

# Motor circuit breaker, TeSys Deca, 3P, 73A, magnetic, rotary handle, EverLink, without downstream

GV3L731

! Discontinued on: Dec 29, 2023

! Discontinued

#### 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

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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	37 kW at 400/415 V AC 50/60 Hz 45 kW at 500 V AC 50/60 Hz 55 kW at 690 V AC 50/60 Hz
Breaking Capacity	65 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
[lcs] 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 handle
[In] Rated Current	73 A
Magnetic Tripping Current	1120 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
Electrical Durability	20000 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	-4080 °C
Fire Resistance	960 °C conforming to IEC 60695-2-11
Ambient Air Temperature For Operation	-2060 °C
Mechanical Robustness	Shocks: 5 Gn for 11 ms contactor open Shocks: 30 Gn for 11 ms contactor closed Vibrations: 4 Gn, 5300 Hz
Operating Altitude	3000 m

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	15.800 cm
Package 1 Width	14.600 cm
Package 1 Length	6.500 cm
Package 1 Weight	1.010 kg

# **Contractual warranty**

Warranty 18 months

### Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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

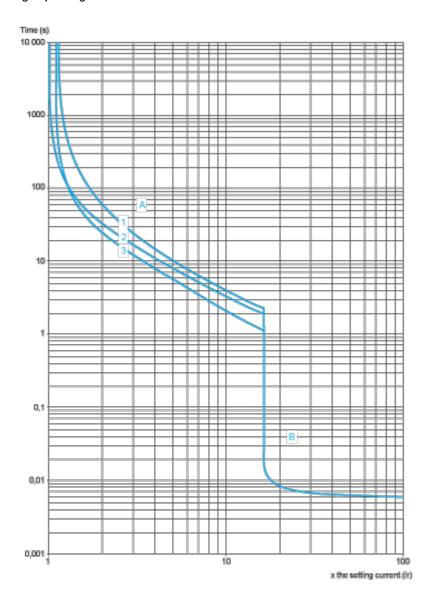
Yes

#### **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

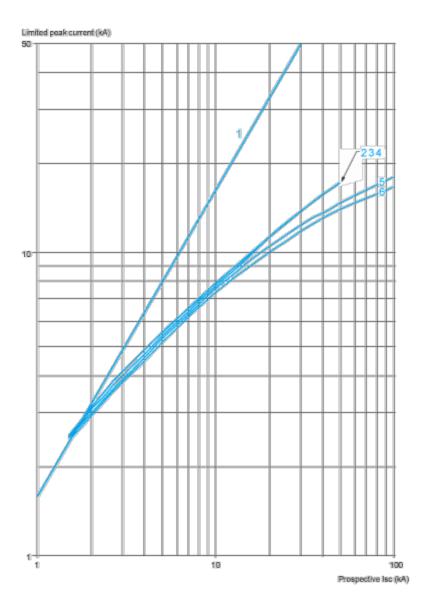


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- A Thermal overload relay protection zone
- B GV3L protection zone

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

#### **Dynamic Stress**

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

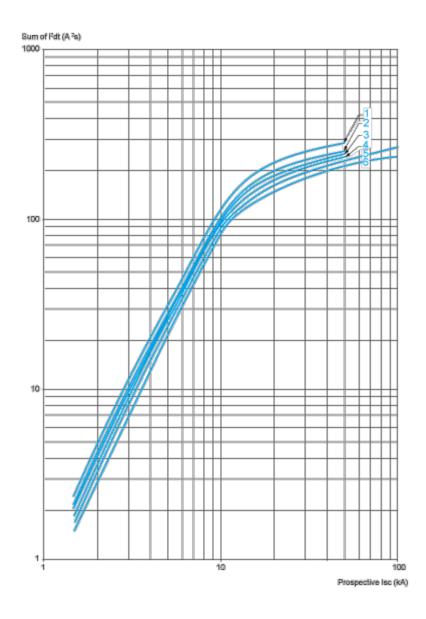


- Maximum peak current 1
- GV3L80 GV3L73 GV3L65 2
- GV3L50 3
- GV3L40 4
- 5 GV3L32
- GV3L25

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

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

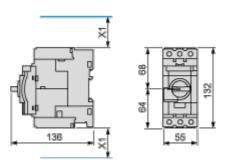
Sum of  $I^2$ dt = f (prospective Isc) at 1.05 Ue = 435 V

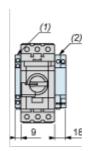


- 1 GV3L73 GV3L80
- 2 GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

#### **Dimensions Drawings**

#### GV3L, GV3P Dimensions



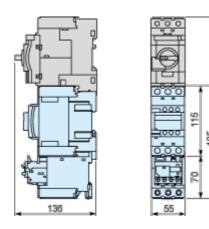


- (1) Blocks  $\text{GVAN}_{\bullet \bullet}$ ,  $\text{GVAD}_{\bullet \bullet}$  and GVAM11.
- (2) Blocks GV3AU and GV3AS.

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

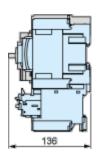
Mounting with Tesys contactor LC1D40A...D80A and relay LR3D313...380 (1)(2)(3)

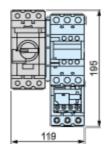


- (1) Mountings with c.b. up to GV3L73, GV3P73.
- (2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
- (3) S-shape busbar system suitable up to 73 A.

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

## **Product data sheet**



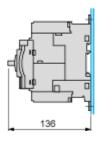


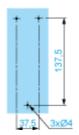
(1) Mountings with c.b. up to GV3L73, GV3P73.

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

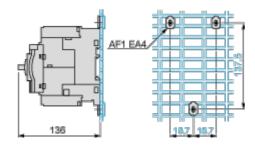


#### Panel Mounting, using M4 Screws

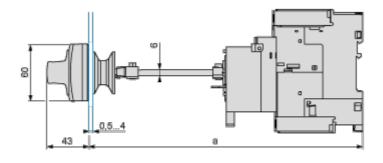




#### Mounting on Pre-Slotted Plate AM1 PA

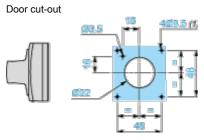


# Mounting of External Operator GV3APN01, GV3APN02 or GV3APN04 for Motor Circuit Breakers GV3L



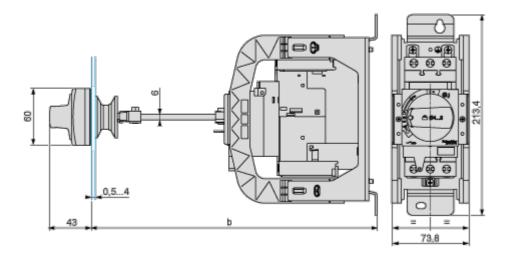


# GV3L731

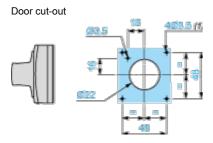


(1) For IP65 only.

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



	b	
	Minimum	Maximum
GV3APN + GVAPH03	200	300
GV3APN <sub>●●</sub> + GVAPH03 + GVAPK12	300	492



(1) For IP65 only.

#### Connections and Schema

GV3L••

