

# Product datasheet

Specifications



Motor circuit breaker, TeSys GV2, 3P, 4 A, magnetic, toggle control, screw clamp terminals

GV2LE08

## Main

Range	TeSys Deca
Product name	TeSys GV2
Product or component type	Motor circuit breaker
Device short name	GV2LE
Device application	Motor protection
Trip unit technology	Magnetic

## Complementary

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 conforming to IEC 60947-2
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with adaptor plate)
Motor power kW	1.5 kW at 400/415 V AC 50/60 Hz 1.5 kW at 500 V AC 50/60 Hz 2.2 kW at 500 V AC 50/60 Hz 3 kW at 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 3 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 690 V AC 50/60 Hz conforming to IEC 60947-2
Control type	Toggle
[In] rated current	4 A
Magnetic tripping current	51 A
[Ith] conventional free air thermal current	4 A conforming to IEC 60947-4-1
[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

<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947-2
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1 § 7-1-6
<b>Power dissipation per pole</b>	1.8 W
<b>Mechanical durability</b>	100000 cycles
<b>Electrical durability</b>	100000 cycles for AC-3 at 415 V In
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Tightening torque</b>	1.7 N.m - on screw clamp terminal
<b>Width</b>	45 mm
<b>Height</b>	89 mm
<b>Depth</b>	78.5 mm
<b>Net weight</b>	0.33 kg
<b>Colour</b>	Dark grey

## Environment

<b>Standards</b>	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 RINA DNV-GL UKCA IECEE CB Scheme
<b>IK degree of protection</b>	IK04
<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: 30 Gn for 11 ms Vibrations: 5 Gn, 5...150 Hz
<b>Operating altitude</b>	2000 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>	8.500 cm
<b>Package 1 Width</b>	9.200 cm
<b>Package 1 Length</b>	5.000 cm
<b>Package 1 Weight</b>	251.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm

Package 2 Length	40.000 cm
Package 2 Weight	6.350 kg
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	112.164 kg

### Offer Sustainability

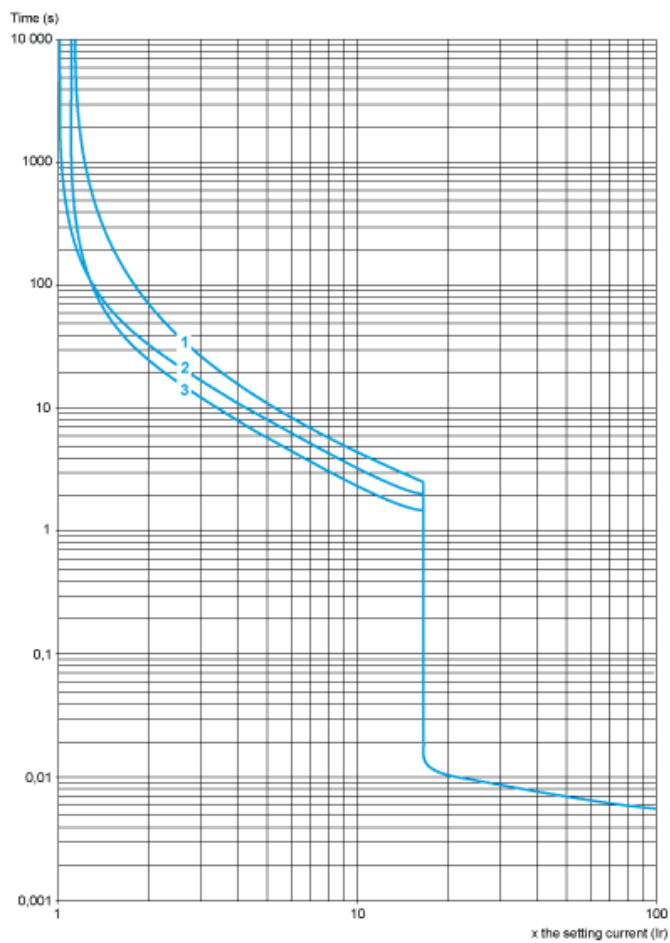
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	<a href="#">Yes</a>
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 GV2L or LE Combined with Thermal Overload Relay LRD or LR2K

Average Operating Times at 20 °C Related to Multiples of the Setting Current



- 1

3 poles from cold state
- 2

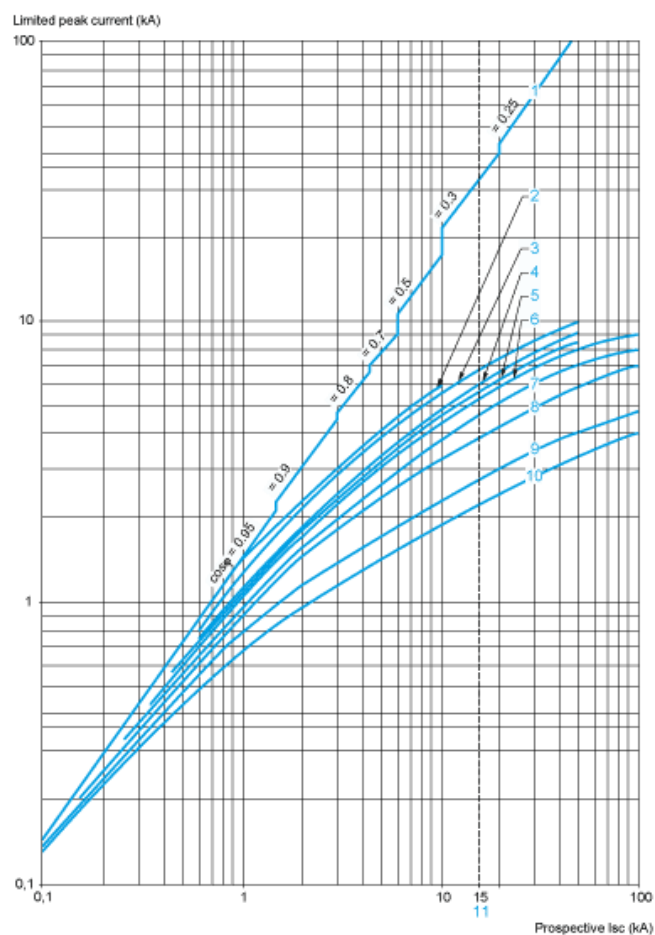
2 poles from cold state
- 3

3 poles from hot state

Current Limitation on Short-Circuit for GV2L and GV2LE Only (3-Phase 400/415 V)

Dynamic Stress

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

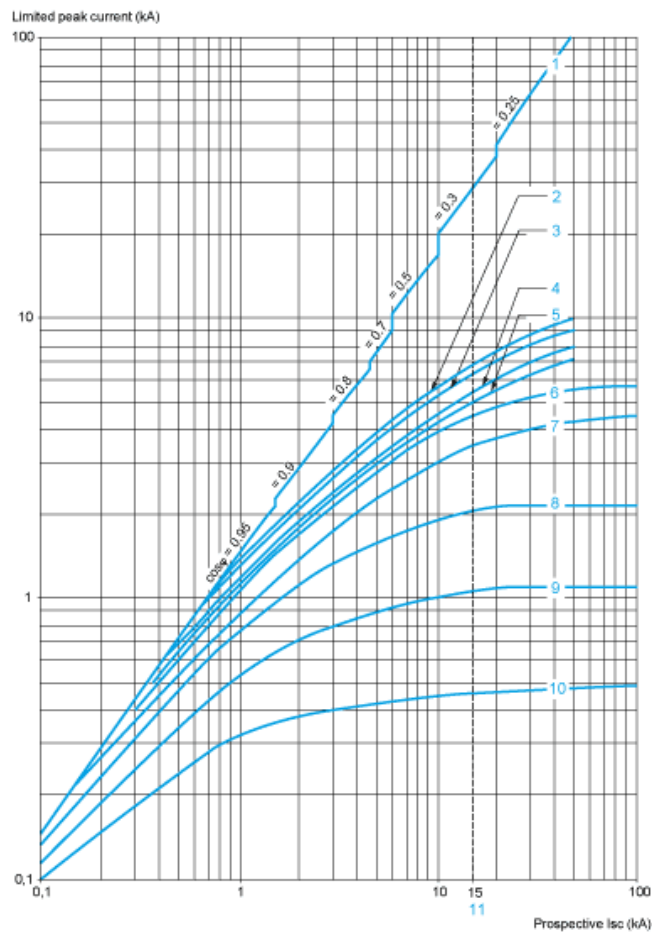


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

### Current Limitation on Short-Circuit for GV2L and GV2LE + Thermal Overload Relay LRD or LR2K (3-Phase 400/415 V)

#### Dynamic Stress

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

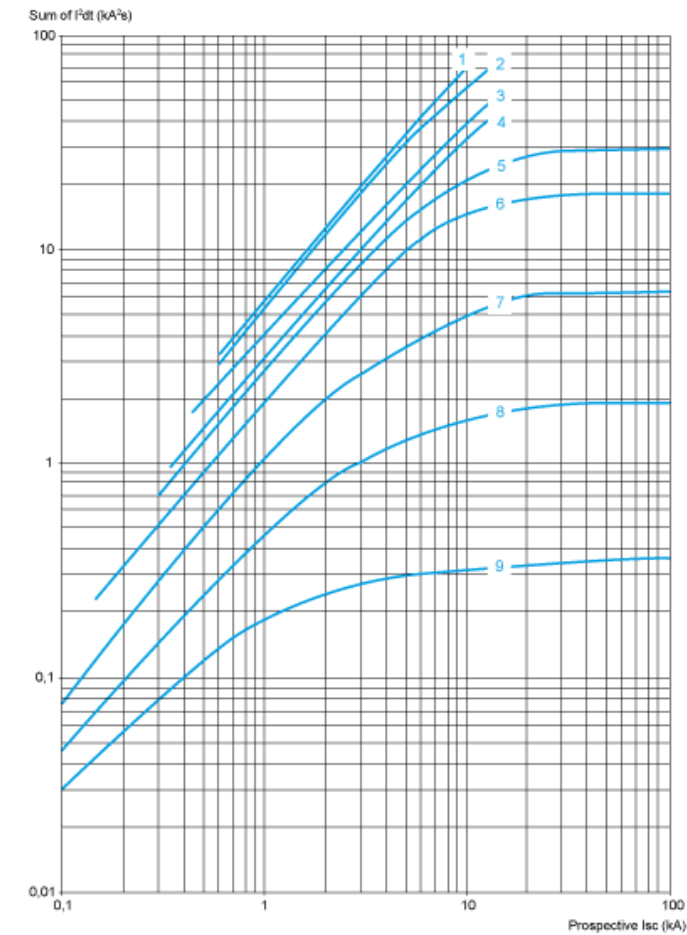


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

**Thermal Limit on Short-Circuit for GV2LE Only**

Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone

Sum of I<sup>2</sup>dt = f (prospective Isc) at 1.05 Ue = 435 V

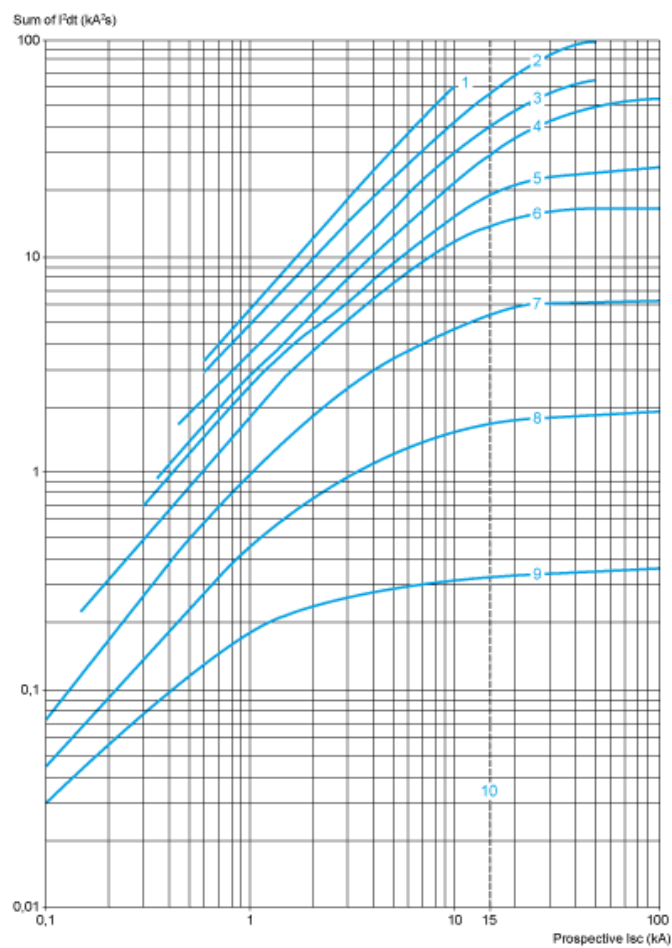


1	32 A
2	25 A
3	18 A
4	14 A
5	10 A
6	6.3 A
7	4 A
8	2.5 A
9	1.6 A

### Thermal Limit on Short-Circuit for GV2L and GV2LE + Thermal Overload Relay LRD or LR2K

Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone

Sum of  $I^2dt = f$  (prospective  $I_{sc}$ ) at 1.05  $U_e = 435$  V

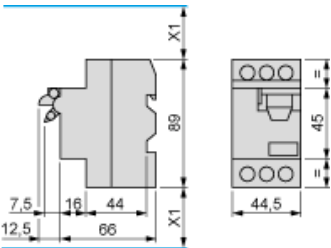


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).



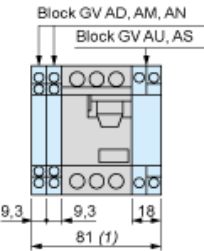
GV2LE

Dimensions



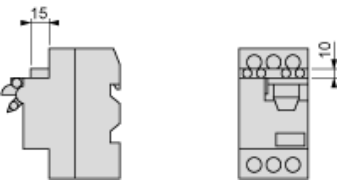
X1 Electrical clearance = 40 mm for Ue ≤ 690 V.

GVAD, AM, AN, AU, AS



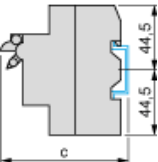
1 Maximum

GVAE



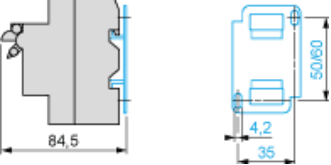
Mounting

On 35 mm rail

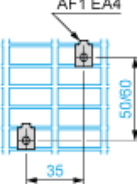


c = 80 on AM1 DP200 (35 x 7.5) and 88 on AM1 DE200, ED200 (35 x15)

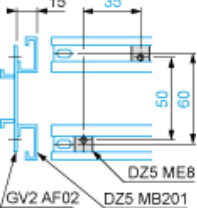
On panel with adapter plate GV2 AF02



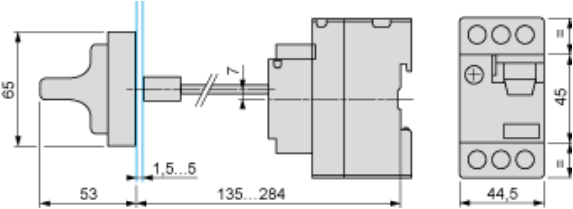
On pre-slotted plate AM1 PA



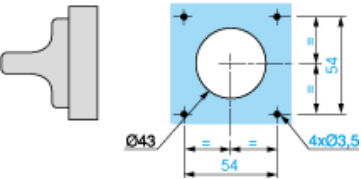
On rails DZ5 MB201



Mounting of External Operator GV2AP03 for GV2LE

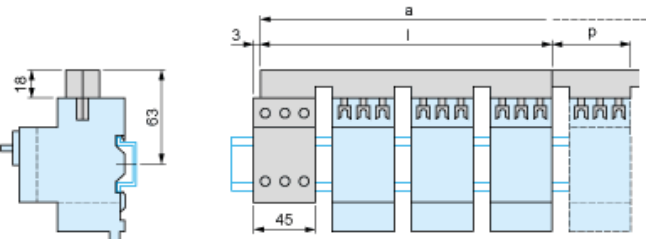


Door cut-out



GV2L and GV2LE

Sets of busbars GV2G445, GV2G454, GV2G472, with terminal block GV2G05

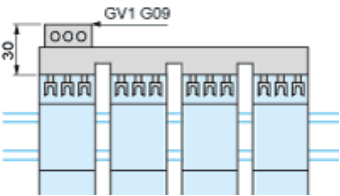


	l	p
GV2G445 (4 x 45 mm)	179	45
GV2G454 (4 x 54 mm)	206	54
GV2G472 (4 x 72 mm)	260	72

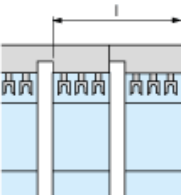
Number of tap-offs	a			
	5	6	7	8
GV2G445	224	269	314	359
GV2G454	260	314	368	422
GV2G472	332	404	476	548

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

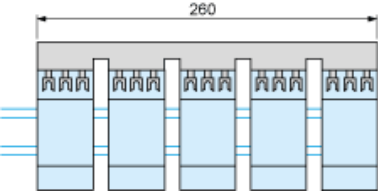


Sets of busbars GV2G245, GV2G254, GV2GR272

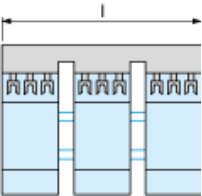


	l
GV2G245 (2 x 45 mm)	89
GV2G254 (2 x 54 mm)	98
GV2G272 (2 x 72 mm)	116

Set of busbars GV2G554

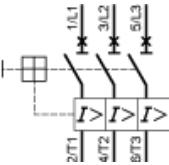


Sets of busbars GV2G345 and GV2G354



	l
GV2G345 (3 x 45 mm)	134
GV2G354 (3 x 54 mm)	152

GV2LE••



Recommended replacement(s)