

# Product datasheet

Specifications



## Motor circuit breaker, TeSys GV2, 3P, 6.3 A, magnetic, rotary handle, screw clamp terminals

Local distributor code:

21103614

GV2L10

**EAN Code: 3389110213263**

### Main

Range	TeSys Deca
Product name	TeSys GV2
Product or component type	Motor circuit breaker
Device short name	GV2L
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 AC-3e conforming to IEC 60947-4-1
Network frequency	50/60 Hz conforming to IEC 60947-2
Motor power kW	2.2 kW at 400/415 V AC 50/60 Hz 3 kW at 500 V AC 50/60 Hz 4 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 4 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 60947-2 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2
Control type	Rotary handle
[In] rated current	6.3 A
Magnetic tripping current	91 A
[Ith] conventional free air thermal current	6.3 A conforming to IEC 60947-2
[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	1.8 W
Mechanical durability	100000 cycles

<b>Electrical durability</b>	100000 cycles for AC-3 at 415 V In 100000 cycles for AC-3e at 415 V In
<b>Rated duty</b>	Uninterrupted conforming to IEC 60947-4-1
<b>Connections - terminals</b>	Power circuit: screw clamp terminal 2 cable(s) 1...6 mm <sup>2</sup> solid Power circuit: screw clamp terminal 2 cable(s) 1.5...6 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminal 2 cable(s) 1...4 mm <sup>2</sup> flexible with cable end
<b>Tightening torque</b>	1.7 N.m - on screw clamp terminal
<b>Fixing mode</b>	35 mm symmetrical DIN rail: clipped Panel: screwed (with 2 x M4 screws)
<b>Mounting position</b>	Horizontal Vertical
<b>Width</b>	45 mm
<b>Height</b>	89 mm
<b>Depth</b>	97 mm
<b>Net weight</b>	0.33 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 IEC/EN 60335-2-40:Annex JJ
<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>	4.700 cm
<b>Package 1 Width</b>	9.300 cm
<b>Package 1 Length</b>	10.000 cm
<b>Package 1 Weight</b>	317.000 g

<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	6.573 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	320
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	113.168 kg

## Logistical informations

<b>Country of origin</b>	FR
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## Contractual warranty

<b>Warranty</b>	18 months
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## 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 >](#)

### Environmental footprint

Total lifecycle Carbon footprint 8

Environmental Disclosure [Product Environmental Profile](#)

### Use Better

#### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic No

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 04104e70-ba29-493c-b2cc-b5837d1f879b

REACH Regulation [REACH Declaration](#)

### Use Again

#### Repack and remanufacture

Recyclability potential, in % 51

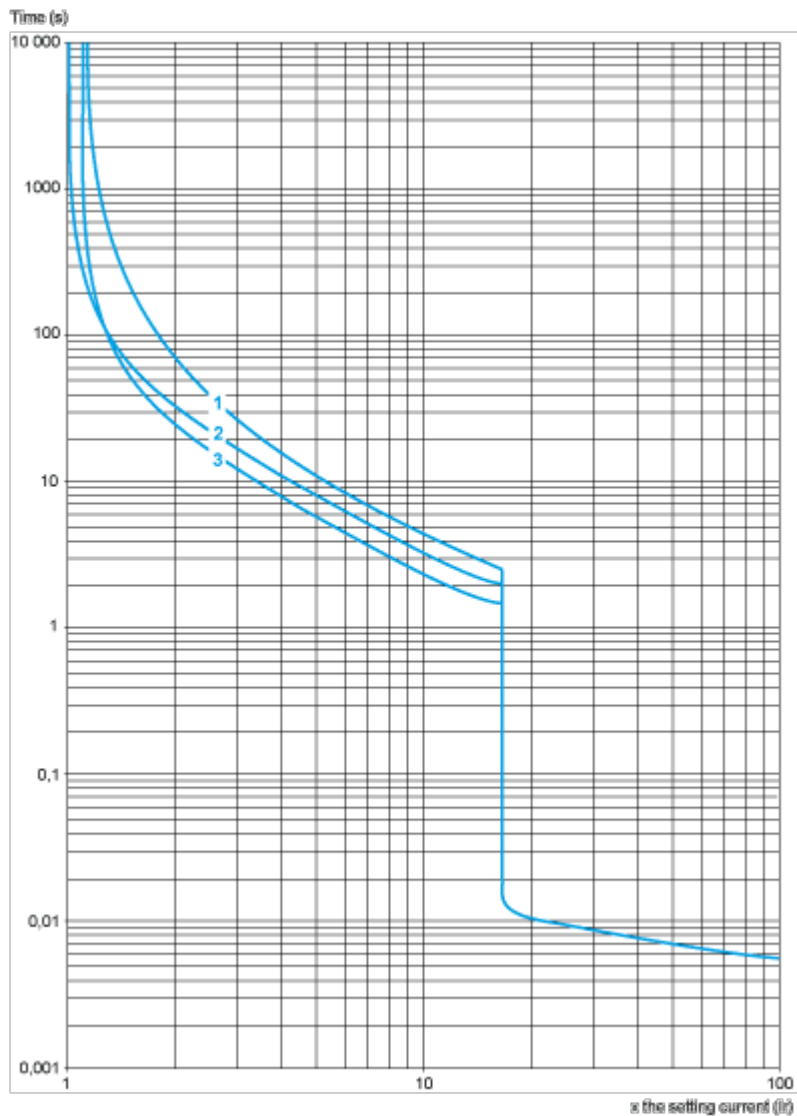
End of life manual availability [End of Life Information](#)

Take-back No

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 GV2L or LE Combined with Thermal Overload Relay LRD or LR2K**  
 Average Operating Times at 20 °C Related to Multiples of the Setting Current

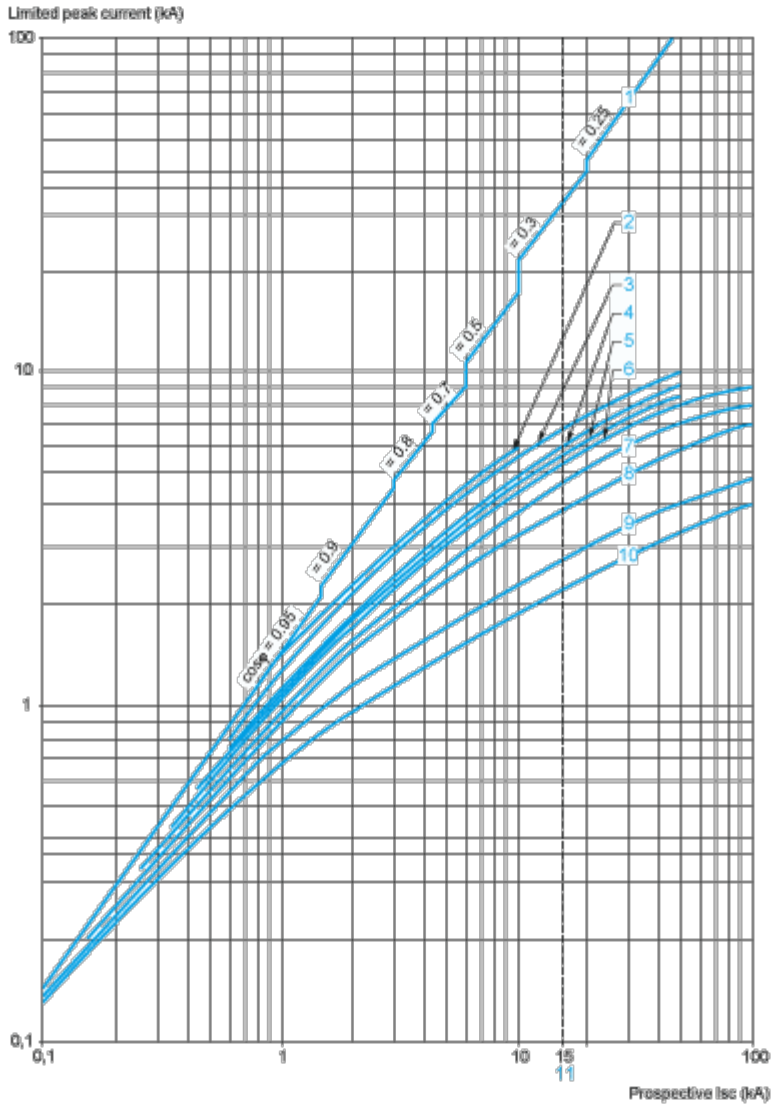


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

**Dynamic Stress**

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

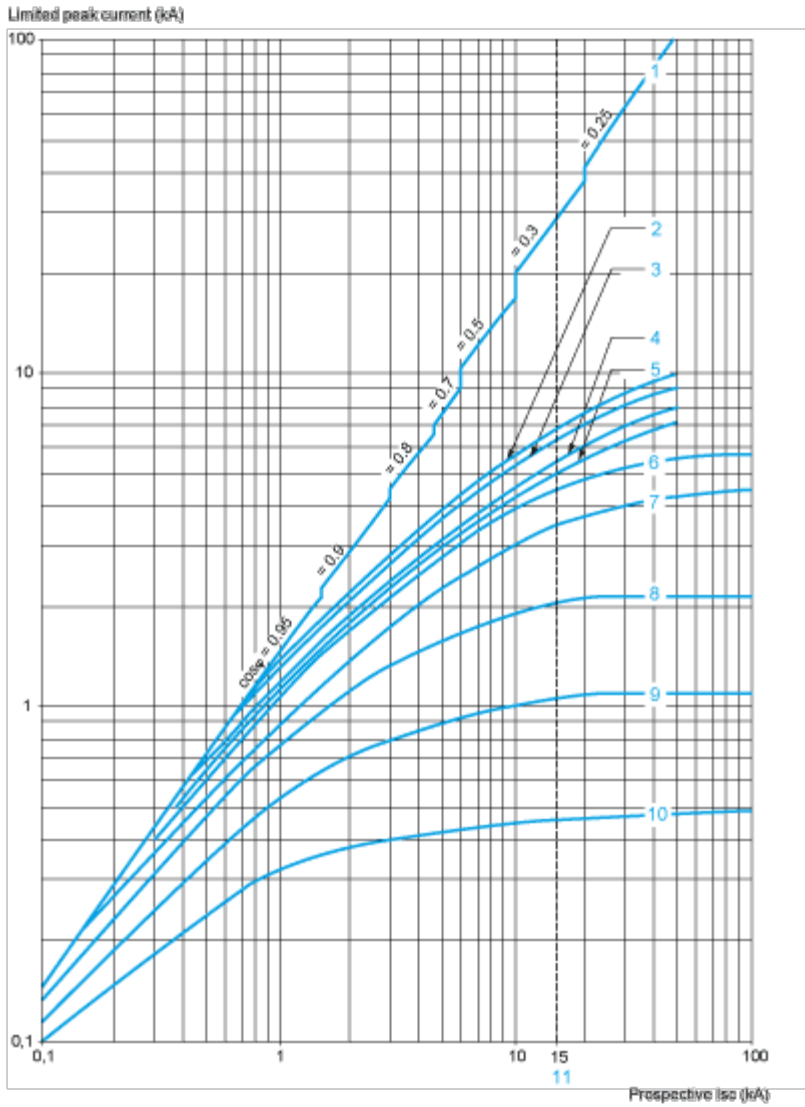


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

**Dynamic Stress**

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

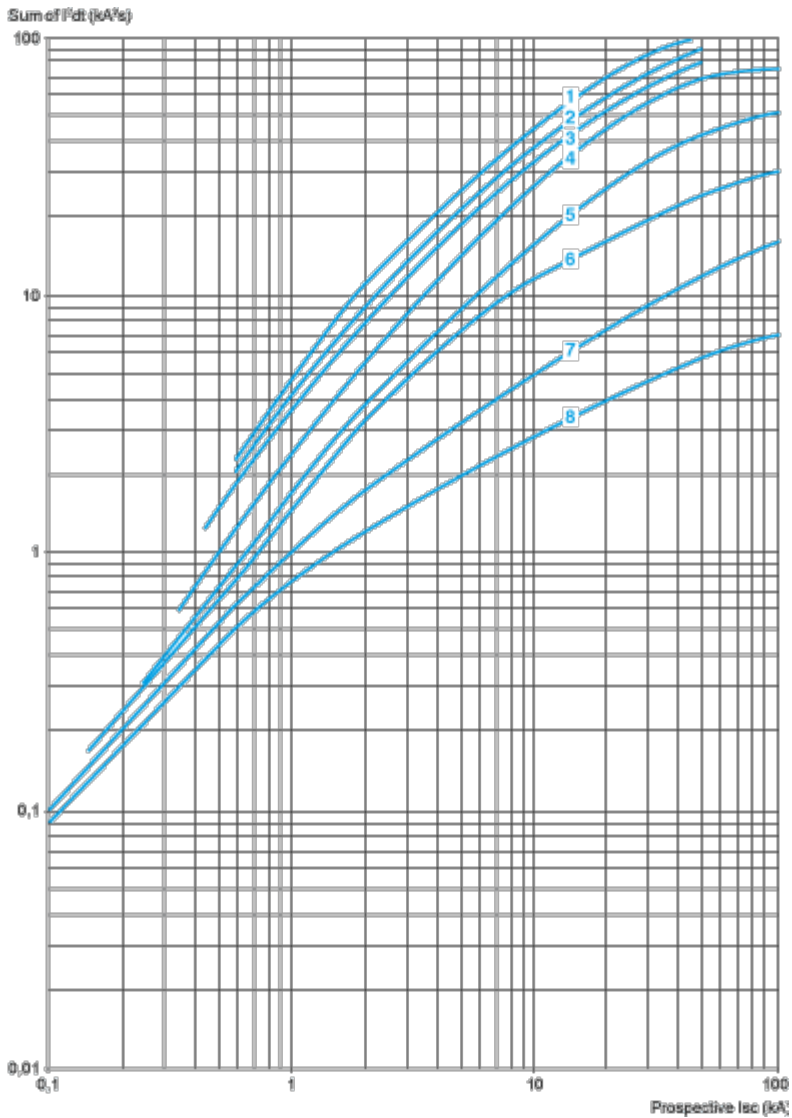


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

**Thermal Limit on Short-Circuit for GV2L Only**

Thermal Limit in  $kA^2s$  in the Magnetic Operating Zone

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

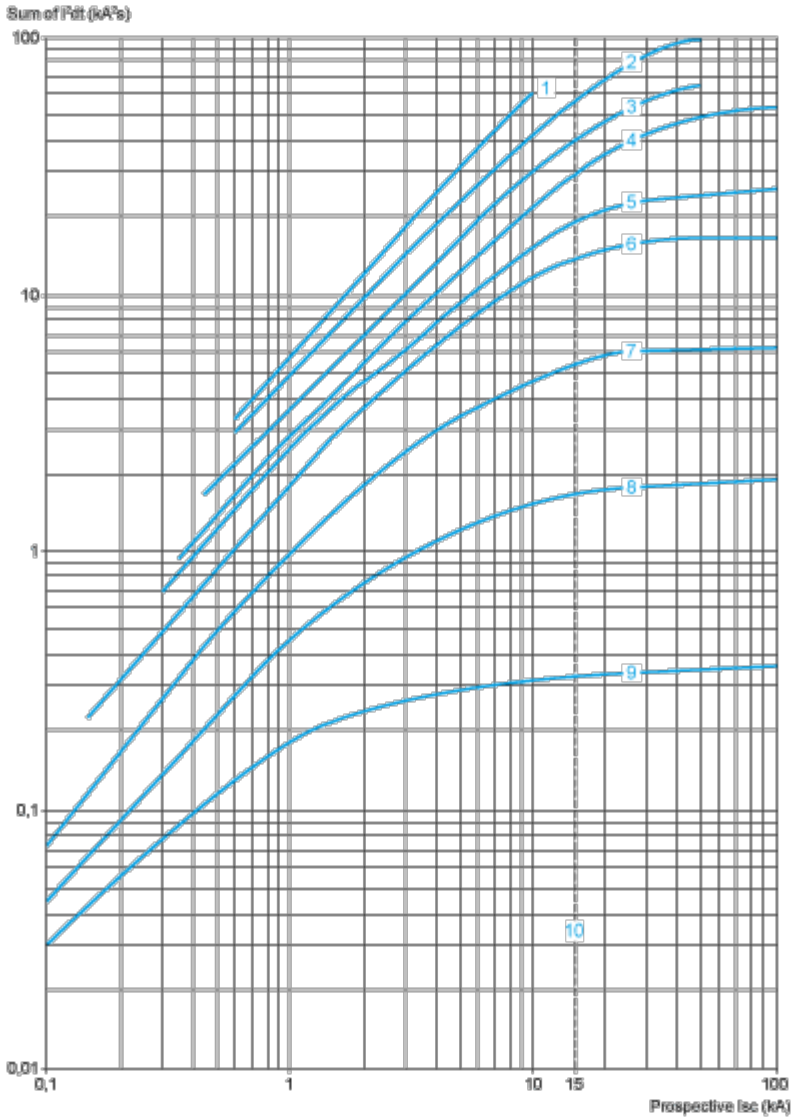


- 1 25 A and 32 A
- 2 18 A
- 3 14 A
- 4 10 A
- 5 6.3 A
- 6 4 A
- 7 2.5 A
- 8 1.6 A

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

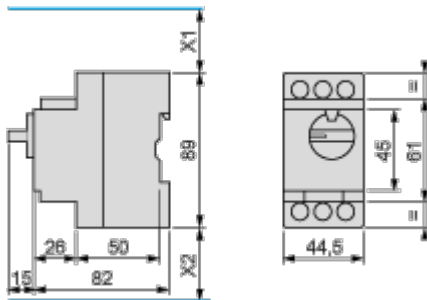


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).

Dimensions Drawings

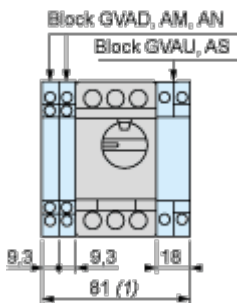
GV2L

Dimensions



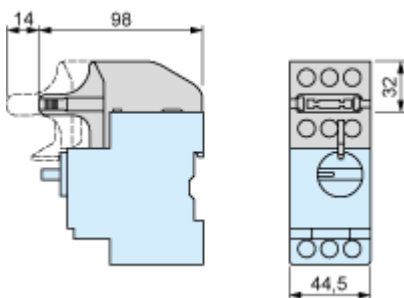
X1 Electrical clearance = 40 mm for  $U_e \leq 415$  V, or 80 mm for  $U_e = 440$  V, or 120 mm for  $U_e = 500$  and 690 V.  
 X2 = 40 mm.

GVAD, AM, AN, AU, AS



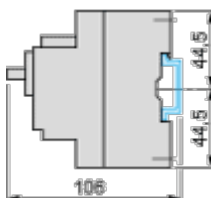
1 Maximum

GV2AK00



Mounting

On rail AM1 DE200, AM1 ED200 (35 x 15)

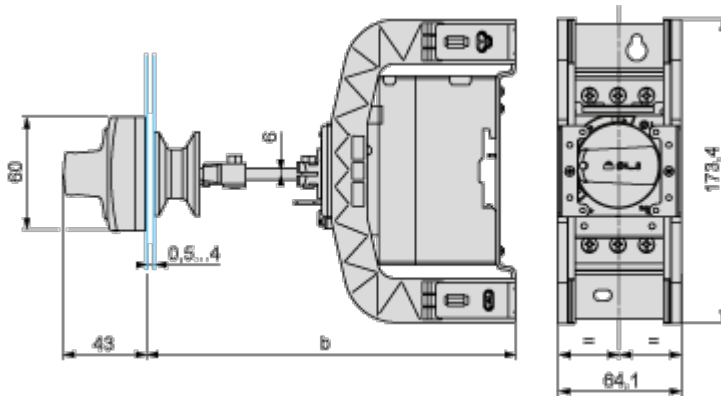


Panel mounted



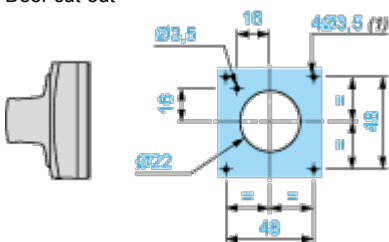
(1) For IP65 only.

Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2L



	b	
	Minimum	Maximum
GV2 APN <sub>..</sub> + GV APH02	151	250
GV2 APN <sub>..</sub> + GV APH02 + GV APK11	250	445

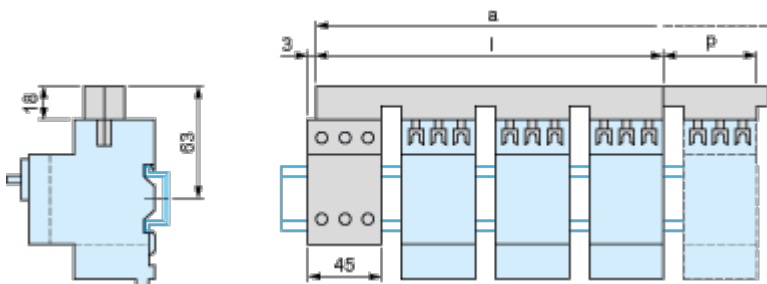
Door cut-out



(1) For IP65 only.

GV2L and GV2LE

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

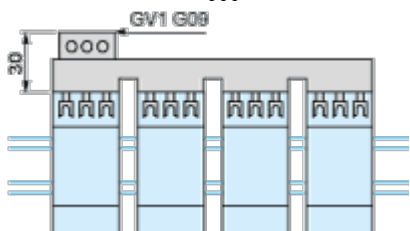


	l	p
GV2G445 (4 x 45 mm)	179	45
GV2G454 (4 x 54 mm)	206	54
GV2G472 (4 x 72 mm)	260	72

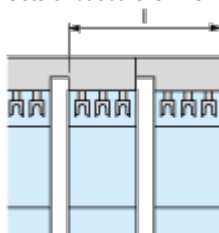
Number of tap-offs	a			
	5	6	7	8
GV2G445	224	269	314	359
GV2G454	260	314	368	422
GV2G472	332	404	476	548

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

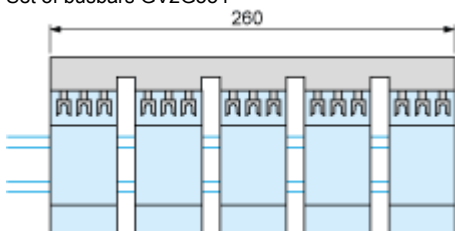


Sets of busbars GV2G245, GV2G254, GV2GR272

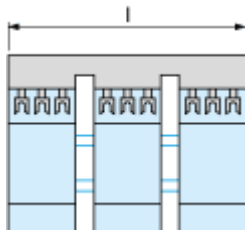


	l
GV2G245 (2 x 45 mm)	89
GV2G254 (2 x 54 mm)	98
GV2G272 (2 x 72 mm)	116

Set of busbars GV2G554



Sets of busbars GV2G345 and GV2G354



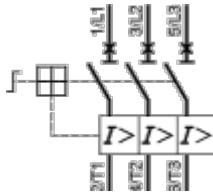
	l
GV2G345 (3 x 45 mm)	134

	I
GV2G354 (3 x 54 mm)	152

## Connections and Schema

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GV2L••



Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Motor Circuit Breakers Range Accessories



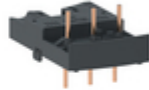
Auxiliary contact blocks



Energy Sensor



Terminal block



Combination block



Current limiter



Comb busbar



Extended rotary handle

Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Motor Circuit Breakers

### Technical Benefits



- High breaking capacity up to 100 kA.
- Screw clamp for the connection, with lug and spring terminals.
- Easily identify the tripped breaker.
- Padlockable in all versions.
- Sealable thermal overload settings without additional accessories.
- Short circuit indication for better diagnostics when a trip occurs.
- Maximum 15 current ratings to cover from 0.1 A to 32 A motor current with a IP20 level for finger safety.

Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Motor Circuit Breakers



### Universal Integration

Can be used for all type of applications across industry, infrastructure and buildings.



### Complete protection

Provide short circuit protection, overload protection, motor (ON/OFF) control, all in a single product.



### Standard Sync

Compliant to motor control and protection, in accordance with standards.



Image of product / Alternate images

Alternative

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## Technical Illustration

### Assembly's dimensions

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