

# Product data sheet

Specifications



## Motor circuit breaker, TeSys Deca frame 3, 3P, 65A, magnetic, rotary handle, EverLink terminals

GV3L65

### 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	30 kW at 400/415 V AC 50/60 Hz 37 kW at 500 V AC 50/60 Hz 55 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	65 A
Magnetic tripping current	910 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

<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>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 LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
<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>	1.006 kg
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	120
<b>Package 2 Height</b>	75.000 cm
<b>Package 2 Width</b>	60.000 cm
<b>Package 2 Length</b>	80.000 cm
<b>Package 2 Weight</b>	136.480 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
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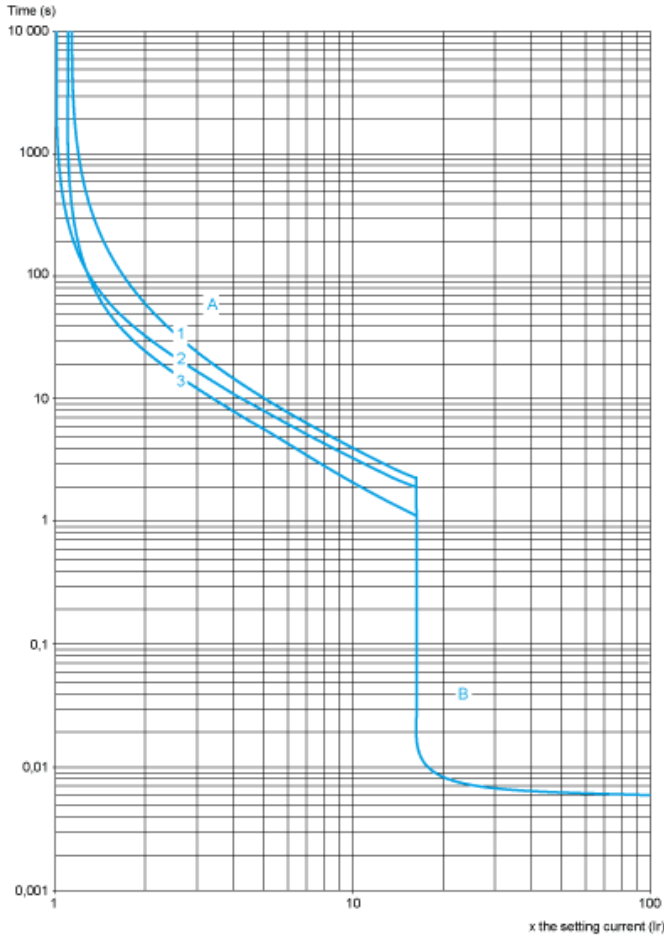
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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

<b>Warranty</b>	18 months
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Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33

Average Operating time at 20 °C without Prior Current Flow

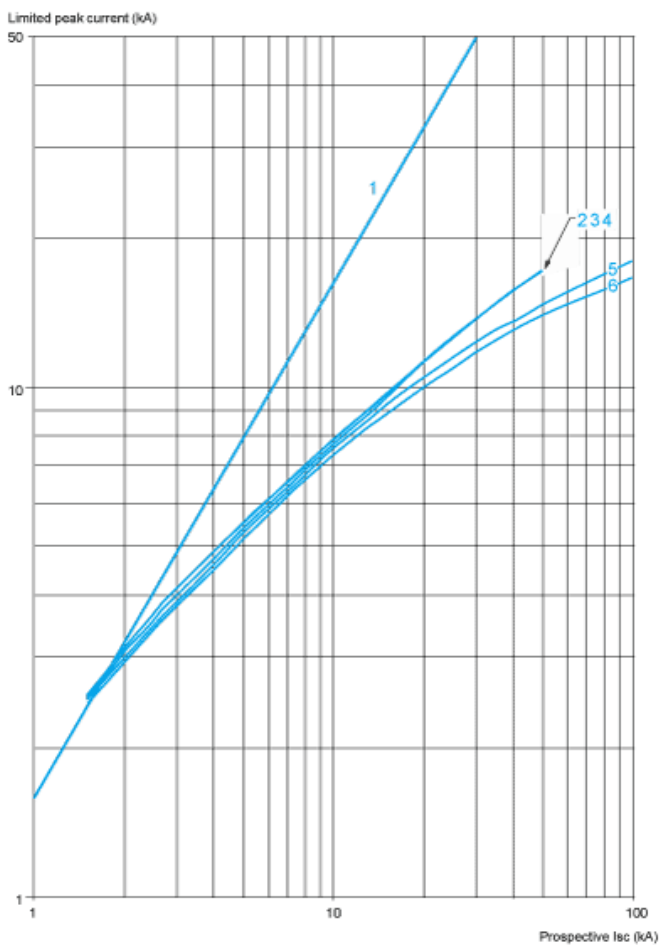


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- A Thermal overload relay protection zone
- B GV3L protection zone

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

Dynamic Stress

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

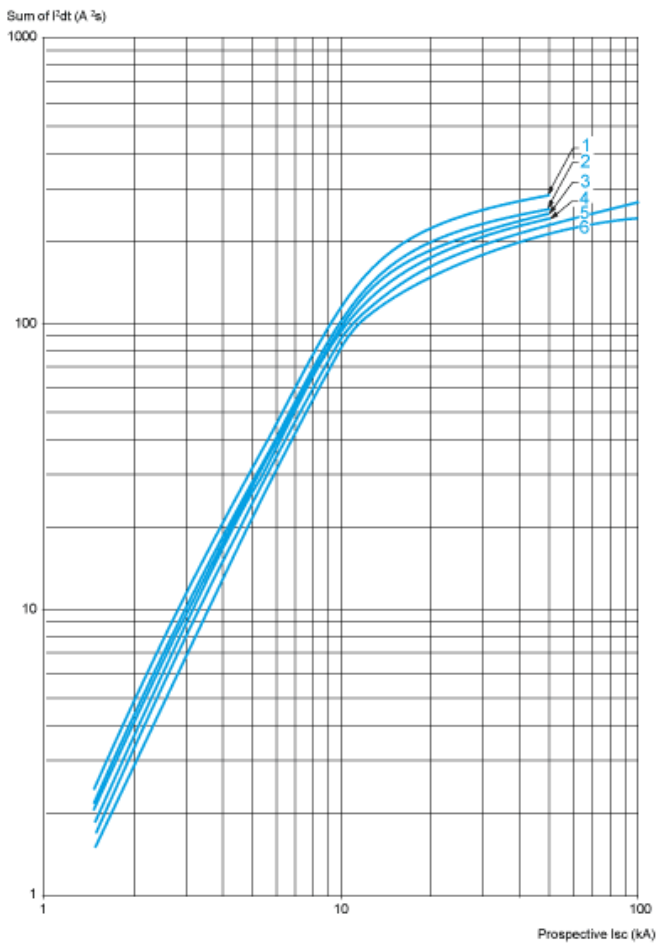


- 1 Maximum peak current
- 2 GV3L80 - GV3L73 - GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

**Thermal Limit on Short-Circuit for GV3L**

Thermal Limit in A<sup>2</sup>s

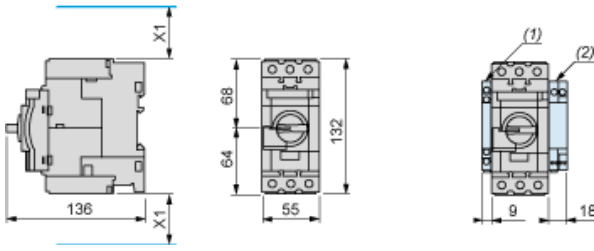
Sum of I<sup>2</sup>dt = f (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V



- 1 GV3L73 - GV3L80
- 2 GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

**GV3L, GV3P**

**Dimensions**

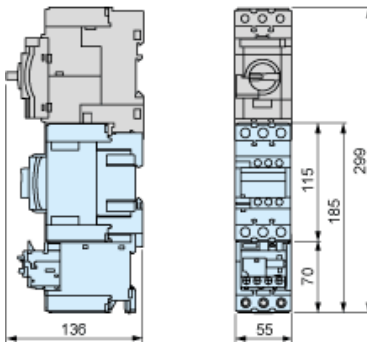


- (1) Blocks GVAN.., GVAD.. and GVAM11.
- (2) Blocks GV3AU.. and GV3AS..

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

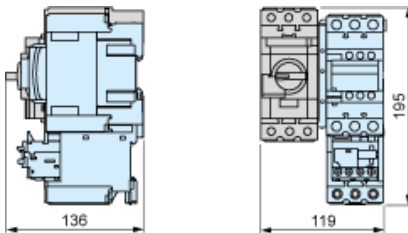
**NOTE:** Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

**Mounting with Tesys contactor LC1D40A...D80A and relay LR3D313...380 <sup>(1) (2) (3)</sup>**



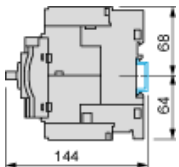
- (1) Mountings with c.b. up to GV3L73, GV3P73.
- (2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
- (3) S-shape busbar system suitable up to 73 A.

**Side by side mounting with Tesys contactor LC1D40A...D73A (S-shape busbar system GV3S<sup>(1)</sup>)**

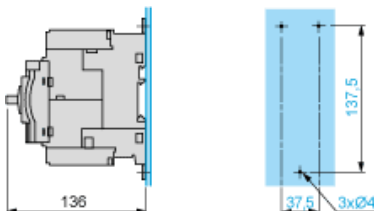


- (1) Mountings with c.b. up to GV3L73, GV3P73.

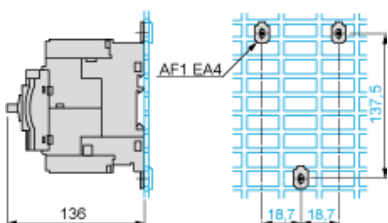
**Mounting on Rail AM1 DE200 or AM1 ED201**



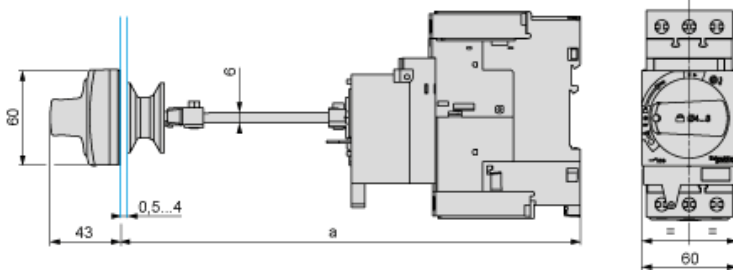
**Panel Mounting, using M4 Screws**



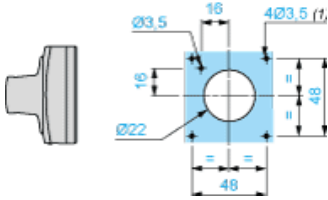
**Mounting on Pre-Slotted Plate AM1 PA**



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

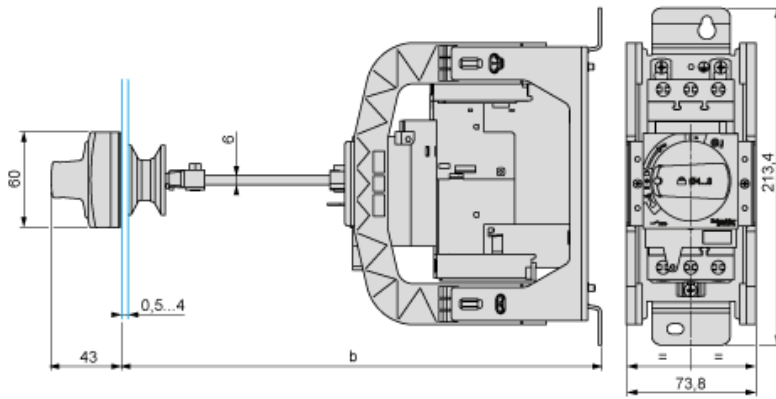


Door cut-out



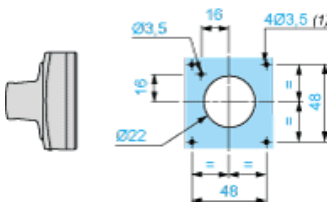
(1) For IP65 only.

**Mounting of External Operator GVAPH03 for Motor Circuit Breakers GV3L**



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

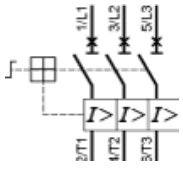
Door cut-out



(1) For IP65 only.



GV3L••



**Recommended replacement(s)**