Product data sheet
Characteristics

GV3L32
Motor circuit breaker, TeSys GV3, 3P, 32 A, magnetic, rotary handle, EverLink terminals

Main

Range	TeSys
Product name	TeSys GV3
Product or component type	Circuit breaker
Device short name	GV3L
Device application	Motor
Poles description	3P
Network type	AC
Utilisation category	Category A conforming to IEC 60947-2 AC-3 conforming to IEC 60947-4-1
Network frequency	50/60 Hz
Breaking capacity	100 KA Icu at 230/240 V AC 50/60 Hz 100 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
Trip unit technology	Magnetic
Magnetic tripping current	448 A

Complementary

Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with 3 x M4 screws)
Operating position	Any position
Motor power kW	15 KW at 400/415 V AC 50/60 Hz 18.5 KW at 500 V AC 50/60 Hz 22 kW at 690 V AC 50/60 Hz
Control type	Rotary knob
[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	IEC 60947-2 6 kV
Mechanical durability	50000 cycles
Electrical durability	50000 cycles for AC-3 at 415 V
Maximum operating rate	25 cyc/h
Connections - terminals	EverLink BTR screw connectors 1 cable(s) 1…35 mm² solid EverLink BTR screw connectors 2 cable(s) 1…25 mm² solid EverLink BTR screw connectors 1 cable(s) 1…35 mm² flexible without cable end EverLink BTR screw connectors 2 cable(s) 1…25 mm² flexible without cable end EverLink BTR screw connectors 1 cable(s) 1…35 mm² flexible with cable end EverLink BTR screw connectors 2 cable(s) 1…25 mm² flexible with cable end
Tightening torque	5 N.M on EverLink BTR screw connectors for cable 25 mm² 8 N.m on EverLink BTR screw connectors for cable 35 mm²
Mechanical robustness	Shocks: 15 Gn for 11 ms closed conforming to IEC 60068-2-27 Shocks: 30 Gn for 11 ms opened conforming to IEC 60068-2-27 Vibrations: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6
Suitability for isolation	Yes conforming to IEC 60947-1
Height	132 mm
Width	55 mm

Depth	136 mm
Net weight	0.96 kg

Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 CSA C22.2 No 60947-4-1 UL 60947-4-1
Product certifications	IECEE CB Scheme UL CSA CCC EAC ABS LROS (Lloyds register of shipping) DNV-GL BV
Protective treatment	TH
IP degree of protection	IP20 conforming to IEC 60529
IK degree of protection	IK09
Ambient air temperature for operation	-20…60 °C
Ambient air temperature for storage	-40…80 °C
Fire resistance	960 °C conforming to IEC 60695-2-1
Operating altitude	0...3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	989 g
Package 1 Height	6.5 cm
Package 1 width	14.5 cm
Package 1 Length	16 cm
Unit Type of Package 2	P06
Number of Units in Package 2	60
Package 2 Weight	72.34 kg
Package 2 Height	80 cm
Package 2 width	80 cm
Package 2 Length	60 cm

Offer Sustainability

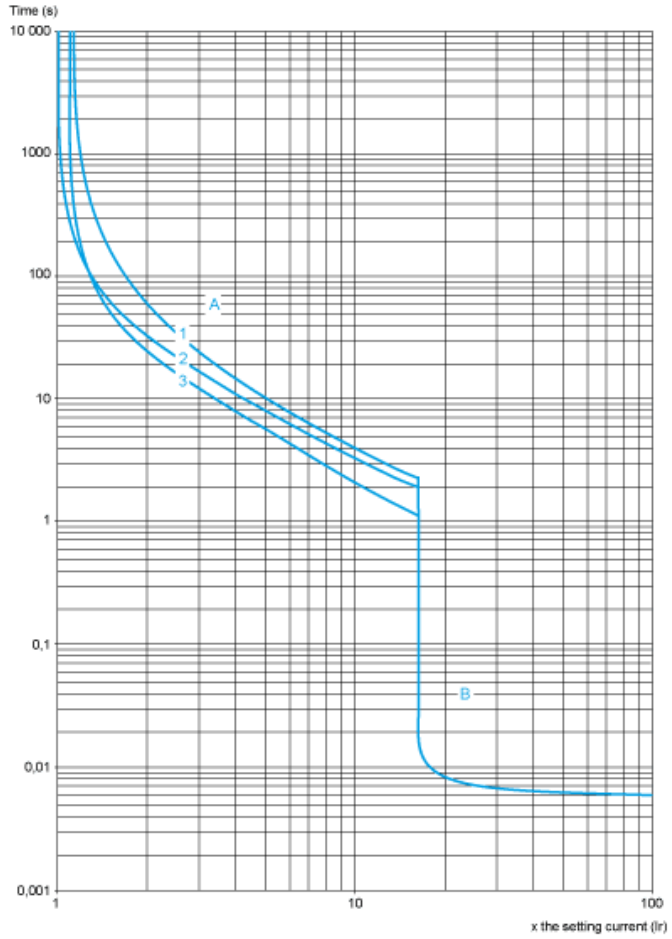
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months

Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33

Average Operating time at 20 °C without Prior Current Flow

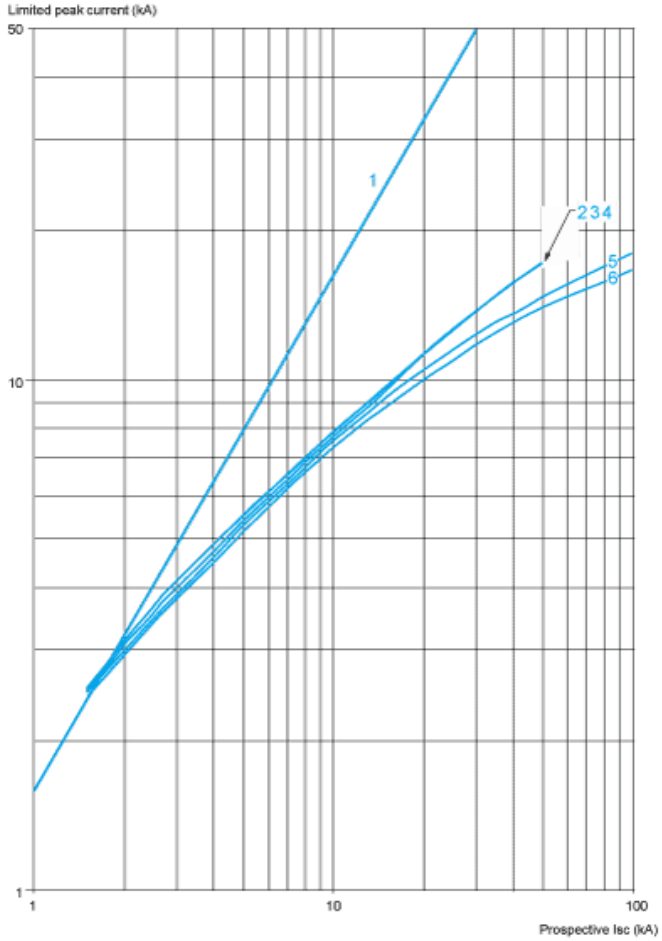


1 3 poles from cold state
2 2 poles from cold state
3 3 poles from hot state
A Thermal overload relay protection zone
B GV3L protection zone

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

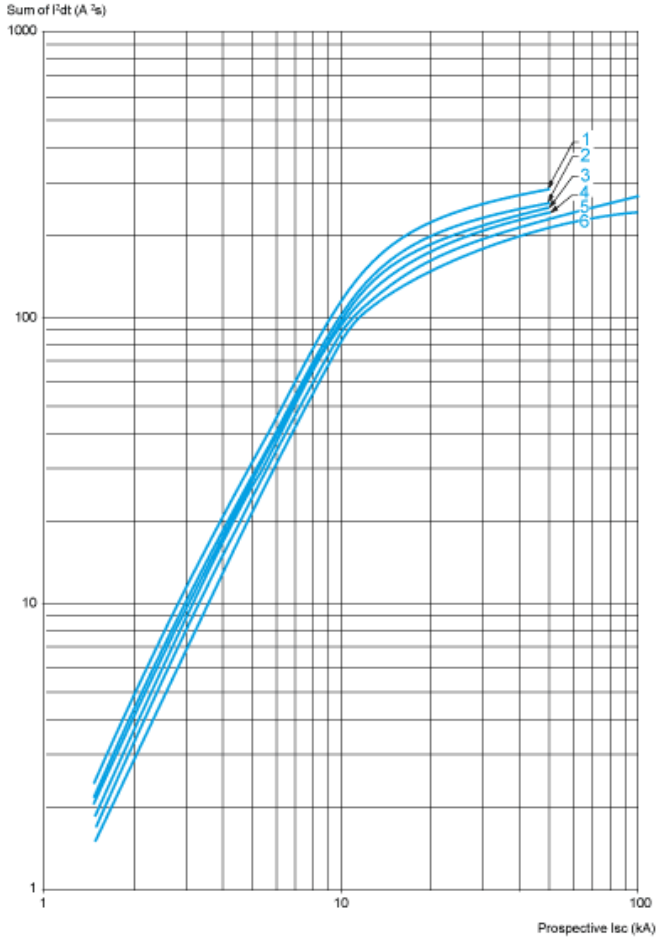


1 Maximum peak current
2 GV3L80 - GV3L73 - GV3L65
3 GV3L50
4 GV3L40
5 GV3L32
6 GV3L25

Thermal Limit on Short-Circuit for GV3L

Thermal Limit in A^2s

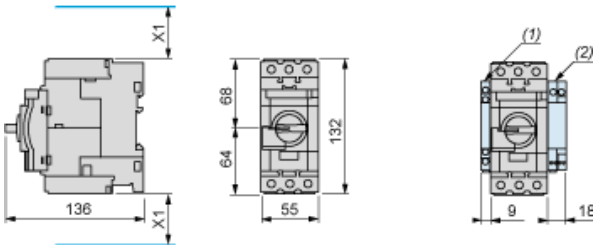
Sum of I^2dt = f (prospective Isc) at 1.05 Ue = 435 V



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

GV3L, GV3P

Dimensions

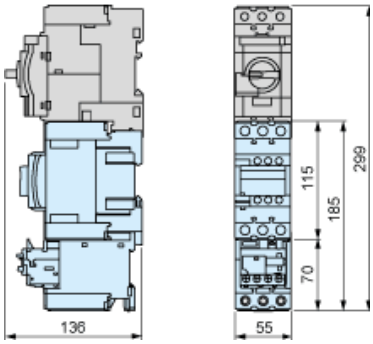


(1) Blocks GVAN••, GVAD•• and GVAM11.
(2) Blocks GV3AU•• and GV3AS••.

X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

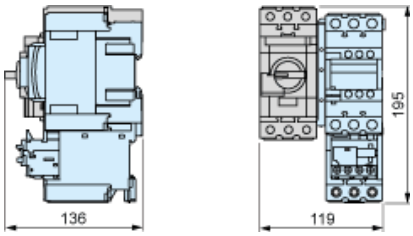
NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

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



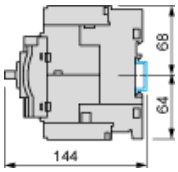
(1) Mountings with c.b. up to GV3L73, GV3P73.
(2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
(3) S-shape busbar system suitable up to 73 A.

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

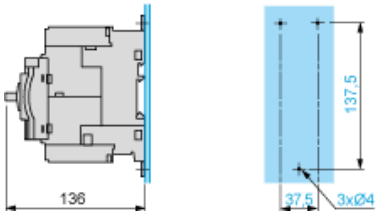


(1) Mountings with c.b. up to GV3L73, GV3P73.

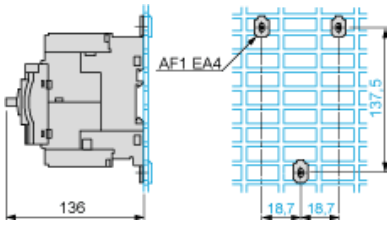
Mounting on Rail AM1 DE200 or AM1 ED201



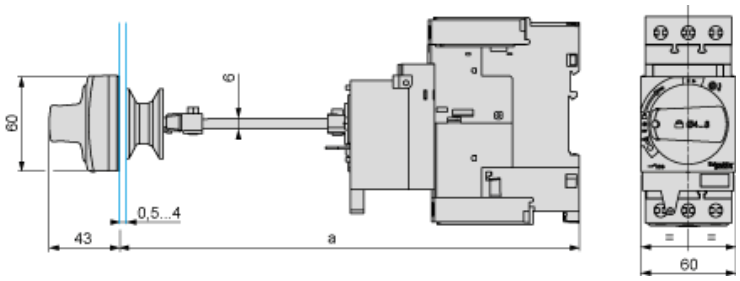
Panel Mounting, using M4 Screws



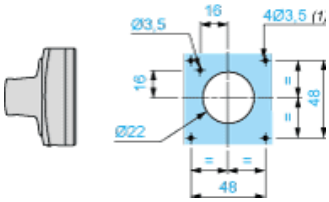
Mounting on Pre-Slotted Plate AM1 PA



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

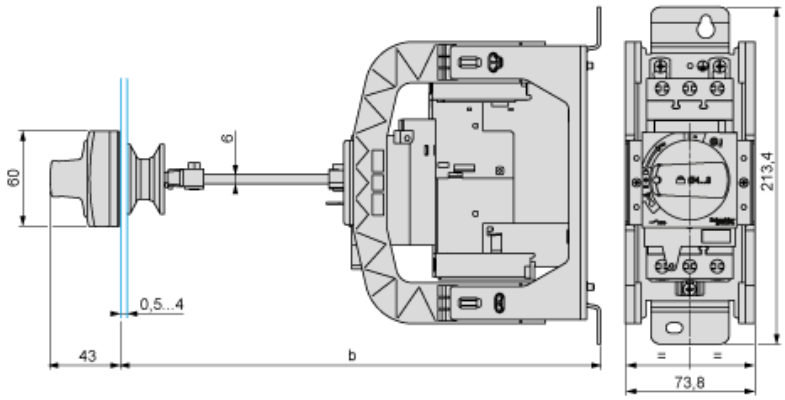


Door cut-out



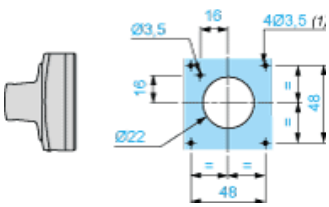
(1) For IP65 only.

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.

GV3L••