Product data sheet

Specifications

Discontinued

Motor circuit breaker, TeSys Deca, 3P, 40 A, magnetic, rotary handle, EverLink terminals, for contactor assembly

GV3L401

Discontinued on: Jun 30, 2022

End-of-service on: Jul 20, 2022

Main

Range	TeSys Deca
Product name	TeSys GV3
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 IEC 60947-2 AC-3 IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-2
Motor power kW	18.5 kW 400/415 V AC 50/60 Hz 22 kW 500 V AC 50/60 Hz 37 kW 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu 230/240 V AC 50/60 Hz 50 kA Icu 400/415 V AC 50/60 Hz 50 kA Icu 440 V AC 50/60 Hz 12 kA Icu 500 V AC 50/60 Hz 6 kA Icu 690 V AC 50/60 Hz
[Ics] rated service short-circuit breaking capacity	100 % 230/240 V AC 50/60 Hz 100 % 400/415 V AC 50/60 Hz 100 % 440 V AC 50/60 Hz 50 % 500 V AC 50/60 Hz 50 % 690 V AC 50/60 Hz
Control type	Rotary handle
[In] rated current	40 A
Magnetic tripping current	560 A
[Ith] conventional free air thermal current	40 A IEC 60947-2
[Ue] rated operational voltage	690 V AC 50/60 Hz IEC 60947-2
[Ui] rated insulation voltage	690 V AC 50/60 Hz IEC 60947-2
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
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	Uninterrupted IEC 60947-4-1
Tightening torque	44.3 lbf.in (5 N.m) screw clamp terminal
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with 3 x M4 screws)
Mounting position	Horizontal Vertical
Width	2.2 in (55 mm)
Height	4.5 in (114 mm)
Depth	5.4 in (136 mm)
Net weight	2.12 lb(US) (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 LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
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	3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.6 in (6.5 cm)
Package 1 Width	5.7 in (14.5 cm)
Package 1 Length	6.3 in (16 cm)
Package 1 Weight	32.3 oz (917 g)

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 >

Use Better

Materials and Substances

EU RoHS Directive	Compliant

Use Longer

Lifetime extension

Repair	No

Use Again

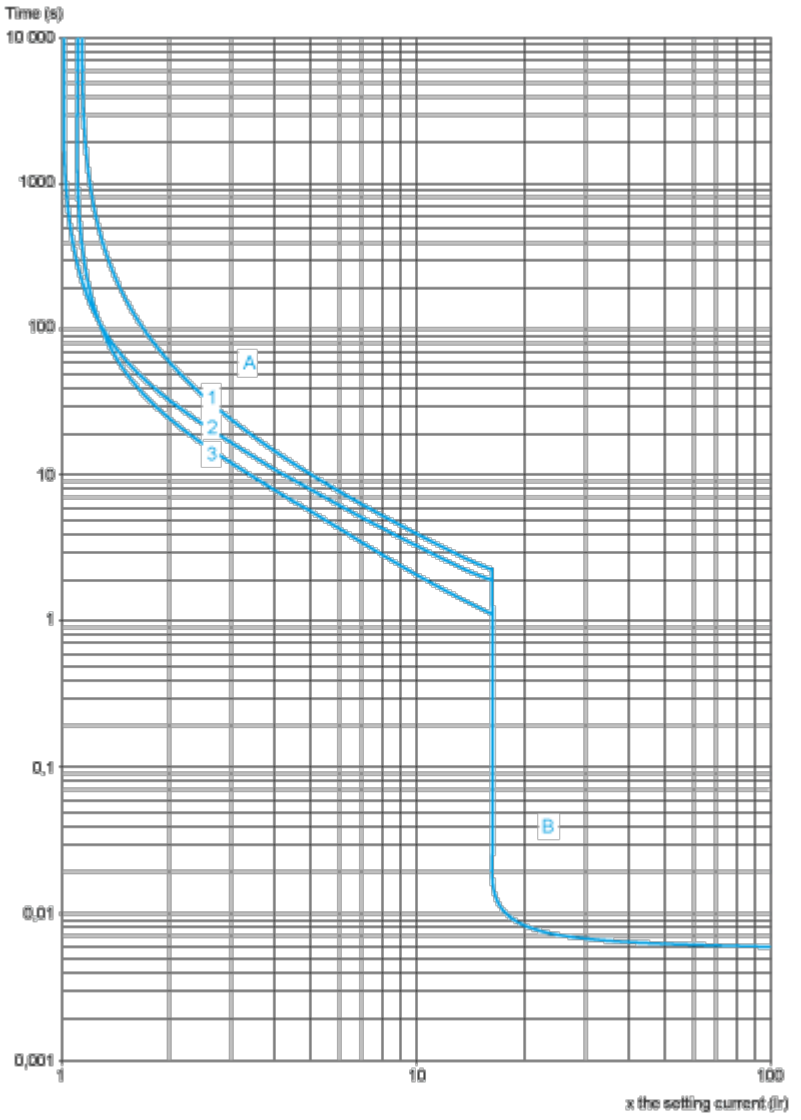
Repack and remanufacture

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

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

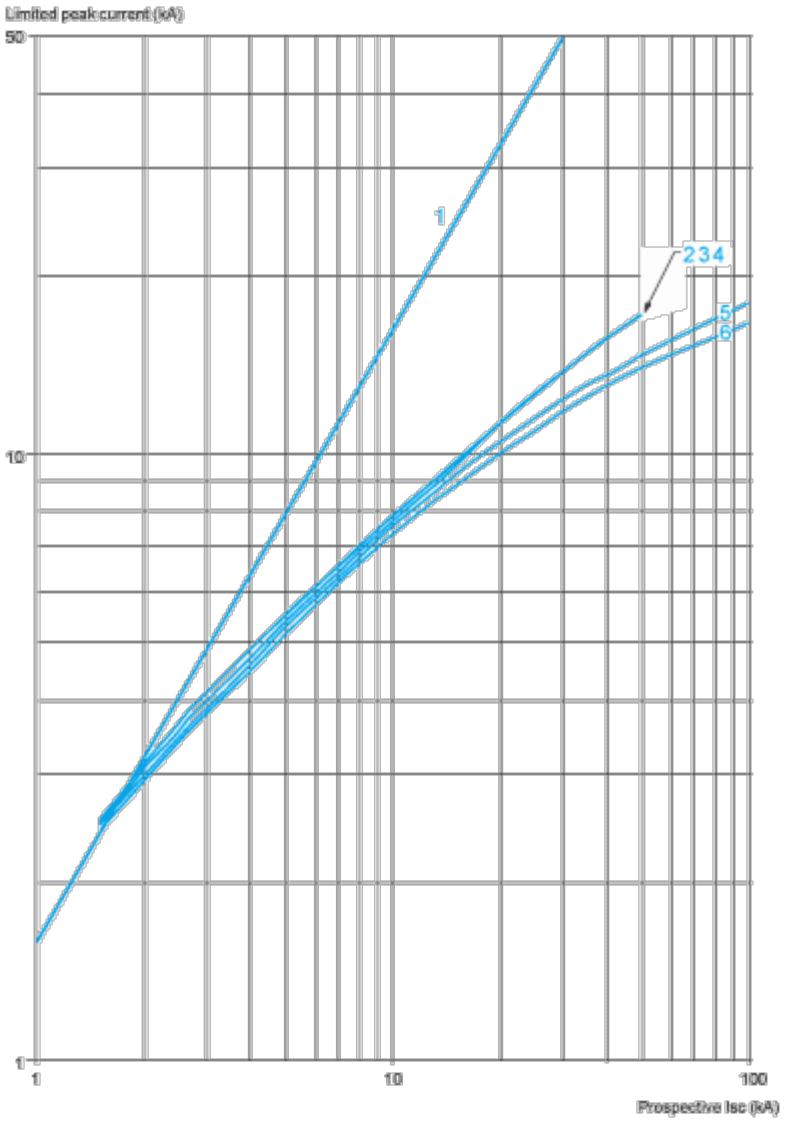
A Thermal overload relay protection zone

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

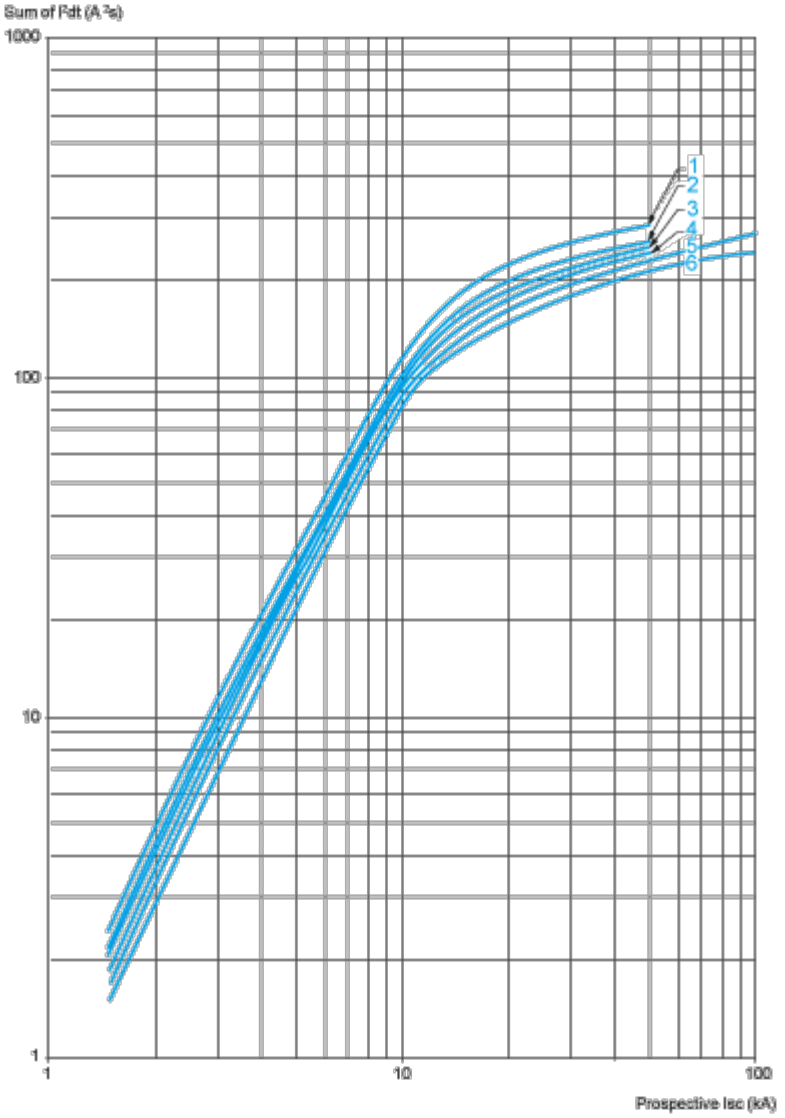
5 GV3L32

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

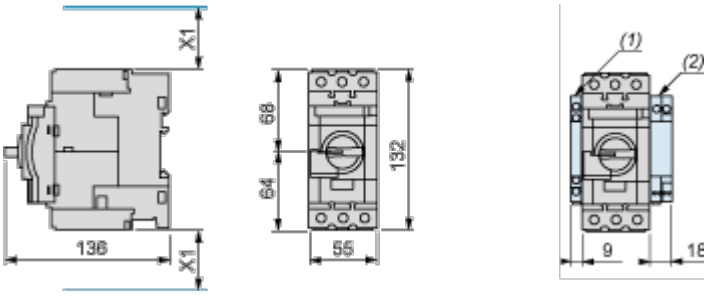
5 GV3L32

6 GV3L25

Dimensions Drawings

GV3L, GV3P

Dimensions



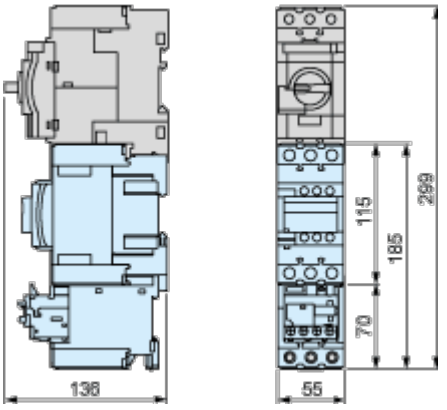
(1) Blocks GVAN••, GVAD•• and GVAM11.

(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)

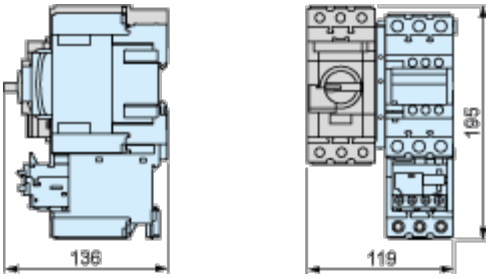


(1) Mountings with c.b. up to GV3L73, GV3P73.

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

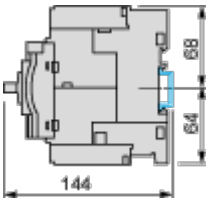
(3) S-shape busbar system suitable up to 73 A.

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

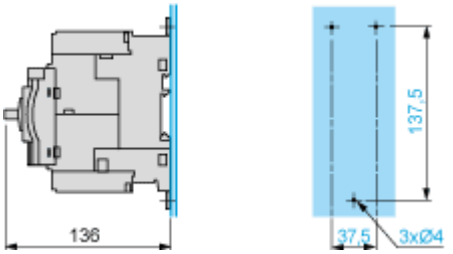


(1) Mountings with c.b. up to GV3L73, GV3P73.

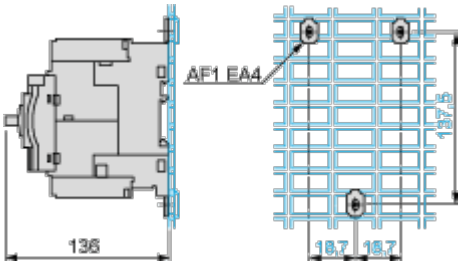
Mounting on Rail AM1 DE200 or AM1 ED201



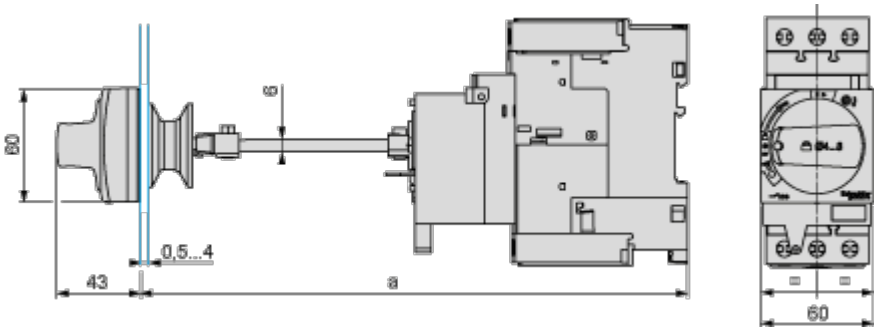
Panel Mounting, using M4 Screws



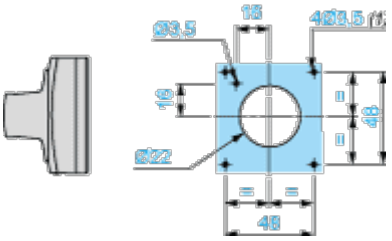
Mounting on Pre-Slotted Plate AM1 PA



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

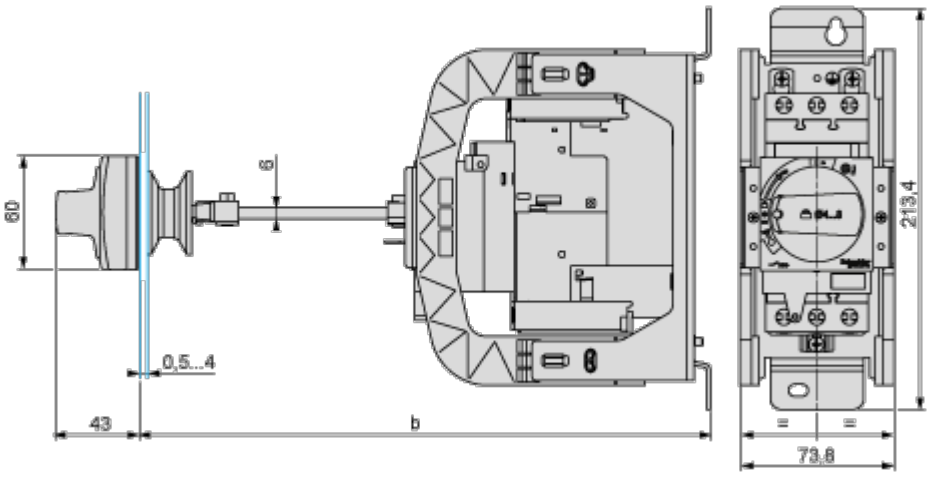


Door cut-out



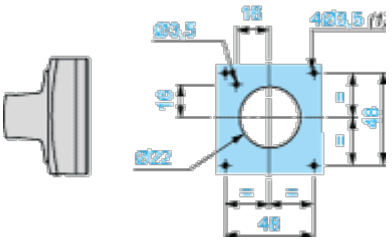
(1) For IP65 only.

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••