

Product data sheet

Specifications



TeSys Deca Manual Starter and Protector, magnetic circuit protector, rotary handle, 6.3 A, screw clamp terminals

GV2L10

Product availability: Stock - Normally stocked in distribution facility

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	CA
Utilisation category	Category A IEC 60947-2 AC-3 IEC 60947-4-1 AC-3e IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-2
Motor power kW	2.2 kW 400/415 V AC 50/60 Hz 3 kW 500 V AC 50/60 Hz 4 kW 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2 100 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2 100 kA Icu 440 V AC 50/60 Hz IEC 60947-2 100 kA Icu 500 V AC 50/60 Hz IEC 60947-2 4 kA Icu 690 V AC 50/60 Hz IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % 230/240 V AC 50/60 Hz IEC 60947-2 100 % 400/415 V AC 50/60 Hz IEC 60947-2 100 % 440 V AC 50/60 Hz IEC 60947-2 100 % 500 V AC 50/60 Hz IEC 60947-2 100 % 690 V AC 50/60 Hz IEC 60947-2
Control Type	Rotary handle
Line Rated Current	6.3 A
Magnetic tripping current	91 A
[Ith] conventional free air thermal current	6.3 A IEC 60947-2
[Ue] rated operational voltage	690 V AC 50/60 Hz IEC 60947-2
[Ui] rated insulation voltage	690 V AC 50/60 Hz IEC 60947-2
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Suitability for isolation	Yes IEC 60947-1
Power dissipation per pole	1.8 W

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Mechanical durability	100000 cycles
Electrical durability	100000 cycles AC-3 415 V In 100000 cycles AC-3e 415 V In
Rated duty	Uninterrupted IEC 60947-4-1
Connections - terminals	Power circuit screw clamp terminal 2 0.002...0.009 in² (1...6 mm²)solid Power circuit screw clamp terminal 2 0.002...0.009 in² (1.5...6 mm²)flexible without cable end Power circuit screw clamp terminal 2 0.002...0.006 in² (1...4 mm²)flexible with cable end
Tightening torque	15.05 lbf.in (1.7 N.m) screw clamp terminal
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with 2 x M4 screws)
Mounting position	Horizontal Vertical
Width	1.8 in (45 mm)
Height	3.5 in (89 mm)
Depth	3.8 in (97 mm)
Net Weight	0.73 lb(US) (0.33 kg)
color	Dark grey

Environment

Standards	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
Product Certifications	CCC UL CSA EAC LROS (Lloyds register of shipping) BV RINA DNV-GL UKCA IECEE CB Scheme
IK degree of protection	IK04
IP degree of protection	IP20 IEC 60529
Climatic withstand	IACS E10
Ambient Air Temperature for Storage	-40...176 °F (-40...80 °C)
Fire resistance	1760 °F (960 °C) IEC 60695-2-11
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Mechanical robustness	Shocks 30 Gn for 11 ms Vibrations 5 Gn, 5...150 Hz
Operating altitude	<= 6561.68 ft (2000 m)

Ordering and shipping details

Category	US10I1122367
Discount Schedule	0I11
GTIN	3389110213263
Returnability	Yes

Country of origin	TH
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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.85 in (4.700 cm)
Package 1 Width	3.66 in (9.300 cm)
Package 1 Length	3.94 in (10.000 cm)
Package 1 Weight	11.182 oz (317.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	14.491 lb(US) (6.573 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	249.493 lb(US) (113.168 kg)

Contractual warranty

Warranty	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	
Carbon footprint (kg CO2 eq, Total Life cycle)	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
California proposition 65	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 www.P65Warnings.ca.gov

Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	 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

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

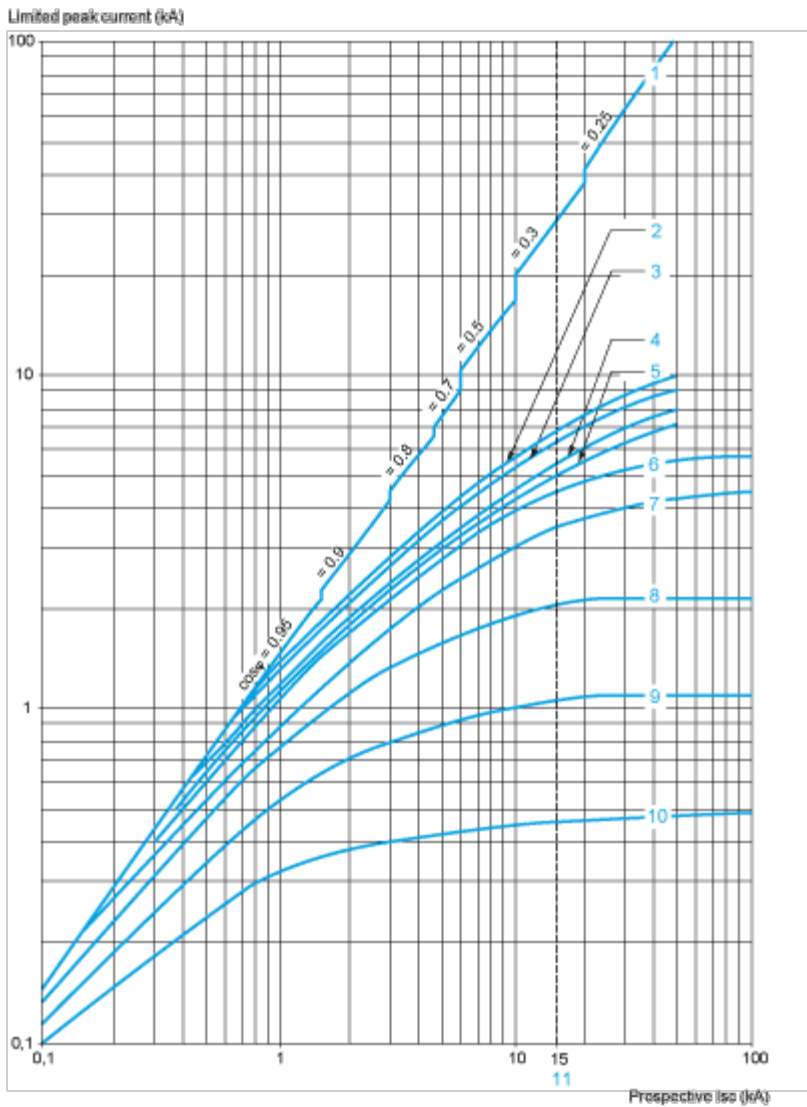


- 1 Maximum peak current
- 2 32 A
- 3 25 A
- 4 18 A
- 5 14 A
- 6 10 A
- 7 6.3 A
- 8 4 A
- 9 2.5 A
- 10 1.6 A
- 11 Limit of rated ultimate breaking capacity on short-circuit of GV2LE (14, 18, 23, and 25 A ratings).

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

Dynamic Stress

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



- 1 Maximum peak current
- 2 32 A
- 3 25 A
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- 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 kA²s in the Magnetic Operating Zone

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

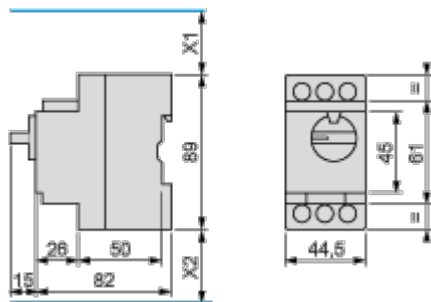


- 1 32 A (GV2LE32)
- 2 25 A and 32 A (GV2L32)
- 3 18 A
- 4 14 A
- 5 10 A
- 6 6.3 A
- 7 4 A
- 8 2.5 A
- 9 1.6 A
- 10 Limit of rated ultimate breaking capacity on short-circuit of GV2 LE (14, 18, 23, and 25 A ratings).

Dimensions Drawings

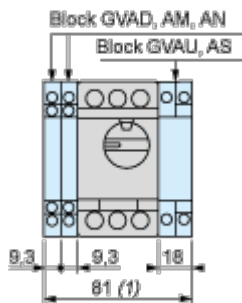
GV2L

Dimensions



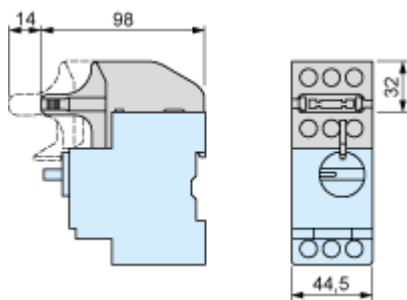
X1 Electrical clearance = 40 mm for Ue ≤ 415 V, or 80 mm for Ue = 440 V, or 120 mm for Ue = 500 and 690 V.
X2 = 40 mm.

GVAD, AM, AN, AU, AS



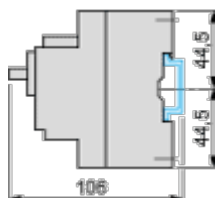
1 Maximum

GV2AK00

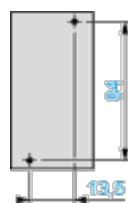


Mounting

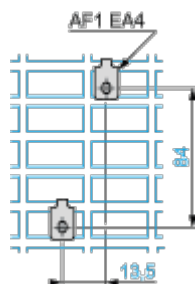
On rail AM1 DE200, AM1 ED200 (35 x 15)



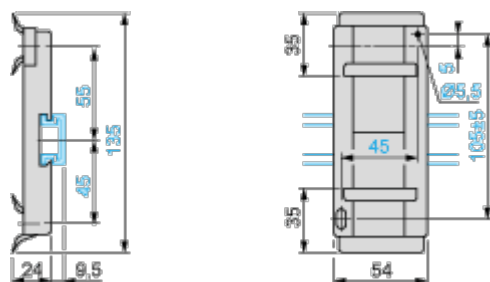
Panel mounted



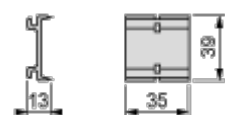
On pre-slotted mounting plate AM1 PA



Adapter Plate GK2AF01

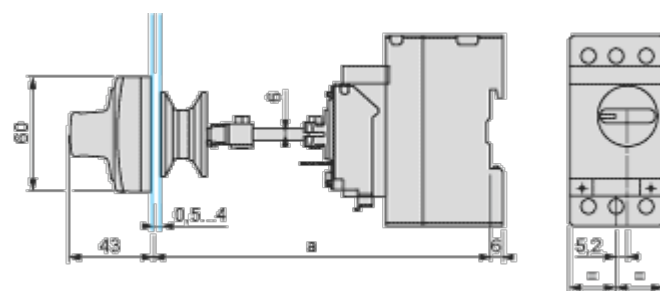


7.5 mm Height Compensation Plate GV1F03

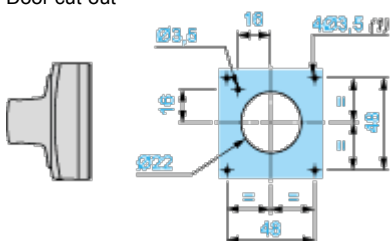


Mounting

Mounting of External Operator GV2APN01, GV2APN02 or GV2APN04 for Motor Circuit Breakers GV2L

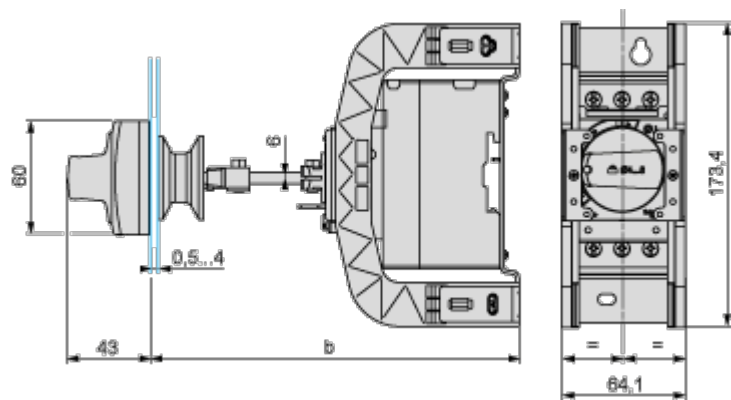


Door cut-out



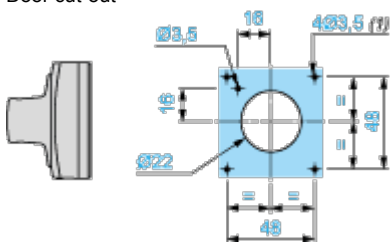
(1) For IP65 only.

Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2L



	b	
	Minimum	Maximum
GV2 APN _{...} + GV APH02	151	250
GV2 APN _{...} + GV APH02 + GV APK11	250	445

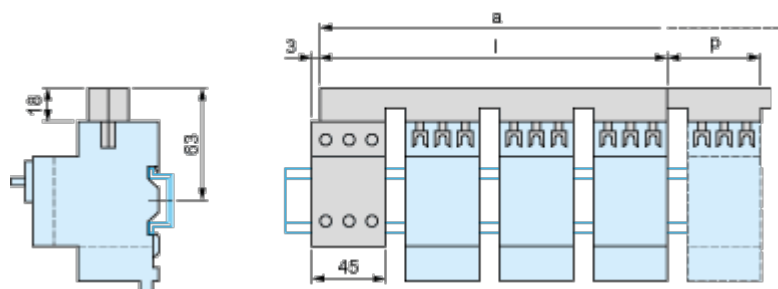
Door cut-out



(1) For IP65 only.

GV2L and GV2LE

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

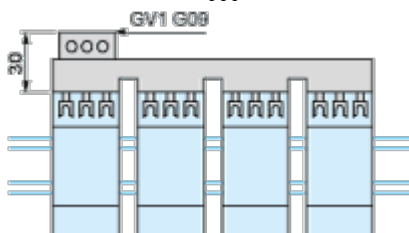


	l	p
GV2G445 (4 x 45 mm)	179	45
GV2G454 (4 x 54 mm)	206	54
GV2G472 (4 x 72 mm)	260	72

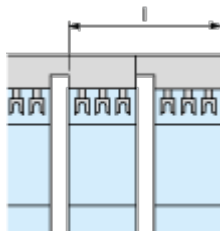
Number of tap-offs	a			
	5	6	7	8
GV2G445	224	269	314	359
GV2G454	260	314	368	422
GV2G472	332	404	476	548

Sets of Busbars for GV2L and GV2LE

Sets of busbars GV2G... with terminal block GV1G09

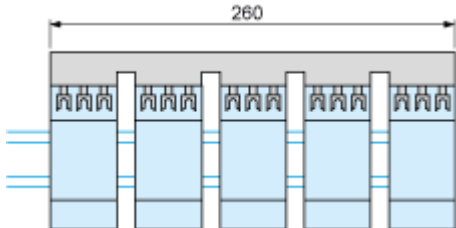


Sets of busbars GV2G245, GV2G254, GV2GR272

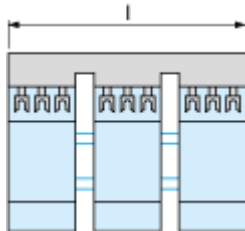


	l
GV2G245 (2 x 45 mm)	89
GV2G254 (2 x 54 mm)	98
GV2G272 (2 x 72 mm)	116

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

GV2L••



Offer Marketing Illustration

Product benefits / Features



The image shows a TeSys Deca Motor Circuit Breaker, a black rectangular device with a large green handle. It has three screw terminals at the top labeled 1L1, 3L2, and 5L3, and three at the bottom labeled 2T1, 4T2, and 6T3. A green handle is in the center, with a green indicator light above it. A QR code is visible on the front panel. The device is set against a green circular background.

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

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.



Offer Marketing Illustration

Product benefits / Features



TeSys Deca Motor Circuit Breakers

Range Accessories



Auxiliary
contact blocks



Energy Sensor



Terminal block



Combination block



Current limiter



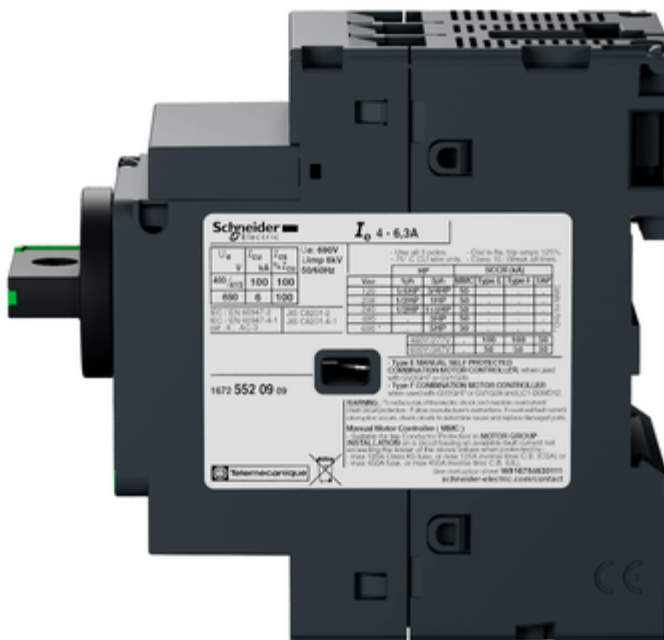
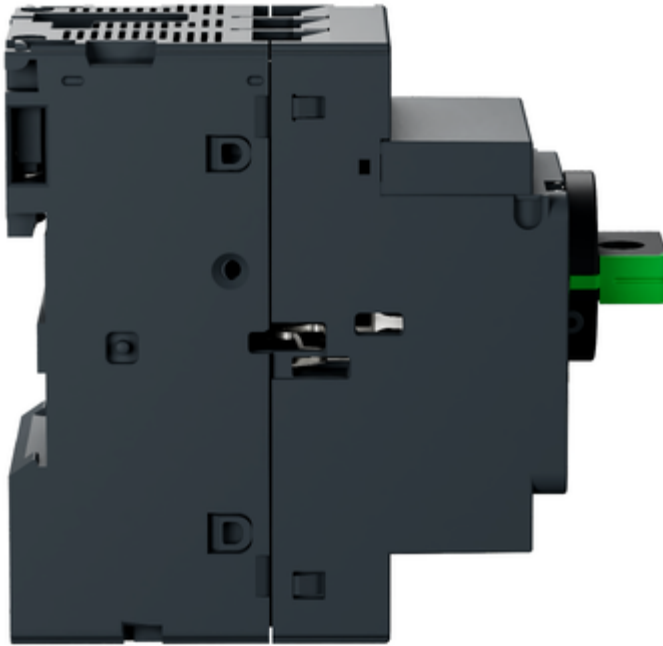
Comb busbar



Extended
rotary handle

Image of product / Alternate images

Alternative





Technical Illustration

Assembly's dimensions

