	50 A
Magnetic Tripping Current	700 A
[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
Suitability For Isolation	Yes conforming to IEC 60947-1
Power Dissipation Per Pole	8 W
Mechanical Durability	50000 cycles

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

Electrical Durability	50000 cycles for AC-3 at 415 V In
Tightening Torque	5 N.m - on screw clamp terminal
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
Product Certifications	CCC UL CSA EAC LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
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	6.500 cm
Package 1 Width	16.000 cm
Package 1 Length	14.500 cm
Package 1 Weight	997.000 g
Unit Type Of Package 2	P06
Number Of Units In Package 2	60
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	73.060 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

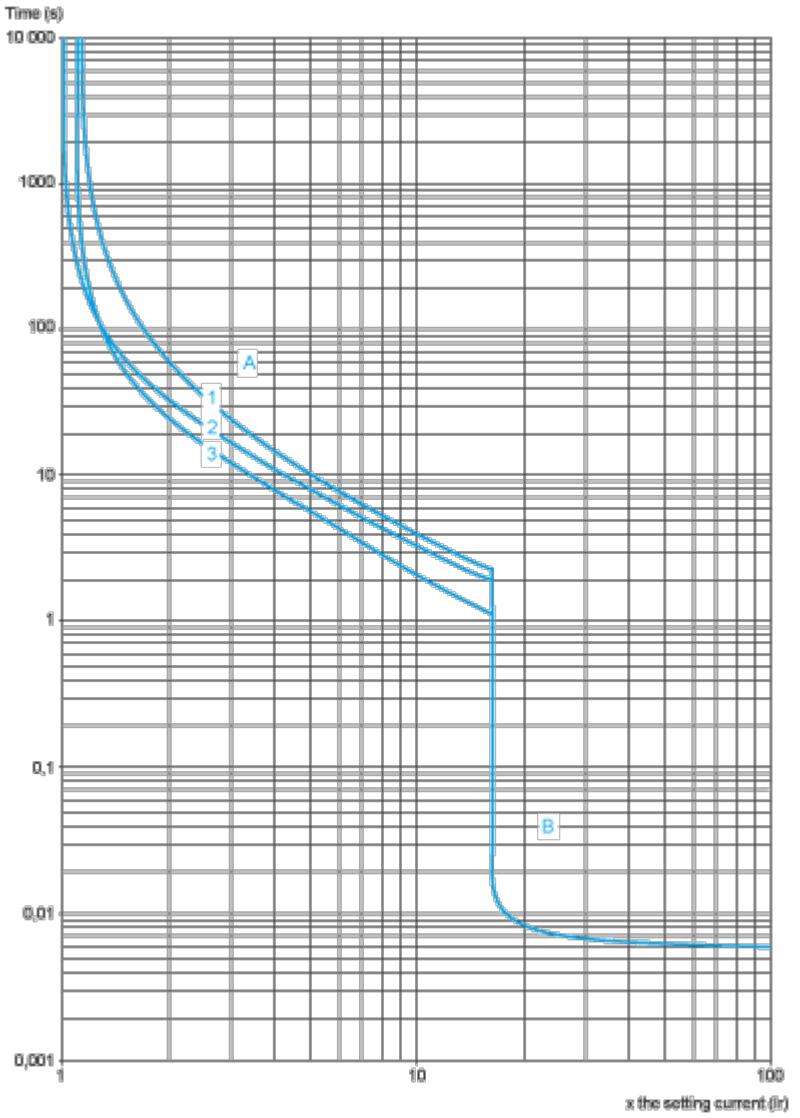
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Performance Curves

Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33

Average Operating time at 20 °C without Prior Current Flow

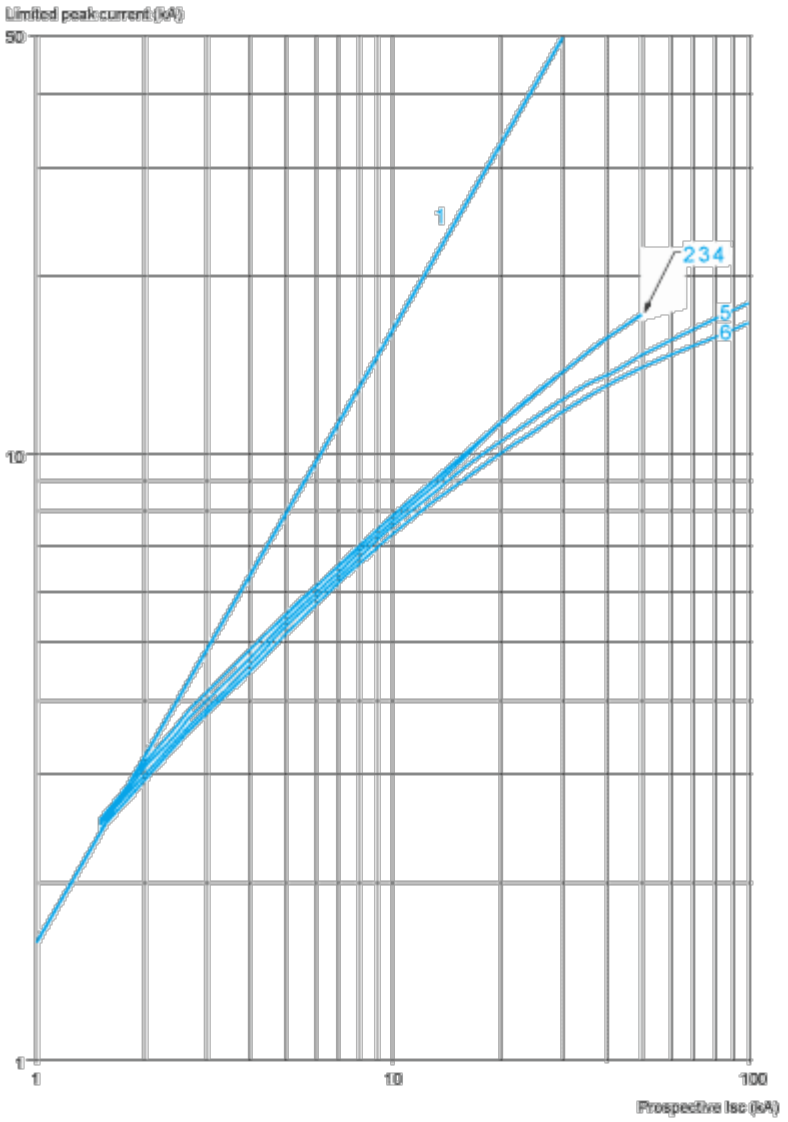


1	3 poles from cold state
2	2 poles from cold state
3	3 poles from hot state
A	Thermal overload relay protection zone
B	GV3L protection zone

Current Limitation on Short-Circuit for GV3L (3-Phase 400/415 V)

Dynamic Stress

I peak = f (prospective Isc) at 1.05 Ue = 435 V



1 Maximum peak current

2 GV3L80 - GV3L73 - GV3L65

3 GV3L50

4 GV3L40

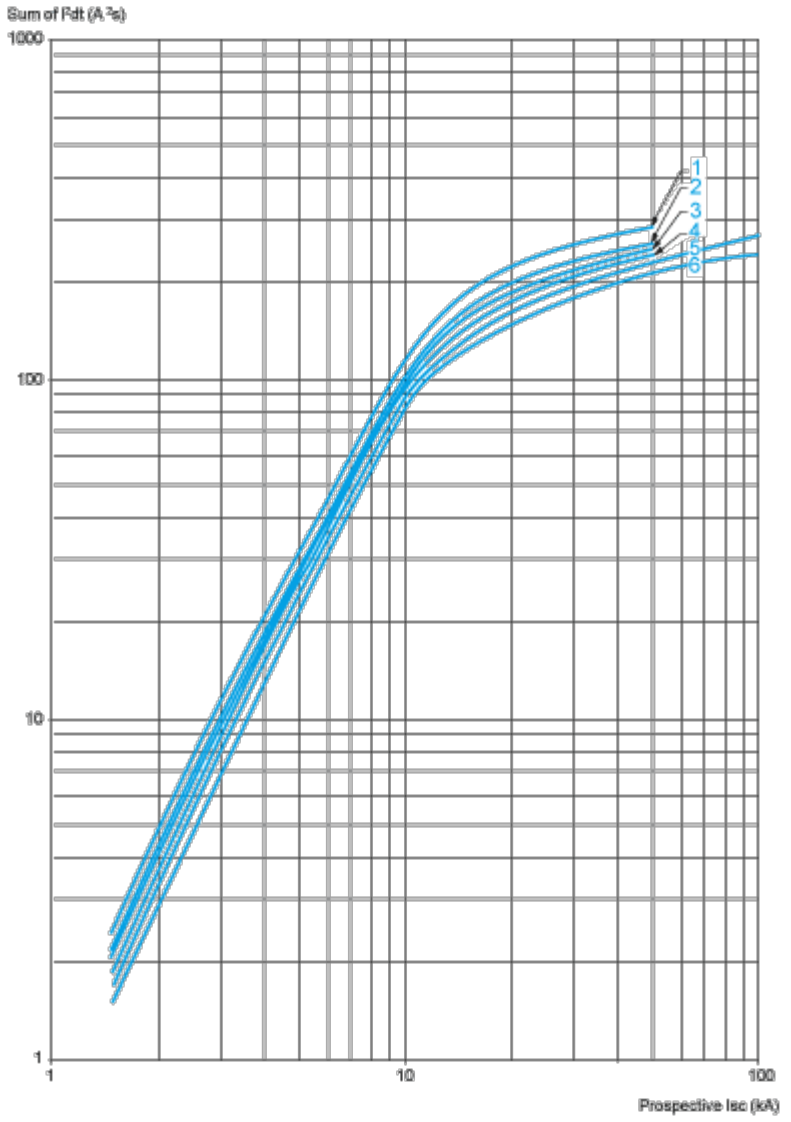
5 GV3L32

6 GV3L25

Thermal Limit on Short-Circuit for GV3L

Thermal Limit in A^2s

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



1 GV3L73 - GV3L80

2 GV3L65

3 GV3L50

4 GV3L40

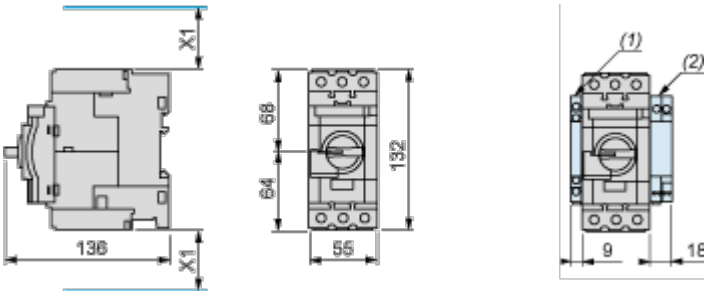
5 GV3L32

6 GV3L25

Dimensions Drawings

GV3L, GV3P

Dimensions



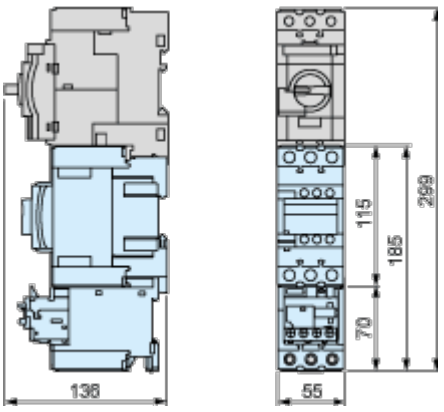
(1) Blocks GVAN●●, GVAD●● and GVAM11.

(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 with Tesys contactor LC1D40A…D80A and relay LR3D313…380 (1)(2)(3)

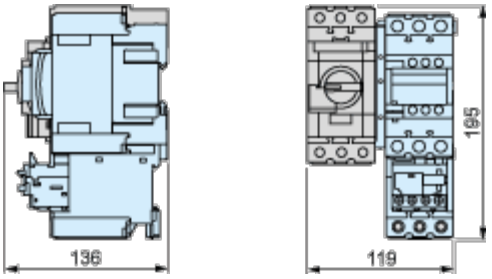


(1) Mountings with c.b. up to GV3L73, GV3P73.

(2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.

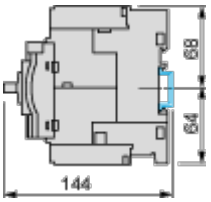
(3) S-shape busbar system suitable up to 73 A.

Side by side mounting with Tesys contactor LC1D40A…D73A (S-shape busbar system GV3S(1))

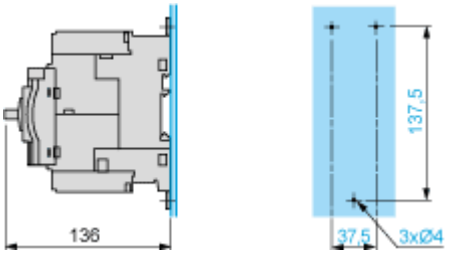


(1) Mountings with c.b. up to GV3L73, GV3P73.

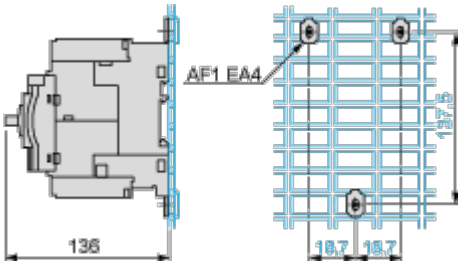
Mounting on Rail AM1 DE200 or AM1 ED201



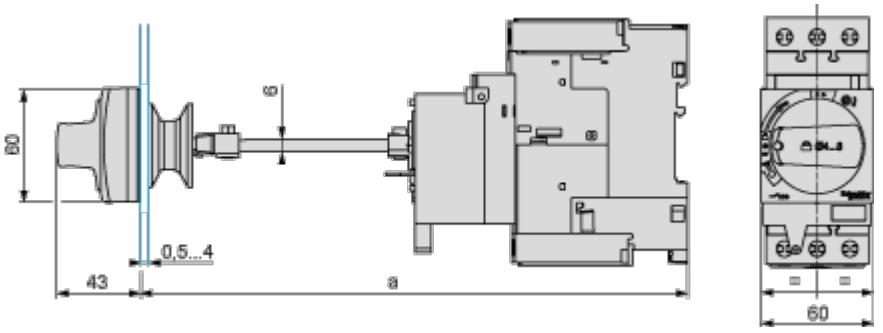
Panel Mounting, using M4 Screws



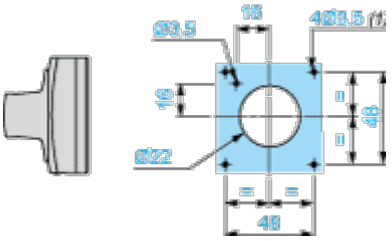
Mounting on Pre-Slotted Plate AM1 PA



Mounting of External Operator GV3APN01, GV3APN02 or GV3APN04 for Motor Circuit Breakers GV3L

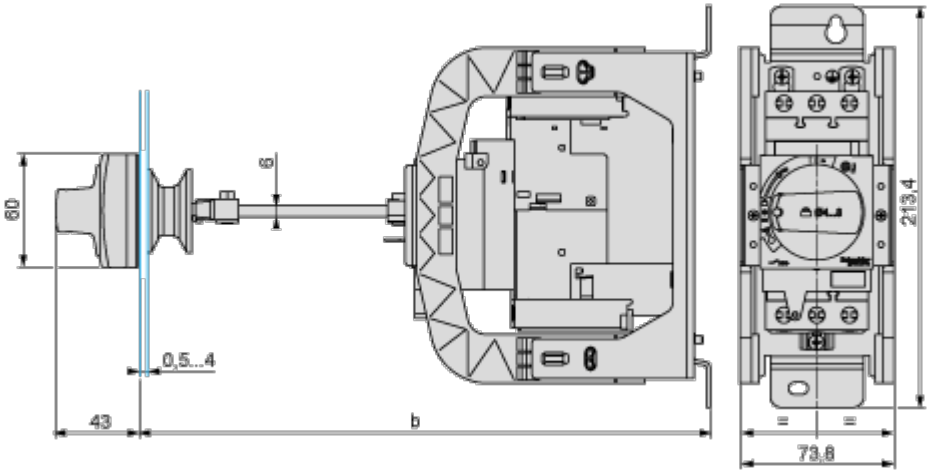


Door cut-out



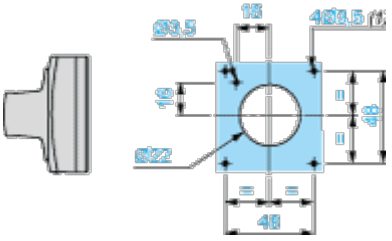
(1) For IP65 only.

Mounting of External Operator GVAPH03 for Motor Circuit Breakers GV3L

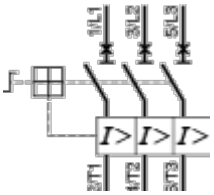


	b	
	Minimum	Maximum
GV3APN•• + GVAPH03	200	300
GV3APN•• + GVAPH03 + GVAPK12	300	492

Door cut-out



(1) For IP65 only.

Connections and Schema

GV3L••